

DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft
ZBW – Leibniz Information Centre for Economics

Milkovic, Marin (Ed.); Kecek, Damira (Ed.); Hammes, Khalid (Ed.)

Conference Paper

Economic and social development : 46th International Scientific Conference on Economic and Social Development - "Sustainable Tourist Destinations" : Varazdin, 24-25 October 2019

Provided in Cooperation with:

Varazdin Development and Entrepreneurship Agency

Reference: (2019). Economic and social development : 46th International Scientific Conference on Economic and Social Development - "Sustainable Tourist Destinations" : Varazdin, 24-25 October 2019. Varazdin, Croatia : Varazdin Development and Entrepreneurship Agency.

This Version is available at:
<http://hdl.handle.net/11159/3505>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
<https://www.zbw.eu/econis-archiv/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

<https://zbw.eu/econis-archiv/terms-of-use>

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.

Varazdin Development and Entrepreneurship Agency
in cooperation with
University North
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat



Economic and Social Development

46th International Scientific Conference on Economic and Social Development –
"Sustainable Tourist Destinations"

Book of Proceedings

Editors:

Marin Milkovic, Damira Kecek, Khalid Hammes



ISSN 1849-7535



9 771849 753006 >

Varazdin, 24-25 October 2019

Varazdin Development and Entrepreneurship Agency
in cooperation with
University North
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat

Editors:
Marin Milkovic, Damira Kecek, Khalid Hammes

Economic and Social Development
46th International Scientific Conference on Economic and Social Development –
"Sustainable Tourist Destinations"

Book of Proceedings

Varazdin, 24-25 October 2019

Title ■ Economic and Social Development (Book of Proceedings), 46th International Scientific Conference on Economic and Social Development - "Sustainable Tourist Destinations"

Editors ■ Marin Milkovic, Damira Kecek, Khalid Hammes

Scientific Committee / Programski Odbor ■ Marijan Cingula (President), University of Zagreb, Croatia; Sandra Raquel Alves, University of Aveiro, Portugal; Ayuba A. Aminu, University of Maiduguri, Maiduguri, Nigeria; Anona Armstrong, Victoria University, Australia; Gouri Sankar Bandyopadhyay, The University of Burdwan, Rajbati Bardhaman, India; Haimanti Banerji, Indian Institute of Technology, Kharagpur, India; Elisabeth de Jesus Oliveira Brito, University of Aveiro, Portugal; Alla Bobyleva, The Lomonosov Moscow State University, Russia; Leonid K. Bobrov, State University of Economics and Management, Novosibirsk, Russia; Rado Bohinc, University of Ljubljana, Slovenia; Zeki Atıl Bulut, Dokuz Eylül University, Turkey; Adnan Celik, Selcuk University - Konya, Turkey; Angelo Maia Cister, Federal University of Rio de Janeiro, Brasil; Alexey Chernov, RUDN University, Russian Federation; Przemyslaw Chmielecki, Higher Baptist Theological Seminary in Warsaw, Poland; Mirela Cristea, University of Craiova, Romania; Sreten Cuzovic, University of Nis, Serbia; Oguz Demir, Istanbul Commerce University, Turkey; T.S. Devaraja, University of Mysore, India; Onur Dogan, Dokuz Eylül University, Turkey; Darko Dukic, University of Osijek, Croatia; Gordana Dukic, University of Osijek, Croatia; Alba Dumi, Vlora University, Vlore, Albania; Ksenija Dumicic, University of Zagreb, Croatia; Galina Pavlovna Gagarinskaya, Samara State University, Russia; Fran Galetic, Zagreb University, Croatia; Mirjana Gligoric, Faculty of Economics, Belgrade University, Serbia; Mehmet Emre Gorgulu, Afyon Kocatepe University, Turkey; Klodiana Gorica, University of Tirana, Albania; Aleksandra Grobelna, Gdynia Maritime University, Poland; Liudmila Guzikova, Peter the Great Saint-Petersburg Polytechnic University, Russia; Anica Hunjet, University North, Koprivnica, Croatia; Oxana Ivanova, Ulyanovsk State University, Ulyanovsk, Russia; Irena Jankovic, Faculty of Economics, Belgrade University, Serbia; Lara Jelenc, University of Rijeka, Croatia; Myrl Jones, Radford University, USA; Gorazd Jostinek, Graduate School of Government and European Studies, Slovenia; Hacer Simay Karaalp, Pamukkale University, Turkey; Grzegorz Karasiewicz, University of Warsaw, Poland; Dafna Kariv, The College of Management Academic Studies, Rishon Le Zion, Israel; Salih Katircioglu, Eastern Mediterranean University, Northern Cyprus, Turkey; Hilal Yildirim Keser, Uludağ University, Bursa, Turkey; Sophia Khalimova, Institute of Economics and Industrial Engineering of Siberian Branch of Russian Academy of Science, Novosibirsk, Russia; Marina Klacmer Calopa, University of Zagreb, Croatia; Vladimir Kovsca, University of Zagreb, Croatia; Goran Kozina, University North, Koprivnica, Croatia; Dzenan Kulovic, University of Zenica, Bosnia and Herzegovina; Robert Lewis, Les Roches Gruyere University of Applied Sciences, Bulle, Switzerland; Ladislav Lukas, Univ. of West Bohemia, Faculty of Economics, Czech Republic; Pascal Marty, University of La Rochelle, France; Vaidotas Matutis, Vilnius University, Lithuania; Marjana Merkač Skok, GEA College of Entrepreneurship, Ljubljana, Slovenia; Daniel Francois Meyer, North West University, South Africa; Gabriela Mezeiova, Slovak Centre of Scientific and Technical Information, Slovak Republic; Marin Milkovic, Rector, University North, Koprivnica, Croatia; Raquel Filipa do Amaral Chambre de Meneses Soares Bastos Moutinho, University of Porto, Portugal; Zlatko Nedelko, University of Maribor, Slovenia; Gratiela Georgiana Noja, West University of Timisoara, Romania; Zsuzsanna Novak, Corvinus University of Budapest, Hungary; Alojzy Z. Nowak, University of Warsaw, Poland; Tomasz Ochowski, University of Warsaw, Poland; Mislav Ante Omazic, University of Zagreb, Croatia; Barbara Herceg Paksic, University of Osijek, Croatia; Vera Palea, Università degli Studi di Torino, Italy; Dusko Pavlovic, Libertas International University, Zagreb, Croatia; Igor Pihir, University of Zagreb, Croatia; Dinko Primorac, University North, Koprivnica, Croatia; Zeljka Primorac, University of Split, Croatia; Mirosław Przygoda, University of Warsaw, Poland; Karlis Purmalis, University of Latvia, Latvia; Nicholas Recker, Metropolitan State University of Denver, USA; Kerry Redican, Virginia Tech, Blacksburg, USA; Humberto Ribeiro, University of Aveiro, Portugal; Robert Rybnicek, University of Graz, Austria; Amelia Cristina Ferreira da Silva, Polytechnic of Porto, Portugal; Tomasz Studzieniecki, Gdynia Maritime University, Poland; Elzbieta Szymanska, Białystok University of Technology, Poland; Katarzyna Szymanska, The State Higher School of Vocational Education in Ciechanow, Poland; Jan Turyna, University of Warsaw, Poland; Iaria Tutore, University of Naples Parthenope, Italy; Rebeka Danijela Vlahov, University of Zagreb, Croatia; Ilko Vrankic, University of Zagreb, Croatia; Stanisław Walukiewicz, Białystok University of Technology, Poland; Thomas Will, Agnes Scott College, USA; Li Yongqiang, Victoria University, Australia; Peter Zabielskis, University of Macau, China; Tao Zeng, Wilfrid Laurier University, Waterloo, Canada; Grzegorz Zimon, Rzeszow University of Technology, Poland; Snezana Zivkovic, University of Nis, Serbia.

Review Committee / Recenzentski Odbor ■ Marina Klacmer Calopa (President); Ana Aleksić; Sandra Raquel Alves; Ayuba Aminu; Mihovil Andjelinovic; Josip Arneric; Lidija Bagaric; Tomislav Bakovic; Sanja Blazevic; Leonid Bobrov; Ruzica Brecic; Anita Ceh Casni; Iryna Chernysh; Mirela Cristea; Oguz Demir; Jasmina Dvorski; Stjepan Dvorski; Robert Fabac; Ivica Filipovic; Sinisa Franjic; Fran Galetic; Mirjana Gligoric; Tomislav Globan; Anita Goltnik Urnaut; Tomislav Herceg; Irena Jankovic; Emina Jerkovic; Dafna Kariv; Oliver Kesar; Hilal Yildirim Keser; Tatjana Kovac; Vladimir Kovsca; Angelo Maia Cister; Katarina Marosevic; Vaidotas Matutis; Marjana Merkač Skok; Josip Mikulic; Ljubica Milanovic Glavan; Daniel Francois Meyer; Natanya Meyer; Guenter Mueller; Ivana Nacinovic Braje; Zlatko Nedelko; Gratiela Georgiana Noja; Zsuzsanna Novak; Alka Obadic; Claudia Ocrean; Igor Pihir; Najla Podrug; Vojko Potocan; Dinko Primorac; Zeljka Primorac; Sanda Renko; Humberto Ribeiro; Vlasta Roska; Souhaila Said; Armando Javier Sanchez Diaz; Tomislav Sekur; Lorena Skuflic; Mirko Smoljic; Petar Soric; Mario Spremic; Joanna Stawska; Matjaz Stor; Tomasz Studzieniecki; Lejla Tijanic; Daniel Tomic; Boris Tusek; Rebeka Daniela Vlahov; Ilko Vrankic; Thomas Will; Zoran Wittine; Tao Zeng; Grzegorz Zimon; Snezana Zivkovic; Berislav Zmuk.

Organizing Committee / Organizacijski Odbor ■ Domagoj Cingula (President); Djani Bunja; Marina Klacmer Calopa; Spomenko Kesina; Erlino Koscak; Mirosław Przygoda; Michael Stefulj; Rebeka Danijela Vlahov; Sime Vucetic.

Publishing Editors ■ Spomenko Kesina, Mario Vrazic, Domagoj Cingula

Publisher ■ Design ■ Print ■ Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / University North, Koprivnica, Croatia / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco

Printing ■ Online Edition

ISSN 1849-7535

The Book is open access and double-blind peer reviewed.

Our past Books are indexed and abstracted by ProQuest, EconBIZ, CPCI (Web of Science) and EconLit databases and available for download in a PDF format from the Economic and Social Development Conference website: <http://www.esd-conference.com>

© 2019 Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia; University North, Koprivnica, Croatia; Faculty of Management University of Warsaw, Warsaw, Poland; Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco. All rights reserved. Authors are responsible for the linguistic and technical accuracy of their contributions. Authors keep their copyrights for further publishing.

CONTENTS

ETIS DESTINATION MANAGEMENT SUSTAINABILITY MEASUREMENT SYSTEM ON THE EXAMPLE OF MEĐIMURJE COUNTY	1
Vesna Haluga, Ana Globocnik Zunac, Rudi Grula	
DIFFERENTIATION CONTENT ANALYSIS OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS OF COUNTRY	12
Berislav Andrljic, Shtuler Iryna, Serzhanov Vitaliy	
THE LEGAL ENVIRONMENT OF BUSINESS WITH RESPECT TO CHANGES IN INCOME TAX.....	18
Ivana Martincevic, Goran Kozina, Mario Matic	
RESEARCH OF IMPACT FACTORS ON BEHAVIOR OF MILLENNIALS IN ONLINE BUYING	24
Lucija Leljak, Damir Dobrinic	
APPLIED REGRESSION ANALYSIS FOR PRIVATE EQUITY FUNDS	34
Petar Misevic, Hrvoje Volarevic, Marko Peric	
APPLYING GAME THEORY TO THE EXAMPLE OF AXELROD'S TOURNAMENT	43
Damira Dukec, Damira Kecek, Ivana Zic	
SPECIFICS OF RETAIL SUPPLY CHAIN MANAGEMENT	51
Davor Dujak	
ON MATTERS OF ECONOMIC AND POLITICAL INEQUALITY IN THE CONTEXT OF DIGITAL POLICIES: THE ROLE OF JOURNALISM	61
Marina Biti, Iva Rosand Zigo	
STATE AID AND TAX RULINGS ISSUED BY EU MEMBER STATES IN SELECTED CASES	69
Doris Beganovic, Nenad Rancic, Ozren Pilipovic	
DESIGNING THE COMPLETE ICT SOLUTION FOR A MODERN MANUFACTURING COMPANY.....	79
Dunja Srpak, Ivan Sumiga, Josip Srpak, Ladislav Havas	
INFLUENCE OF STUDENT SATISFACTION WITH COMMUNICATION DIMENSION ON THE OVERALL SATISFACTION WITH STUDY	89
Emina Terzic, Goran Kozina	
FURTHER DIFFERENTIATING FACTORS OF GAMERS' HEXAD PLAYER TYPES	98
Flora Poecze, Ante Roncevic, Sanja Zlatic	

GENDER AND SCHOOL TEXTBOOKS: FIRST YEAR BACCALAUREATE FRENCH SYLLABUS.....109

Sadik Maliki, Marya Khtira

DEVELOPMENT OF INTERNATIONAL TRADE IN SERVICES AND ISSUES OF STATISTICAL MONITORING AND RECORDING116

Zrinka Lackovic Vincek, Vlatka Bilas, Ivana Dvorski Lackovic

A DIGITAL PLATFORM TO ENHANCE PUBLIC MANAGEMENT BY DELIVERING FINANCIAL AWARENESS TO LOCAL COMMUNITIES: THE TACLARO PROJECT.....125

Amelia Ferreira da Silva, Sandrina Teixeira, Maria Jose Angelico Goncalves, Telma Maia, Humberto Ribeiro

IMPLEMENTATION OF BUSINESS PROCESS REENGINEERING METHODS TO ENTERPRISES - OMICRON D.O.O. AND KUŠTELEGA D.O.O.139

Anica Hunjet, Andreja Borscak, Lea Kustelega

POSITION OF PRAGUE ON THE INTERNATIONAL TOURISM MARKET152

Jiri Vanicek

EFFECTIVENESS OF MANAGERIAL COMMUNICATION - EMPLOYEES' POINT OF VIEW.....159

Karmen Buljat, Jadranka Ivankovic

THE CITY AS THE LEADER OF SUSTAINABLE DEVELOPMENT.....168

Jerko Glavas

DIGITALIZATION CREATES A NEW PARADIGM OF THE GLOBAL MUSIC INDUSTRY: THE TRADITIONAL MUSIC INDUSTRY IS UNDER PRESSURE OF THE STREAMING PLATFORMS.....179

Josko Lozic

INFLUENCE OF SMART CITY COMPONENTS ON COMPETITIVENESS OF TOURISM DESTINATION.....191

Kresimir Buntak, Maja Mutavdzija, Ivana Martincevic

KNOWLEDGE MANAGEMENT: CASE OF CROATIA197

Ljubica Milanovic Glavan, Lucija Ivancic

SUSTAINABLE ENTREPRENEURSHIP AND RELATED DESTINATIONS, LITERATURE REVIEW FOR RESEARCH IMPLICATION204

Ana Malnar, Katja Crnogaj

SUBJECTS OF LEGAL REGULATION – DIFFERENT APPROACHES OF COMPETITION, PUBLIC PROCUREMENT AND CORPORATE LAW.....210

Katarina Kalesna, Maria T. Patakyova

MISSELLING IN THE FINANCIAL SECTOR - THE EXAMPLE OF THE UNITED KINGDOM AND POLAND.....220

Marta Paduszynska

MEASURING THE IMPACT OF SELF-EMPLOYMENT SUBSIDIES ON UNEMPLOYMENT IN CROATA	230
Kristina Marsic, Anica Hunjet, Tena Sumski	
EMERGENCE OF WINE TOURISM AND ITS DEVELOPMENT IN UKRAINIAN TRANSCARPATHIA.....	238
Nazar Kudla, Mykhaylo Hamkalo	
THE PROSPECTS OF SHANGHAI COOPERATION ORGANIZATION TURNING INTO A COUNTERWEIGHT TO THE NATO ALLIANCE.....	248
Bostjan Peternej, Petar Kurecic, Lara Kauss	
BUSINESS VALUATION OF THE STATE-OWNED COMPANIES: THE CASE OF KOSOVO TELECOM	256
Florin Aliu, Artor Nuhiu, Emad Attia Mohammed Omran, Fisnik Aliu	
EXPERIENCE ECONOMY AND TOURISM.....	265
Aljosa Vitasovic, Mauro Dujmovic	
WORKER'S REMMITANCES FROM ABROAD – INCREASINGLY IMPORTANT SOURCE OF DOMESTIC CONSUMPTION GROWTH	276
Zvonimir Savic, Petar Misevic, Luka Burilovic	
TAX COMPLIANCE MODEL: AN INTERVENTIONIST STUDY TO ENHANCE FINANCIAL SUSTAINABILITY	286
Alessandra Segatelli, Liliane Cristina Segura, Henrique Formigoni, Rute Abreu, Sandra Raquel Alves	
DIGITAL TRANSFORMATION - THE IMPLEMENTATION PROCESS IN THE CASE OF THE CROATIAN CHAMBER OF ECONOMY (CCE).....	311
Tomislav Rados, Sanja Simic, Petar Misevic	
THE APPLICATION OF TRIPLE BOTTOM LINE CONCEPT IN TOURISM WITH THE EMPHASIS ON THE HOTEL INDUSTRY	322
Ivana Bujan, Damira Kecek	
IMPACT OF TRADITIONAL AND DIGITAL MARKETING ON CONSUMER PERCEPTION.....	330
Ante Roncevic, Tina Lukcic, Paula Spoljaric	
CROSS-BORDER TOURIST DESTINATIONS IN EUROPE - GENESIS, ESSENCE AND PROMOTION.....	341
Tomasz Studzieniecki, Eduardas Spiriajevas	
THE IMPORTANCE OF IDENTIFYING OPPORTUNITIES AND RISK IN ENSHURING BUSINESS CONTINUITY	354
Kresimir Buntak, Matija Kovacic, Vesna Sesar	
THE ROLE OF TRANSPORT DECARBONIZATION IN THE CROATIAN ECONOMY AND TOURISM.....	361
Dalibor Pudic, Igor Grozdanic, Zoran Dojcinovic	

THE PROCESS OF FINANCIALIZATION IN GROUPS OF EUROPEAN UNION MEMBER STATES368
Tomasz Florczak

SOCIAL ECONOMIC COMPLEX VALUE OF AMENITIES AS MEASURE OF BIDS FOR THE USE OF ITALIAN PUBLIC SEASIDES376
Pasquale Balena, Alessandro Bonifazi, Felicia di Liddo, Carmelo Maria Torre

STAKEHOLDER DIALOGUE IN THE DEVELOPMENT OF SUSTAINABLE TOURIST DESTINATIONS.....386
Anica Hunjet, Goran Kozina, Dijana Vukovic

A MODEL FOR ASSESSING CUSTOMERS' PERCEPTIONS TOWARDS FUNCTIONAL FOOD.....398
Jose Joao Oliveira, Humberto Ribeiro

NEW PERSPECTIVES ON FAMILY FIRMS AND CORPORATE GOVERNANCE408
Fernando Nascimento Zatta, Liliane Cristina Segura, Henrique Formigoni, Rute Abreu, Sandra Raquel Alves

MOBBING AS A SOCIOLOGICAL AND COMMUNICATION PHENOMENON - NEED TO OPEN MOBBING VICTIMS CENTER425
Stela Novak, Mladen Greguras, Damira Dukec

MOROCCAN-AFRICAN REVIEW: WHAT ARE THE RESULTS IN 2017-2019? ...435
Bahha Meryeme, Nechad Abdelhamid

ETIS DESTINATION MANAGEMENT SUSTAINABILITY MEASUREMENT SYSTEM ON THE EXAMPLE OF MEĐIMURJE COUNTY

Vesna Haluga

*Medjimurje County, Croatia
vesna.haluga@gmail.com*

Ana Globocnik Zunac

*University North, Croatia
agzunac@unin.hr*

Rudi Grula

*Tourist Bord of Međimurje County, Croatia
rudi.grula@gmail.com*

ABSTRACT

For each successful tourist destination the most important is to create a good and recognizable image focusing on the optimal ratio of quality of service provided and the high entry preservation of natural and social resources. According to new trends and rapidly growing tourist market requires new methods of monitoring are needed to contribute development of sustainable tourism. Unfortunately, state, and local policies in the Republic of Croatia relies just on statistical data such is the number of nights, arrivals, satisfaction with the service, offers, which follow the tourist movement in the area. To get a complete and accurate picture of the impact of tourism on the local economy, population and the environment more that is needed. The fact is that all Croatian counties have tourism development strategies / master plans for tourism development, but only the County of Međimurje, through the Tourist Board, has a system for measuring the process of managing the sustainability of a destination, which enables monitoring and monitoring of the process, and with realistic recommended target goals enables planning of activities and future processes management. Specific measurements were carried out on the example of the County of Međimurje, according to the measurements defined by the European Commission, European Tourism Indicator System (ETIS). Based on the data obtained, it is evident that the systematic measurement of sustainable tourism development is a very complex and demanding process for which there is no legal basis as an obligation to measure the sustainability of a destination. The responsibility of managing tourist destination as well as the financing system entirely on the goodwill of the destination itself, a concrete policy, which is the tourism destination management, with the aim of sustainable tourism and sustainable development put on the will and conscience of local authorities and the enthusiasm of local tourism stakeholders.

Keywords: *sustainable tourism, destination management, ETIS, Međimurje County*

1. INTRODUCTION

Considering that tourism is nowadays one of the fastest growing industry in the world, which is very profitable, which creates new jobs, raise quality of life of the local population, it is logical that every country, region, city or town wants to gain the status of a destination that tourists will want to visit continuously. In order to realize that a goal, for tourist destination is necessary that system works. When tourism is deeply rooted in the everyday life of the local community population who are themselves a part of the destination product, with the common goals of the tourist board system, only then tourism will not be just a seasonal activity that benefits only individuals (Petrić, 2011).

Sustainable tourism is a concept of tourism management that anticipates and avoids problems that otherwise occur when capacity is exceeded. It is imperative that marketing, as a process in the destination development system, accept the possible waiver of current revenue in tourism for the benefit of longer destination life and tourism demand itself (Kotler et al., 2010). The Međimurje County was taken as an example and analysis of data according to the ETIS system, because they systematically invest in development of tourism. Sustainable tourism, according to the Međimurje County Tourism Development Master Plan until 2020 is also highlighted as a priority of future destination development and management, and it is the only county in Croatia which has implemented ETIS system.

2. ETIS EUROPEAN SYSTEM OF TOURISM INDICATORS

ETIS is designed as a process to be managed at the local level and which is intended for monitoring, managing and enhancing the sustainability of tourist destinations. It was developed based on the findings of previous indicator system initiatives and has been adapted according to feedback from field polling. Throu European Union's tourism strategy, according to which Europe must retain its position as the world's leading tourist destination, tourism faces the need to strengthen and promote sustainable development, in order to ensure the long-term competitiveness of the sector. Therefore, in 2013, the European Commission launched the "European Tourism Indicators System (ETIS)". The aim of the European Tourism Indicators System is to contribute to the promotion of sustainable destination management by providing a simple and useful toolkit to tourism stakeholders. The system will assist stakeholders in measuring and monitoring the management of sustainability processes and enable them to share and compare progress and results achieved in the future. ETIS is divided into four groups, within 27 mandatory indicators: 1. Destination management (sustainable tourism policies, tourism management in tourism enterprises, customer satisfaction, information and communication); 2. Economic effects (tourism flows, business results of tourism enterprises, quantity and quality of employment, safety and health, tourism supply chain); 3. Social / cultural impacts (impact on community / society, gender equality, protection and enhancement of cultural heritage, local identity and property); and 4. Environmental / nature protection (reducing the impact of transport, climate change, waste management, wastewater treatment, water management, energy consumption, landscape and biodiversity protection, light and noise pollution, and bathing water quality). The core of the system is a working group that collects data, reports and correlates with tourism sustainability issues. According to ETIS, 40 additional or optional indicators are also available. A total of 43 indicators were used in the ETIS system established by Međimurje County Tourist Board, and the 35 indicators during 2017. and 2018. were processed and compared.

3. RESEARCH METHODOLOGY

For the analysis, as the primary data, we used Međimurje County Tourist Board ETIS results from 2017. and 2018, and as a secondary data, books, scientific and expert articles and internet sources. Through descriptive methods of synthesis and analysis, by comparison, the collected data were systematized and compared in order to provide an overview of the impact of the ETIS system on the overall results of sustainable tourism in Međimurje County. The paper uses descriptive and developmental research, and the data were quantitatively and qualitatively analyzed with the help of Microsoft Office Excel and presented in tables and graphs. Data from 2017. and 2018. were compared, a total of 35 indicators divided into four categories, and each category also had three or more indicators, of which only indicators followed by destination were analyzed and compared. The work aims to determine the contribution of induction of the ETIS system for Međimurje excellence as a tourist destination. The subject of research is Međimurje County, the only county in Croatia which has implemented ETIS system.

Data for 2017. and 2018. were analyzed and compared, which is a relatively short observed period. Hypothesis 1: The introduction of the ETIS system contributed to the promotion of sustainable tourism in Međimurje, Hypothesis 2: The ETIS system identified potential threats to the tourist destination sustainability.

Table 1: Destination Profile

DESTINATION PROFILE			
DESTINATION	THE MEĐIMURJE COUNTY		
COUNTRY	Republic of Croatia		
COUNTRY BORDER	The Međimurje County borders with the Republic of Slovenia in the north and west, with Hungary in the east, with Varaždin County in the south, and with the Koprivnica-Križevci County in the southeast. The boundaries of the county are mainly determined by the natural flows of the Mura River in the north and east and the Drava River in the south. In the west, the natural border with the Republic of Slovenia is not so clearly defined, but is made up of the Međimurje hills.		
THE LOCATION		FEATURES	
Position	Distance from the capital	the main forms of tourism and popular activities	Top five the most popular attractions (natural environment, cultural attractions)
The Međimurje County is located in the far northwest of the Republic of Croatia and geographically and geographically is part of Central Europe	90 km FROM Zagreb	Health tourism Active holidays MICE tourism Enogastronomy	1. St. Martin Spa
			2. Međimurje wine road
			3. Old town Zrinski
			4. Mill on the Mura river
			5. Regional Nature Park Mura-Drava

Source: Archives Međimurje County Tourist Board, ETIS research for 2017. and 2018.

3.1. Comparison of ETIS results for Međimurje County in 2017. and 2018. in the Destination Management category

The Destination Management category defines two criteria: Sustainable Tourism Management in Tourism Enterprises with Indicator Percentage of Tourism Enterprises / Facilities in Destination Using Voluntary Certificate / Ecolabel / Quality / Sustainability and / or Corporate Social Responsibility Measures and Other Criteria Customer Satisfaction with Indicators : Percentage of multi-day tourists and daily visitors who are satisfied with the experience in the destination and Percentage of arrivals of the returning tourists (within 5 years).

Table following on the next page

Table 2: Destination Menagment

CRITERIA	INDICATOR	RECOMMENDED GOAL	DESTINATION RESULTS	
			2017.	2018.
Sustainable tourism management in tourism enterprises	Percentage of tourism entrepreneurs / destination establishments using voluntary certification / labeling for the environment / quality / sustainability and / or corporate social responsibility measures	10% annual growth	12,50%	18,18%
Customer satisfaction	Percentage of multi-day tourists and daily visitors who are satisfied with the experience of the destination	90%	87,00%	77,50%
	Percentage of arrivals / tourists who return (within 5 years)		35%	60%

Source: author

Although the number of tourists returning to the destination increased by 25%, it is an indicative indicator that the number of tourists satisfied with the experience in the destination decreased by 9.5%. In order to get accurate indicators, it is necessary to include new indicators in this category, that is, to examine/test tourists in more detail, what they are not exactly satisfied with (accommodation, off-board offer...). The fact is that it is almost impossible for all guests to be completely satisfied, so the goal of 90% is realistic and achievable. Last few years researched of tourist satisfaction indicate that service is very important to tourists. There are certain principles that modern service providers should follow it are necessary to cultivate trust and a strong understanding with the customer and fulfill their expectations. Positive impression reflects on the reputation and leaves a lasting impression, and the guest's desire to return. (Previšić, J., Ozretić Došen, Đ., Krupka, 2012). Equally important is measuring employee satisfaction within the company. Employee surveys should be conducted and measured on a regular basis, and every effort should be made to improve employee satisfaction. Every improvement in employee satisfaction will have an impact on customer and customer satisfaction. More satisfied employees will provide better service for their clients (Backer, 2019.) The increase in the percentage of entrepreneurs by 5.68% according to the criteria of sustainable management is the result of systematic work and education and raising awareness of the importance of sustainable tourism for the success of the overall business.

3.2. Comparison of ETIS results for Međimurje County in 2017 and 2018 in the Economic Values category

Economic functions of tourism are activities aimed at achieving concrete economic effects (tourism consumption, export of goods and services, direct investments, improvement of foreign exchange balance, activation of tourism potential, increase of employment, development of underdeveloped areas, etc.) at the level of enterprises and organizations directly or indirectly involved in the creation of the tourist offer, but also in the area of the tourist destination (places, regions or countries) where certain stages of tourist consumption take place. The economic functions of tourism can be organized into ten basic functions: multiplicative, inductive, conversion, absorption, integration and acceleration functions, employment function, and stimulation of international exchange of goods, balance of payments and development of economically underdeveloped areas (Enciklopedija.hr). In this category, the tourist flows (volume and values) in the destination are analyzed as criteria with the number of nights spent

per month, the relative contribution of tourism to the destination economy (% of GDP) and the daily spending per overnight tourist. Within the Tourism Economy Performance criterion, the indicators Average tourist length of stay (night) and Occupancy rate per month and average for the year were analyzed, while the criterion Quantity and quality of employment analyzed Direct employment in tourism in relation to the total number of employees in the destination and percentage of tourism jobs that are seasonal, while the Tourism Supply Chain criterion analyzes and compares the percentage of domestic production of food, beverages, products and services originating from the destination of destination companies.

Table 3: Economic Criteria

CRITERIA	INDICATOR	RECOMMENDED GOAL	DESTINATION RESULTS	
			2017.	2018.
Tourist flows (volume and values) in the destination	number of nights per month	Increasing number of guests 10%	14.012 guests	15.813 guests
	the relative contribution of tourism to the destination economy (% of GDP)	4%	2,11 %	no data
	daily spending per overnight tourist	5% annual growth	407,00 kunas	407,00 kuna
Performance of the tourism economy	Average stay (nights)	3,5	2,39	2,32
	Occupancy of accommodation facilities per month and average for the year	30%	26,08 %	27,61 %
Quantity and quality of employment	Direct employment in tourism in relation to the total number of employees in the destination	4%	3,81%	3,52%
	Percentage of seasonal jobs in tourism	Increasing employment 3,3%	7,10%	9,11%
Tourism supply chain	Percentage of domestic production of food, beverages, products and services originating from destination companies	40%	30,44%	40,70%

Source: author

An increase in the number of tourist's criterion on a monthly basis is evident, which is certainly the result of systematic work and marketing activities. The average length of stay is at the same level as daily consumption. Direct employment in tourism is slightly lower in 2018, but interesting is the increase in seasonal employment of 2.01%. The problem of labor shortage in tourism is the problem of all tourist destinations in the Republic of Croatia. In order to promote awareness of the importance of Croatia's tourist orientation, it is necessary to establish tourism as part of the educational program of elementary schools, which would create a positive awareness of tourism at the earliest age, when basic life attitudes are formed. This is a prerequisite for the efficient and harmonious functioning of the entire tourism system in the country. (Ministry of Tourism, Croatian Tourism Strategy 2020.) Also, a possible solution for solving problem is the improvement of the tourism education system by specialized / profiled programs, based on an effective combination of acquiring professional knowledge and practical skills whose programs, apart from the necessary contemporary theoretical knowledge, would

include a high proportion of practical teaching and practical work, and the application of modern teaching methods. Certainly, the education of the population should be introduced as indicators, especially of young upper-elementary and high school students. Most interesting is the increase in the percentage of domestic production of food, beverages, products and services originating from enterprises in the immediate environment by as much as 10.26%. Economic development is an important, if not the most important determinant of the sustainability of a destination. Tourism connects all sectors of the destination and contributes to the strengthening of the local economy, especially because the trend is healthy, local food, clean and healthy environment and preserved cultural and natural heritage, which is the basis of tourism development in Međimurje County. Additional criteria should also be introduced in this criterion to detect the specific wishes, needs and interests of tourists and to further enrich the overall tourist offer of the destination. ETIS data collection shows that there is no systematic planning, management and recording of day-visitor data, which is advisable to introduce, as well as additional indicators to provide a clearer picture of where guests, ages, and gender come from to see what the real reasons are that there is no increase in consumption even though the number of tourists in the destination is increased.

3.3. Comparison of ETIS results for Međimurje County 2017. and 2018. in the Social and Cultural Impact category

The Strategy for the Development of Croatian Tourism by 2020 emphasizes that in 2020 Croatia is a globally recognized tourist destination, competitive and attractive for investments, which creates jobs and sustainable development in its entire area, nurtures a culture of quality, and during all year gives its guests hospitality, security and a unique diversity of authentic content and experiences. (Institute of Tourism). In this category, five criteria were compared across twelve indicators.

Table following on the next page

Table 4: Social and Cultural Impact

CRITERIA	INDICATOR	RECOMANDED GOAL	DESTINATION RESULT	
			2017.	2018.
Community/social impact	number of tourists per 100 inhabitants	Number of tourists	5,39	6,08
	Percentage of residents satisfied with tourism in destination (by month / season)	65%	66%	66%
	Number of beds available in commercial accommodations per 100 inhabitants	number of beds	1,39	1,49
health and safety	Percentage of registered cases that tourists complain to the police	0%	0%	0%
gender equality	Percentage of men and women employed in the tourism sector	50:50	M 38,53% F 61,47%	M 37,82% F 62,18%
	Percentage of tourism businesses where the general manager is women	50%	25,00%	45,45%
Inclusiveness / availability	Percentage of rooms in commercial accommodations accessible to disabled people	10%	5%	2,41%
	Percentage of commercial accommodations participating in accessibility of information	80%	50%	45,45%
	Percentage of public transportation accessible to disabled people and special access requirements	15%	14,28%	14,28%
	Percentage of tourist attractions accessible to disabled people and / or participating in recognized, affordable programs	50%	0%	72,73%
Protecting and strengthening cultural heritage, local identity and cultural assets	Percentage of residents satisfied with the effects of tourism on destination identity	90%	86%	86%
	Percentage of destination events targeting traditional / local culture and heritage	50%	41,24%	38,67%

Source: author

With the development of tourist products in the future, it adapts to the needs of the guest in the creation of tourist products, in accordance with the expectations of the modern tourist who wants to have a new experience on the trip, is eager for new stories, is curious and wants an individual approach.

Such trends ultimately result in significant opportunities to create a rich, qualitatively improved and diversified product portfolio, as stated in the Croatian Tourism Strategy 2020 (Tourism Strategy in Croatia). The percentage of residents who are satisfied with tourism in the destination (per month / season) in 2017 and 2018 is 66.00%, which is within the set parameters and is satisfactory as well as the data of a slight increase in the number of tourists compared to 100 inhabitants with 5.39% in 2017 to 6.08% in 2018. The number of beds per 100 populations has also increased from 1.39 in 2017 to 1.49 in 2018. Data comparing the percentage of men and women employed in the tourism sector were also compared. In 2018, the number of male employees decreased by 0.71%, while the number of female employees increased by the same percentage (0.71%). Interesting is the percentage of tourism companies that have a woman at the leading position, which increased by as much as 20.45% in 2018. Presumably, this is the result of various incentive state and local financial stimulations aimed at women who started their own businesses and were mainly the managers of them. Since the average salary of women in tourism has not been measured and compared to the average salary of men, it would be good to include this indicator in future measurements. Below is information on infrastructure in a destination adapted to persons with disabilities. The results show that the percentage of commercial accommodations with accessible rooms for disabled people and / or participating in recognized accessibility schemes has fallen from 5% to 2.41% in 2018, most likely caused by the rise of holiday homes in the vineyards which are generally in less accessible terrain. The percentage of destinations providing public transportation accessible to people with disabilities and persons with special access requirements has not changed in 2018 and is 14.28%, which is almost at the recommended percentage of 15%. The percentage of attractive places for visitors with disabilities and / or participating in recognized accessibility schemes from 0% in 2017 has risen to 72.73% in 2018. It is a fact that many attractive places can be reached by car or bus, but it is not clear that in one year there has been such an increase. Attention should be paid to the data of the coming years, and since visitors' satisfaction with accessibility to the destination of persons with disabilities or special requests for access is not measured, it would be good, although optional, to introduce additional indicators to obtain a complete picture of the real situation. Ultimately, the percentage of the population satisfied with the effects of tourism is almost at the recommended percentage level, unchanged in 2018, at 86%. The only indicator that reports a decline is the percentage of destination events targeting traditional culture and heritage from 41.25% in 2017 to 38.67% in 2018 and requires a more detailed analysis and recommendations for improving the situation, being one of the strategic determinants of tourism in Međimurje counties just traditional culture and heritage.

3.4. Comparison of ETIS results for Međimurje County in 2017 and 2018 in the Environmental Impacts category

Environmental protection is certainly the biggest challenge when we talk about sustainable tourism of the destination. The increase in the number of arrivals and overnight stays in most cases also means an increase in the consumption of water, electricity and an increase in the amount of waste. It is a great responsibility on local policy, and above all on managers who have to take care and take timely measures to avoid collapse due to the under capacity of the destination.

Table following on the next page

Table 5: Enviromental Impacts

CRITERIA	INDICATOR	RECOMMENDED GOAL	DESTINATION RESULT	
			2017.	2018.
Climate changes	Percentage of tourism enterprises involved in climate change (CO2 release, low energy systems, "adaptations, actions, reactions"	100%	100%	90,91%
	Percentage of tourist accommodations and attractions located in "sensitive areas"	0%	0%	0%
Waste management	Waste produced per night per person compared to the local population in kg	0,5	Tourists:0.98 Residents: 0.59	Tourists:2,65 Residents: 0.59
	Percentage of tourism companies separating different types of waste	100%	100%	100%
Waste water treatment	Percentage of wastewater from a destination treated with at least a secondary stage before discharge	100%	Businesses:87,50% Residents: 93.18%	Businesses: 81,82% Residents: 93.18%
Water management	Water consumption per tourist overnight compared to general consumption		Economy: 706,37l Residents: 82.66 l	Economy:751.68l Residents: 81.25 l
	Percentage of tourism businesses taking action to reduce water consumption	100%	87,50%	81,82%
	Percentage of businesses using recycled water	20%	12,5%	9,09%
Energy efficiency	Consumption of electricity per tourist overnight in relation to general consumption per capita per night		Tourists / residents80,34 / 19,66 Tourists: 43.43 kwh per night Residents: 8.54 kwh per day	Tourists / residents93.50 / 6.50 Tourists: 39.60 kwh per night Residents: 2.76 kwh per day
	Percentage of tourism companies taking action to reduce energy consumption	100%	100%	100%
	Percentage of the annual amount of energy consumed from renewable energy sources in relation to the total annual consumption of the destination	100%	3.5% solar collectors 95% of the hydroelectric power plants	3.5% solar collectors 96.5% hydro power plants
Environmental management and bio diversity	Percentage of local businesses in the tourism sector actively supporting the protection, conservation and management of local biodiversity and landscape	100%	100%	100%

Source: author

According to the results of measurement Međimurje as a tourist destination, there are no accommodation facilities and attractions on the so-called sensitive areas, and 100% of enterprises are involved in monitoring climate change through ion schemes (eg CO₂ release, low energy systems) and in adaptation, action and reaction processes. When it comes to waste management, all businesses separate waste. According to the Law on Waste, waste is substances and objects which the owner or the producer of the waste (legal or natural person) has disposed of, or disposed of, or intends or must dispose of. According to the place of origin, there are two types of waste - municipal and technological (industrial) waste. Municipal waste is household waste, waste arising from the cleaning of public areas and waste similar to household waste arising from the economy, institutions and services. The responsibility for the proper management of municipal waste is primarily the responsibility of the residents and companies that produce their own waste. Utility companies must create conditions that will allow all residents to properly treat their municipal waste. (Law on Waste of the Republic of Croatia). In Međimurje, tourists produce more waste than the locals, and compared to 2017, there is an increase from 0.98 kg to 2.65 kg when it comes to tourists, while in the population the amount of waste produced remains the same and amounts to 0.59 kg per day. With regard to wastewater, the Republic of Croatia strategically manages water according to the provisions of the Water Act. The 2008 Water Management Strategy is a document underpinning water sector reforms to meet European water management standards. The Water Management Strategy is also a framework for the preparation of strategies and plans for physical planning, environmental protection, nature protection and development of other water dependent or affecting sectors (agriculture, forestry, fisheries, industry, energy, transport, tourism, public health and else). It is valid for as long as the assumptions under which it is made are in force, with due regard for the period of legal adjustment until the end of 2009 and the duration of two fifteen-year investment cycles until the end of 2038 (Water Law and Water Management Strategy). The destination is expected to see an increase in water consumption by economic operators from 706.37 l in 2017 to 751.68 l in 2018, while the population recorded a slight decrease in consumption from 82.66 l in 2017 to 81.25 l in 2018.

4. CONCLUSION

Continuing on the analysis and comparison of the data obtained on the basis of the indicators for Međimurje as a continental tourism tourist destination of the Republic of Croatia in 2017 and 2018 according to the ETIS system, it can be concluded that the obtained results confirmed the hypothesis that the ETIS system contributed to the promotion of sustainable tourism in Međimurje. In order to achieve even better results, the system should be introduced and the data obtained should be compared at least at the level of northwestern Croatia, since the neighboring counties of Međimurje, considered as tourist destinations of continental tourism of the Republic of Croatia, are one in debt, and quality benchmarking can save time, money, especially due to the fact of under capacity, especially of county tourist boards. The second hypothesis was confirmed that ETIS research has identified potential threats to the sustainability of the destination. The results obtained can certainly help to prevent possible losses, but also to timely plan investments, projects and programs at all levels of the tourist destination. The fact is that it is necessary to find sources of funding and to eliminate in the shortest possible time the problems that have affected the worse results of ETIS research. In order to further develop the destination and improve the offer, introduce new indicators and systematically collect data every year, analyze, compare and measure the effects of importance for the sustainable development of tourism. Although it is generally considered an economic category, tourism is very often a powerful generator of change and development in the fields of culture, health, education and, not least, environmental protection. As the obtained results confirmed both hypotheses, it can be concluded that as many regional and local government and self-

government units would be included in ETIS. The system itself can be judged excellent, especially because of the possibility of introducing additional indicators according to the needs of the destination. The recommendation to the Međimurje County Tourist Board is to make a public presentation of the results and to communicate directly with stakeholders involved in the process (economic, public and other entities in the tourism sector) in order to be more actively involved in future research. Also, in cooperation with the town of Mali Lošinj, present results and experiences at all levels. In conclusion, after six years from the start of the introduction of ETIS through pilot projects, there is a new challenge for the European Commission. Due to the quality of the system and the usefulness of the results obtained, ways should be found to stimulate as many tourist destinations as possible to apply ETIS. On the other hand, it would be advisable to give an incentive to find through the sources of financing solutions to the problems that have affected the worse results of ETIS research of destinations where it is already in use. The level of awareness and image of the place and the loyalty to the place are strongly influenced by the macro-environmental forces over which destination management organizations have no control. (Pike, 2010).

LITERATURE:

1. Arhiva i podaci Turističke zajednice Međimurske županije, Rezultati ETIS za 2017. i 2018. godinu
2. Backer, B., Superior Customer Service: Seven Strategies for Success , The Magazine for Customer Service Managers & Professionals, www.customerservicemanager.com/superior-customer-service-sevenstrategies-for-success, 16.09.2019.
3. Institut za Turizam, Zagreb, Turizam i sigurnost,
4. Kotler, P; Bowen, J.T; Makens, J.C. (2010). Marketing u ugostiteljstvu, hotelijerstvu i turizmu, Četvrto izdanje, Zagreb, MATE d.o.o.
5. Kotler, P; Bowen, J.T; Makens, J.C. (2010). Marketing u ugostiteljstvu, hotelijerstvu i turizmu, Četvrto izdanje, Zagreb, MATE d.o.o.
6. Masterplan razvoja turizma Međimurske županije do 2020.
7. Ministarstvo turizma, Strategija turizma u Hrvatskoj do 2020,
8. Petrić, L. (2011). Upravljanje turističkom destinacijom, Ekonomski fakultet u Splitu.
9. Pike, S., Mjerenje učinkovitosti marke destinacije tijekom vremena: Praćenje i percepcije klijenata konkurentskog skupa destinacija u desetogodišnjem razdoblju, Acta turistica, Zagreb, 2015, p. 155
10. Previšić, J., Ozretić Došen, Đ., Krupka, Z.: 'Osnove međunarodnog marketinga', Školska knjiga, Zagreb, 2012.
11. Razvojna strategija Međimurske županije do 2020.
12. Strategija upravljanja vodama, Narodne novine 91/08
13. www.iztztg.hr/UserFiles/file/novosti/2015/Turizam-isigurnost_11_12_2015.pdf 16.09.2019.
14. www.mint.hr/UserDocsImages/Strategija-turizam-2020-editfinal.pdf, 18.09.2019.
15. www.odrzivi.turizam.hr
16. www.poslovni.hr
17. www.regionalni.com
18. Zakon o otpadu, Narodne novine 178/2004
19. Zakon o turističkim zajednicama i promicanju hrvatskog turizma, Narodne novine 152/08
20. Zakon o vodama, Narodne novine 107/95 i 105/05

DIFFERENTIATION CONTENT ANALYSIS OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS OF COUNTRY

Berislav Andrić

*Professor at Polytechnic in Pozega, Croatia
bandrlic@vup.hr*

Shtuler Iryna

*Professor at National Academy of Management, Ukraine
shkirka2002@ukr.net*

Serzhanov Vitaliy

*Associate Professor at Uzhgorod National University, Ukraine
vitaliy.serzhanov@gmail.com*

ABSTRACT

The article analyzes the content analysis of differentiation of socio-economic development of the regions of the country. The list of indicators that form groups for assessing the socio-economic development of the regions of the country is given. Grouping of indicators-indicators of socio-economic development of the regions of the country. Using the methods of content analysis, we have selected indicators that characterize the socio-economic development of the regions of the country. In accordance with the selected groups of indicators of socio-economic development of regions, the identification of types of regions of the country is proposed. The author's method of differentiation of socio-economic development of the regions of the country is presented. It is established that the study was conducted is the basis for developing recommendations for improving the country's Socio-Economic Development Program for the harmonious development of its regions.

Keywords: *region, differentiation, socio-economic development, public relations, content analysis*

1. INTRODUCTION

Socio-economic development of the regions of the country is one of the most important indicators of the national economic system of the country, which characterizes its dynamic and effective development as a whole. In order to stimulate socio-economic development in a proper and effective way, the country needs to develop a Program of socio-economic development of the regions using all possible tools, measures and mechanisms. There are several factors behind the increased differentiation in the socio-economic development of the country's regions. These include: lack of a systematic approach to the formation and implementation of national policies, lack of use of regional development potentials, imperfection of public administration and regulation, inefficiency of strategies for socio-economic development of the country's regions, etc. All this makes it impossible to create conditions, use tools, take measures and implement mechanisms for balanced socio-economic development of the regions of the country, increase the efficiency of using their potential and effectiveness of the adopted state decisions.

2. METHOD OF RESEARCH OF THE PROCESS OF ASSESSMENT OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS OF COUNTRY

Given the large number of approaches to the selection of indicators that characterize the socio-economic development of the regions of the country and determine their differentiation, it is advisable to analyze the indicators, identified by leading researchers, economists. The results obtained, namely indicators-indicators, are organized into qualification groups, which greatly

facilitate the selection and reflect the method of formation of differentiation of socio-economic development of the regions of the country. (Table 1)

Table 1: List of indicators that form groups for assessing the socio-economic development of the regions of the country (Balabanova, 2013, p. 52; Gorbatov, 2016, p.46; Mykolaychuk, 2008, p.62)

Indicators	Group
Population, Average life expectancy at birth, Economically active population, Population growth, Number of births, Number of deaths, Migration of population	population and migration
Number of registered unemployed, Duration of registered unemployment, Ratio of number of created and liquidated jobs, Employment of unemployed citizens, Number of full-time employees, Number of workers who were in forced part-time employment, Number of employees, employed on the job, the movement of personnel, the use of workers' working time	employment and unemployment
Average monthly salary of full-time employees, Real wages, Debt arrears, Debt on payment of a single contribution to compulsory state social insurance, Structure of the payroll of full-time employees, Population income	remuneration and social and labor relations
Secondary education, Graduation of secondary schools, Vocational schools, Higher education institutions, Number of students of higher educational establishments, Preschool educational institutions, Cultural and art institutions, Securing of population	education and culture
Number of pensioners, Average pensions, Number of persons with disabilities, Housing security	the social protection
Number of criminal offenses	justice and crime
Number of enterprises, Volume of realized production (goods, services) of enterprises, Financial results of enterprises before tax, Net profit (loss) of enterprises, Share of unprofitable enterprises, Profitability of operating activities of enterprises	activity of enterprises
Capital investment, Housing investment	capital investments
Agricultural production index, Volume of agricultural products	agriculture, forestry and fisheries
Utilization of heat and electricity	energy
Industrial production index, Industrial output, Mining output	industry
Index of construction products, Volume of construction works completed, Total area of residential buildings commissioned	construction
Turnover, Passenger traffic, Density of public roads with hard surface, Density of public tracks, Volume of services provided in the field of telecommunications and mail, Number of Internet users	transport and communication
Number of hotels and other places for temporary accommodation, Children's health and wellness establishments, Number of health resorts and sanatoriums,	tourism
Retail turnover, Wholesale turnover, Cost of fixed assets	entrepreneurship
Exports, Imports, Share of foreign trade turnover in gross regional product	foreign economic activity
Consumer Price Index	consumer prices
Expenditure on R&D, Number of researchers involved in the implementation of research and development, Costs of innovation	science, technology and innovation

According to the regulatory documents that form the methodology for assessing the differentiation of socio-economic development of the regions of the country, the following indicators are defined:

- volume of gross regional product per person;
- volume of industrial products sold per person;
- the volume of gross agricultural output per person (at comparable prices);
- volume of investments in fixed capital for one person;
- volume of construction work performed per person;
- volume of foreign direct investment per person;
- the amount of taxes and fees (compulsory payments) to budgets and state trust funds per person;
- the amount of local budget revenues without transfers (general and special fund) per person;
- volume of export of goods per person;
- the average monthly wage of employees;
- the amount of arrears of wages per employee;
- unemployment rate among the able-bodied population;
- the level of providing housing to the population based on the number of m² of total area per person;
- crime rate per 10,000 population;
- average size of pensions;
- ratio of the number of pensioners to the average number of employees. (Noskova, 2013, p. 206; Storonyanska, 2008, p. 80)

Thus, having conducted a content analysis of the indicators of socio-economic development of the regions, we consider it expedient to include indicators that reach a frequency of not more than 50% for further consideration. Such indicators-indicators characterizing the socio-economic development of the regions of the country were: in alov regional product, population, economically active population, number of births, number of registered unemployed, number of full-time employees, average monthly wage of full-time workers, income of the population, output (goods and services), net income (loss) of companies, capital investment, industrial output, provision of housing , Exports, imports, consumer price index, the cost of innovation. The results of the content analysis can be divided into the groups presented in Fig. 1. According to the peculiarities of the use of correlation-regression analysis, some of the proposed indicators may be removed from the study in order to prevent the phenomenon of multicollinearity (Kulinic 2007, p. 350).

Figure following on the next page

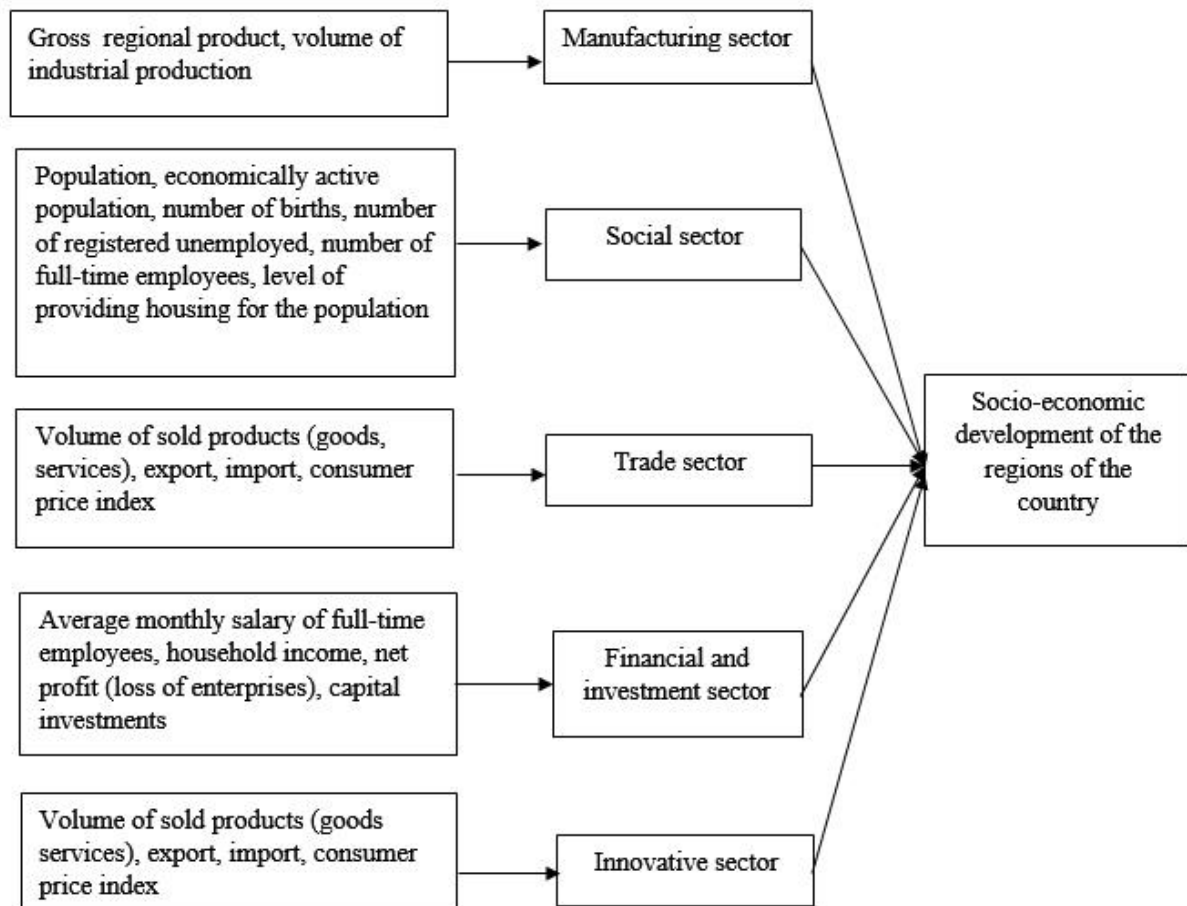


Figure 1: Grouping of indicators of socio-economic development of the regions of the country by the results of content analysis (Balabanova, 2013, p.53; Noskova, 2013, p. 206)

3. DIFFERENTIATION OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS OF COUNTRY

In accordance with the selected groups of indicators of socio-economic development of regions, it is proposed to identify such types of regions of the country as "production-oriented region", "socially-oriented region", "trade-oriented region", "financial-investment-oriented region", "innovatively oriented". If the multivariate regression equation contains several weighting equivalents belonging to different groups of indicators, such region is identified as "mixed". In Fig. 2. the author's method of differentiation of socio-economic development of the regions of the country is clearly presented.

Figure following on the next page

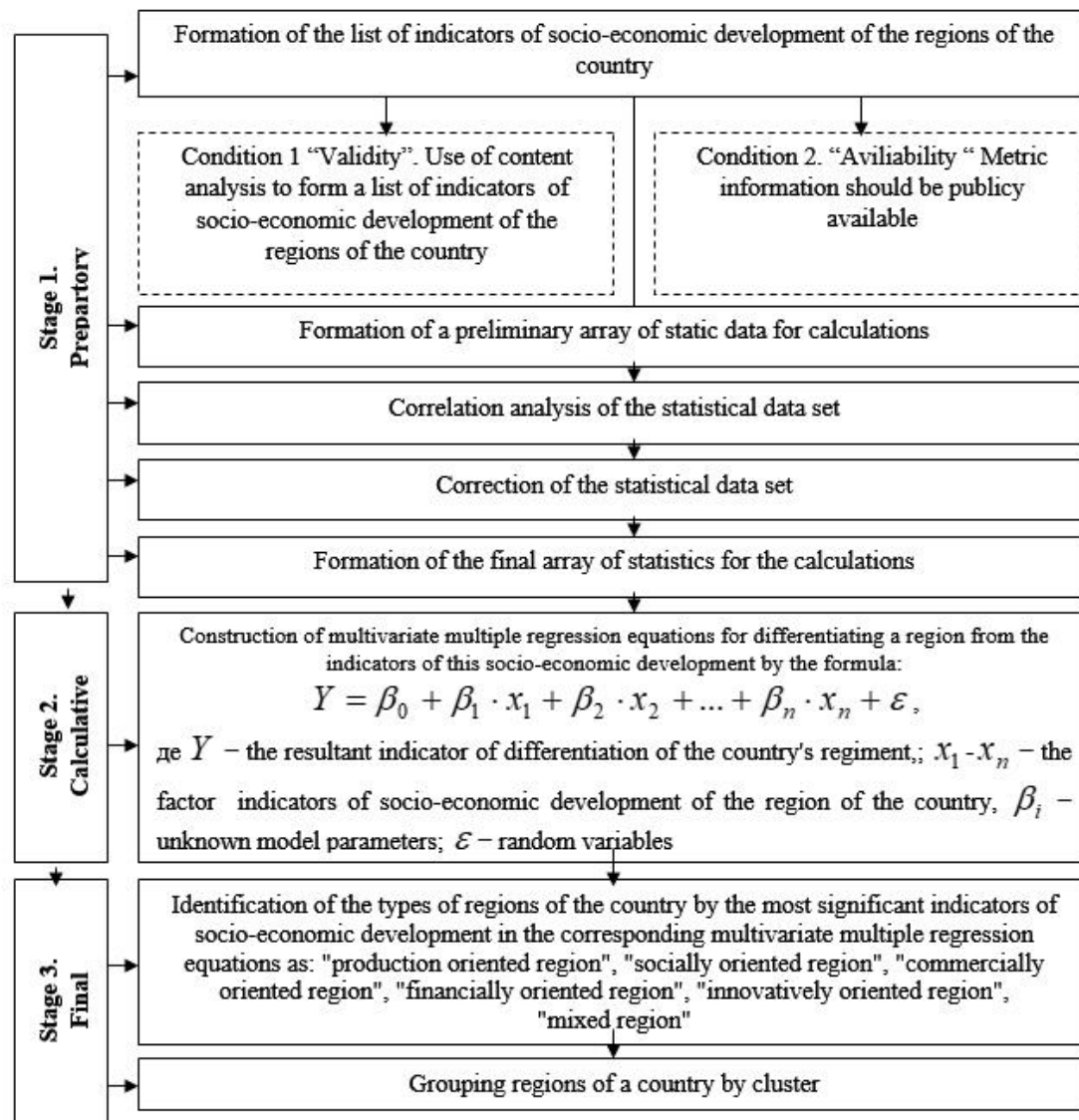


Figure 2: Methods of differentiation of socio-economic development of the regions of the country (Balabanova, 2013, p. 54; Kupira, 2016, p.45; Smentina, 2014, p. 116; Storonyanska, 2008, p.82)

4. CONSLUSION

Comparison of the results of content analysis of the socio-economic development of the regions of the country and the results of the proposed method of differentiation of the socio-economic development of the regions of the country are the basis for the development of recommendations for improving their development programs. The tools, measures and mechanisms developed in the Program of Socio-Economic Development of the Regions of the Country will allow it to be substantially improved for the harmonious development of all regions of the country. Proposed, based on content analysis, the differentiation of socio-economic development of the regions of the country should be applied in the improvement and refinement of regional programs of socio-economic development of the regions of the country in order to ensure:

1. growth of key indicators of socio-economic development of the regions of the country, which have the most significant impact on the national economic system of the country;
2. decrease in indicators of socio-economic development, which have a negative impact on the national economic system of the country.

LITERATURE:

1. Balabanova , N. (2013) Assessing the Uniformity of Socio-Economic Development of Ukrainian Regions. *Bulletin of Mariupol State University. Series: Economics*. - Vol . 6. P. 49-55.
2. Bevz, I. (2013) Assessment of socio-economic development of Ukrainian regions in the pre-crisis and post-crisis periods. *An efficient economy* . - № 7 Retrieved 19.09.2019 from: http://nbuv.gov.ua/UJRN/effect_2013_7_15
3. Gorbatov, V. (2016) World experience in assessing the socio-economic development of countries and their regions. *Business Inform* . - № 4. - P. 44-50.
4. Kulinich, R. (2007) Comprehensive assessment of the results of socio-economic development of Ukrainian regions (based on the calculation of deviations from average values). *University research notes* . - № 1. - P. 348-351.
5. Kupira, M. (2016) Assessment of socio-economic development of Ukrainian regions. *Economic Bulletin of Zaporizhzhya State Engineering Academy* . - Vol . 6 (2). - P. 43-47.
6. Mykolaychuk, M. (2008) Assessment of socio-economic achievements of regions from the point of view of sustainable development. *Economy and the state* . - № 10. - P. 61-63.
7. Noskova, S. (2013) Generalization of indicators of economic, social and environmental potentials of the region for assessing the balance of their development. *Bulletin of the East Ukrainian National University named after Vladimir Dahl*. - № 16. - P. 204-207.
8. Smentina, N. (2014) Evaluation of the impact of strategic measures on the socio-economic development of regions. *Market Economics: Modern Management Theory and Practice* . - Vol 1, Vol . 2, pp . 110-118.
9. Solovyova, N. (2016) Methodological correctness of predictive estimation of parameters of socio-economic development of regions. *Current problems of the economy* . - № 11. - P. 268-277.
10. Storonyanska, I. (2008) Processes of convergence / divergence of socio-economic development of Ukrainian regions: approaches to assessment. *Regional economy* . - № 2. - P. 73-84.
11. Scheme of the content of the statistical bulletin "Socio-economic situation of the region" (2018) Retrieved 21.09.2019 from: http://www.ukrstat.gov.ua/druk/publicat/kat_u/2018/Shema2018.zip

THE LEGAL ENVIRONMENT OF BUSINESS WITH RESPECT TO CHANGES IN INCOME TAX

Ivana Martincevic

University North, Croatia
ivana.martincevic@unin.hr

Goran Kozina

University North, Croatia
goran.kozina@unin.hr

Mario Matic

Ured za vodstvo obrt, Croatia
mamatic@unin.hr

ABSTRACT

In terms of the legal environment for businesses, one of the main areas is the tax load salary. The tax system has two opposing sides, on the one hand, that is, entrepreneurs and employers who advocate the lowest possible burdens, and on the other, a state that must generate sufficient tax revenue. According to the tax burden, Croatia is not ranked well in comparison to other EU countries, and employers' organizations often warn about problems of Croatian employers. The Government of the Republic of Croatia has introduced certain tax exemptions with the aim of reducing the tax burden on labor and improving the competitiveness of Croatian companies in relation to the EU market. The main objective of this paper is to investigate the impact and significance of new tax and other legal changes related to workload and to show the effectiveness or ineffectiveness of legal changes in the example of wage calculations in Croatia.

Keywords: *Business, Income, Legal, Tax*

1. INTRODUCTION

Taxation is the price that must be paid for the functioning of civilized society, so taxes are an important part of the environment and institutional structure of any regulated economy (Jurković 2002). The tax system in Croatia has undergone many reforms since independence of the state and process through the transition period, so much so that it can be considered as a new system (Jurković 2002). The reforms announced today are not really reforms, they are only minor or major legal changes to an already complex tax system. In developed countries, priority is placed on increasing tax efficiency and increasing the neutrality and simplicity of the tax system in order to achieve fairness and reduce tax evasion (Jurković 2002). Considering the legal environment of business in the Republic of Croatia the tax load salary is a significant item for entrepreneur. On the one hand, we have a state where contributions to existing and future pensions are of big importance and it is difficult to reduce them for a number of objective reasons, and even more urgently needed are health contributions as well as income taxes to finance local government. On the other hand, we have employers and workers who strive to reduce the workload in order to result in greater competitiveness of businesses and higher disposable income for workers. Croatia has struggled with the problem of over-unemployment for years, but today the situation is different for employers to find workers, and even more for attracting highly skilled labor from abroad. The reasons for the lack of competitiveness and the unsuccessful attraction of foreign workers can be seen in the legal environment of business and the tax load salary. After a long period of equal tax burden on the work, the Government of the Republic of Croatia decided to release somewhat in the field of taxation of work, initially by changing the rates of compulsory insurance contributions at the beginning of the year and

introducing non-taxable employee benefits and then introducing new non-taxable receipts during the year.

2. TAX LOAD SALARY

The tax load salary is the relationship between the cost an employer incurs when paying a salary and the net salary an employee receives. The difference between gross salary and net salary is called the tax wedge. The tax wedge has multiple impacts, in addition to affecting the disposable income of workers, it also raises the cost to the employer, which in turn has a negative impact on unemployment (Šeparović 2009). Unemployment in the Republic of Croatia has been one of the biggest problems of the economy in the last ten years, but since Croatia's accession to the European Union, there has been a problem outflow of working population and heavy attraction of workers from foreign countries. The reasons for this are high tax load that discourage the employer from increasing workers' wages. The aforementioned tax wedge is calculated by comparing the defined "average worker" singleman with three levels of income relative to the average wage (Šeparović 2009).

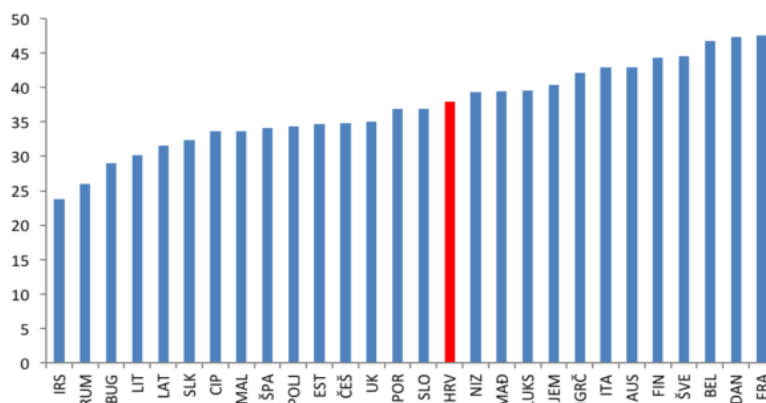
Table 1: Tax wedge calculation in Croatia 2019

	Worker with 67% average salary	Worker with 100% average salary	Worker with 167% average salary
Gross costs work	100	100	100
Net salary	65	60	56
Pension contribution insurance	17	17	17
Health contribution insurance	14	14	14
Income tax and surtax	4	9	13

Source: authors work

An "average worker" singleman, living in the City of Zagreb, paying 18% of the surtax with tax, was used as an example for calculating the tax wedge. The basis for calculating the salary of the average worker is 8,741.00 kunas, which represents the average gross salary for July 2019 in Croatia. From the calculation above, it can be seen that the work taxation in Croatia is extremely high and the tax wedge is 35% below the average salary, 40% in the average salary range, and the tax wedge is as high as 44% in the case of above average salary. It can be noted that when paying above average wages, the employer in Croatia must pay 100.00 kunas in order for the worker to receive only 56.00 kunas. According to Eurostat statistics, Croatia's share of tax revenue and contributions to GDP is near the middle of the EU rankings. The Government of the Republic of Croatia often uses such results as an argument to justify the imposition of an additional tax burden. This is also supported by the fact that income and income tax rates in Croatia are lower than in the more developed EU countries. Most states have a high tax load salary due to their high public spending, but such data should be viewed from a broader perspective. In public finance, the so-called Wagner law is known, which states that with the economic and social progress of a country comes greater social activity, such as culture, sports and well-being, from which it is also clear that government spending increases (Garcia 2016). Respecting Wagner's law, it is clear why countries like Germany, Sweden or France have a higher tax burden than Croatia. In addition, when looking at the share of government revenue from taxes and contributions to GDP, the state development itself should be taken into account, so when we study Croatia in the adjusted indicators of the share of general government revenue in GDP, we can see that Croatia is among the five most burdened countries in the European Union side by side Czech Republic, Bulgaria, Hungary and Poland. Such an analysis of the data shows that the most developed countries in fact don't have that large work taxation as Croatia has.

Picture 1: Indicator of tax load



Source: <https://arhivanalitika.hr/blog/stvarno-porezno-opterecenje-u-hrvatskoj-medu-najvecima-u-eu/>

Picture 2: Corrected indicator of tax load



Source: https://arhivanalitika.hr/blog/stvarno-porezno-opterecenje-u-hrvatskoj-medu-najvecima-u-eu

In the first picture we can see the aforementioned fact that the tax load of Croatia relative to other EU countries, places Croatia in the middle of the scale, but in the second picture it can be seen that when the corrected data are displayed where the tax load also shows the development of the country(BDP), Croatia is at the top of the tax load scale.

3. LEGAL CHANGES AND IMPACT ON SALARIES

The demands of employers' association in Croatia and other market entities finally gave results, and at the end of 2018 and during 2019, the Government of the Republic of Croatia decided on tax reforms aimed at reducing the workload. Officially, from the beginning of 2019, the Government of the Republic of Croatia amended the Contribution law and the Income tax Regulations. The amendment to the law eliminated two types of contributions, which slightly simplified the calculation salary, while changing the Regulations introduced the possibility of paying non-taxable receipt to workers as a reward for the results they achieved. This non-taxable income is limited to a maximum of 5,000.00 kunas per employee per year. After the initial relief, in the second part of the year, the Government changed wages taxation again, but this time only in the area of non-taxable receipts. The Regulation on amendments to the Regulation on Income Tax (NN 80/19) introduced the possibility of payment in cash of up to a maximum of 5,000.00 kunas per year for workers' food allowance, and provided for co-

financing housing for workers, and the payment of kindergarten costs for children of workers in the amount of actual costs, based on credible documents. It's also important to point out that the Government has announced some new ones for the next year, while making the existing changes, and certainly the most important is the tax exemption for young workers, that is, for workers up to 25 years of age in full and up to 30 years of age, half-exemption. The announcement of a tax exemption for young people planned for implementation from January 2020 immediately encountered problems because the planned measure is a form of discrimination and it also will further complicate the already complex tax system (Šonje 2019). The question is now is how the above-mentioned measures of recent tax reforms will actually affect the disposable income of workers. It can be assumed that employers in Croatia will greatly use of new opportunities for a place to raise wages for workers with less tax load of salary. Starting from the assumption that employers will make full use of the possibilities of tax changes in the further part of their work, an analysis of the tax load salary in Croatia was made according to the laws and rules that were in force last year and according to today's regulations. The average salary for July 2019, which amounted to 8,741.00 kunas gross, was used as the basis for the calculation, and the maximum possibility of using the payment of non-taxable receipts for employee benefits and for installment payments to workers was added in the form of a salary, when it amounts to 5,000.00 annually. the dividend on a 12-month basis amounts to 416.66 kunas for each type of non-taxable receipt, ie a total of 833.32 kunas.

Table 2: Calculation of work taxation before and after changes

	Calculation 09/2018	Tax wedge 09/2018	Calculation 09/2019	Tax wedge 09/2019
Gross costs work	10.244,45	100	11.016,59	100
Net salary	6.088,60	59	6.921,92	63
Pension contribution insurance	1.748,20	17	1.748,20	16
Health contribution insurance	1.503,45	15	1.442,27	13
Income tax and surtax	904,20	9	904,20	8

Source: authors work

In the above calculation we can see that due to changes in the regulations on the percentage of health insurance contributions, as well as changes in the use of non-taxable receipts, the tax load salary has decreased in the last year for the benefit of employers and workers. It can be noticed that if we include non-taxable receipts in the calculation of salary the tax wedge, which stood at 41 percent for the average salary in 2018, has dropped to 37 percent in 2019. Expressed in numbers, payment of salaries in the amount of 100.00 kunas the disposable income has increased from 59.00 kunas to 63.00 kunas.

4. PREVIOUS RESEARCH AND LITERATURE REVIEW

Work taxation and the concept of the tax wedge have been elaborated in many papers, most often on the example of Croatia in comparison with other countries. Legal changes and, in general, the tax policy of income taxation in Croatia are also covered in some papers, and more often in Internet articles, when new tax changes are announced. From the work on the work taxation we can point out the work of Anamarija Separovic, published under the title „Impact of the tax wedge on unemployment in OECD countries and comparison with Croatia“ („Utjecaj poreznog klina na nezaposlenost u zemljama OECD-a i usporedba s Hrvatskom"). In the aforementioned working paper, it can be noted that the tax wedge or tax load salary in 2009 when the work was published was at some similar rates as today in 2019 when the previously mentioned calculation of the tax wedge in Croatia was made.

Accordingly, although most governments in recent Croatian history have introduced reforms aimed at improving the entrepreneurial climate and competitiveness of business, it can be concluded that no progress has been made in the mentioned area over the past 10 years. Tax load salary and changes in the tax domain in general are part of public finances, and so the book of Ph.D. Pero Jurkovic, „Public finance“ („Javne financije“), who writes on many topics in the area of public finances, including the field of tax, so we can say that stimulating the economy is closely linked to the tax load salary of work, and the most well-known fiscal measures that stimulate the growth of the economy are those related to stimulating labor supply. According to Jurkovic, payroll taxation has a tendency to work in two directions, the first being that people will be more likely to opt for leisure in the case of high work taxation, while the second is that the work supply will be increased because people will tend to make shortages in high taxation of pay to compensate disposable income with additional work (Jurković 2002). When it comes to legal changes and the impact on wages, Velimir Šonje, in his article „Taxes in Croatia: who was touch by the finger this time“ („Porezi u Hrvatskoj: koga je ovaj put dotaknuo prst sreće?“), provides an excellent analysis of tax reform in 2019, which is what the Government of the Republic of Croatia called the Fourth Round of tax reform. On the one hand, it praises the increase in non-taxable receipts such as receipts for workers' meals, accommodation, etc., but on the other hand, it notes the over-complexity of the benefits of reform, and raises the question of how much the above incentives in the already complex tax system of Croatia further complicate and complicate accounting monitoring (Šonje 2019). The question is now, is it simpler and more expedient to lower taxation rates and increase personal deduction for workers, because in this way the same result would be achieved with a simpler method, and simplicity is known to be an important feature of a good tax system (Šonje 2019).

5. CONCLUSION

It is undisputed that the tax load salary in Croatia is too high and further relaxation are needed in the area of work taxation in order to more easily attract skilled workers from foreign markets. In general tax changes in recent periods are going in the right direction and they provide an opportunity for employers to reward workers, or to increase workers salary with a lower tax load than in previous periods. Certainly, the observed tax changes will at least partially relieve employers and increase future income for workers. On the other hand, although tax changes are stimulating, they could also be implemented in a simpler and cheaper way. It is well known that one of the features of a good tax system is simplicity, and the introduction of new documentation and new types of payments does not in any way contribute to a simpler way of taxing income in Croatia. Certainly, further tax reforms and legal changes should be in the way of simpler tax system, for example, by regulating the work taxation more by increase personal deducting or reducing the income tax rate rather than by adding new non-taxable receipts. Another negative aspect of tax policy in Croatia is that there is no permanent legal framework which all Governments in Croatia would apply. The consequence is that tax changes are regularly made at the last minute, which results in more difficult business for the entrepreneur because they cannot plan for the longer term when laws and regulations are frequently amended.

LITERATURE:

1. 4. krug porezne reforme. <https://vlada.gov.hr/4-krug-porezne-reforme/26478>
2. Buturac, G. (2014). Država i ekonomija: Gdje je Hrvatska?. *Ekonomski pregled*, 65 (6), 513-540. Retrived from: <https://hrcak.srce.hr/132918>
3. Dolenc, P. i Vodopivec, M. (2005). Porezni klin u Sloveniji: međunarodna usporedba i preporuke za ekonomsku politiku. *Financijska teorija i praksa*, 29 (3), 283-297. Retrived from: <https://hrcak.srce.hr/5679>

4. Garcia-Jaen, M. (2017). Wagner's Law: a revision and a new empirical estimation. *Hacienda Pública Española / Review of Public Economics*, 224-(1/2018): 13-35
5. Jurković, P. (2002). *Javne financije*. Masmedia. Zagreb.
6. Pravilnik o izmjenama i dopunama Pravilnika o porezu na dohodak NN (80/19). https://www.porezna-uprava.hr/HR_publikacije/Lists/mislenje33/Display.aspx?id=19669
7. Priopćenje prosječne mjesečne neto i bruto plaće zaposlenih za srpanj 2019. https://www.dzs.hr/Hrv_Eng/publication/2019/09-01-01_07_2019.htm
8. Šeparović, A. (2009). Utjecaj poreznog klina na nezaposlenost u zemljama OECD-a i usporedba s Hrvatskom. *Financijska teorija i praksa*, 33 (4), 463-477. Retrived from: <https://hrcak.srce.hr/48597>
9. Sirovica, K. (2018). Izmjene i dopune zakona o Porezu na dohodak. *Hrvatska zajednica računovođa i financijskih djelatnika*.
10. Sirovica, K; Zuber, M. (2019). Novi neoporezivi primici od 1. rujna 2019., uvjeti za isplatu i iskazivanje u obrascu JOPPD. *Hrvatska zajednica računovođa i financijskih djelatnika*.
11. Šonje, V. Porezi u Hrvatskoj: koga je ovaj put dotaknuo prst sreće?. <https://arhivanalitika.hr/blog/porezi-u-hrvatskoj-koga-je-ovaj-put-dotaknuo-prst-srece/>
12. Stvarno porezno opterećenje u Hrvatskoj među najvećima u EU. <https://arhivanalitika.hr/blog/stvarno-porezno-opterecenje-u-hrvatskoj-medu-najvecima-u-eu/>
13. The tax-to-GDP ratio slightly up in both the EU and the euro area. <https://ec.europa.eu/eurostat/documents/2995521/8515992/2-07122017-BP-EN.pdf/0326ff22-080e-4542-863f-b2a3d736b6ab>
14. Zakon o doprinosima pročišćeni tekst zakona NN 84/08, 152/08, 94/09, 18/11, 22/12, 144/12, 148/13, 41/14, 143/14, 115/16, 106/18. <https://www.zakon.hr/z/365/Zakon-o-doprinosima>
15. Zakon o porezu na dohodak pročišćeni tekst NN 115/16, 106/18. <https://www.zakon.hr/z/85/Zakon-o-porezu-na-dohodak>

RESEARCH OF IMPACT FACTORS ON BEHAVIOR OF MILLENNIALS IN ONLINE BUYING

Lucija Leljak

*Faculty of Organization and Informatics
Pavlinska 2, 42000 Varaždin, Croatia*

Damir Dobrinic

*Faculty of Organization and Informatics
Pavlinska 2, 42000 Varaždin, Croatia
ddobrinic@foi.hr*

ABSTRACT

The emergence and development of the Internet have had and have a substantial impact on all segments of the social and economic life of people. The most important of its advantages are easier and faster communication and connection, quick access to various types and forms of information, and the possibility to buy online. The very possibility of online buying is considered a "miracle" of the century, in just a few "mouse clicks" one can order a product from any part of the world. It is without a doubt that online buying is gaining in importance and is changing traditional patterns of customer behavior. A powerful consumer group, which is increasingly respected by the economy and which stands out for its specificities, beliefs, and values, is the so-called millennial generation. Marketing, as well as overall business goals, are directed toward this consumer group that has grown with the Internet and the development of new communications technologies. In this sense, online sales also becomes an integral part of the overall sales policy of a company. The paper explores the impact factors of online buying by millennial generation to maximize the adaptation of this form of direct sales to the millennial generation.

Keywords: *factors, influencing, online buying, Internet, millennials*

1. INTRODUCTION

Online buying as it is known today evolved with the advent of the internet. Initially used as a means of advertising, the internet was soon used for real transactions and online purchases. The first products purchased online were wine, chocolate, and flowers because customers knew these products and did not have to see and touch them to buy. Most of these first online buyers were young educated men familiar with computer technology. (Nanehkaran, 2013). In other words, online buying required minimum computer literacy and internet access. According to Eurostat data, 86% of households in the European Union, on average in 2017 had internet access. (Eurostat, 2019a) The Republic of Croatia is below that average with 70 %. According to the Eurostat survey, the percentage of people in the European Union who use the internet daily is 72% and in the Republic of Croatia 59%. (Eurostat, 2019b) The same survey states that less than 30% of respondents in the Republic of Croatia purchased online at least once in 2017. This percentage places the Republic of Croatia, with Bulgaria and Romania, on the very bottom of the European Union (EU average is 57%) (Eurostat, 2019a). Furthermore, average online consumption per capita in the Republic of Croatia in 2015 was just under USD 300, which also places the Republic of Croatia among the countries whose consumers make the least purchases online ("Ecommerce news," 2015). There is no doubt that online shopping is growing every year and that, as such, it has its distinctiveness. While making a decision, online buyers encounter certain external influencing factors that do not exist in traditional shopping. The most well-known and applied consumer decision-making model and one of the fundamental theories of consumer behavior is the EKB model (Engel, Kollatt, and Blackwell model).

The EKB model shows the decision-making process consisting of five stages: awareness of the problem, searching for information, evaluating alternatives, buying, and evaluating after purchase. (Osei, B.A., Abenyin, A.N., 2016). The model is applied to understand the way and the impact on the consumer in making a purchase decision. (Wen, 2012). Darley and associates complement the model with influencing factors specific to online buying. (Figure 1) (Darley et al., 2010).

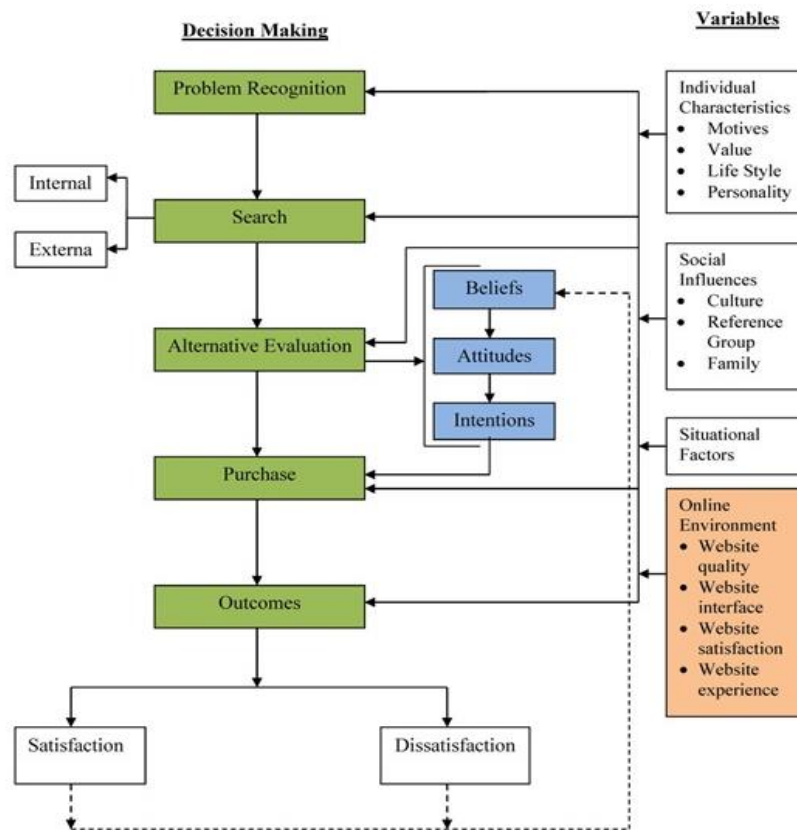


Figure 3: Darley, Blankson and Luethge's model (2010) (Wen, 2012)

Various researches addressed identification and analysis of the factors influencing online buying, so Khanna (2015) states usefulness and convenience, website design, ease of payment, positive recommendation, delivery and return of goods, accessibility and ease of navigation of the website, mobile access and attractive offering as the primary influences on online buyers in India. Furthermore, Sivanesan et al. (2017) state that product availability, pricing, easy navigation, good return policy, and quality are essential in online buying, with customers placing particular emphasis on quality, price, and easy navigation. The convenience of online buying, pricing, and product variety are all stated as crucial elements of the student population survey by Deafrooz et al. (Deafrooz et al., 2010) Kumar and associates carry out their research based on a conceptual framework where they observe four primary factors influencing online buying. These are perceived benefits, perceived risk, consumer innovation, attitudes, and intentions (Figure 2).

Figure following on the next page

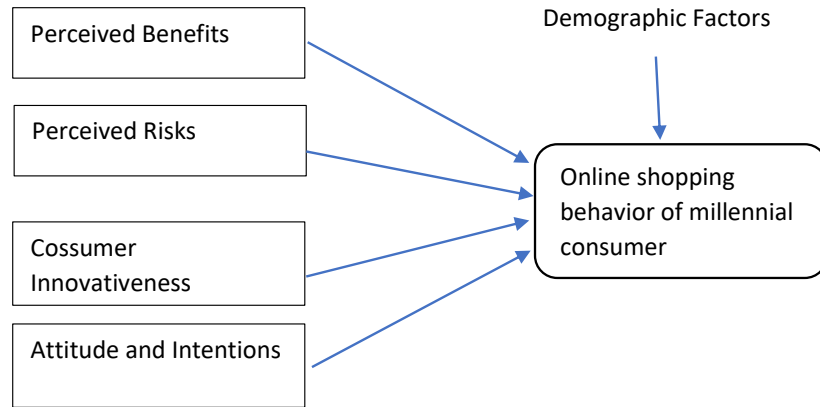


Figure 2: Conceptual framework of research, Kumar, A. et al.: (2017)

Based on these researches, the authors in this paper conduct research on a millennial generation in order to identify the factors influencing their decision to buy online.

2. EMPIRICAL RESEARCH

The following text presents the results and conclusions of a study of the factors influencing millennials' online buying behavior.

2.1. Objectives of the research

This paper focuses on the increasingly dominant consumer group, the so-called millennials, and the factors that influence their online buying. To that effect, the research goals were set:

- Research the type of factors that influence the decision to buy online
- Research the impact of individual factors on the decision to buy online

The conceptual framework of the research was defined starting from the research problem and goals (Figure 3).

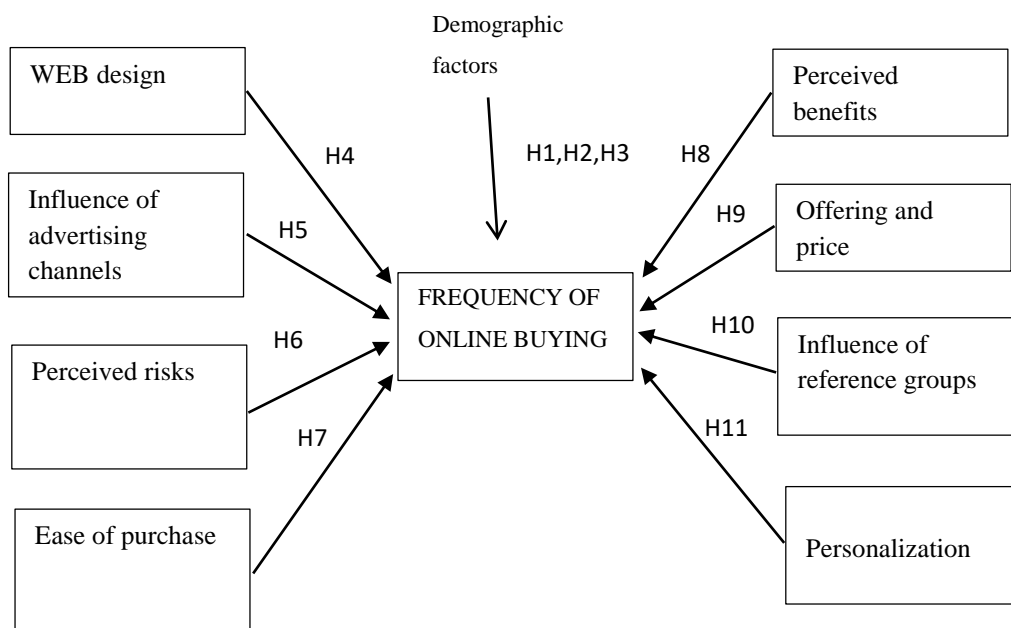


Figure 3: Conceptual Framework of Research

Based on the conceptualization, the following hypotheses were formed:

- H1: There is a significant difference in the frequency of online buying concerning employment status
- H2: There is a significant difference in the frequency of online buying concerning gender
- H3: There is a significant difference in the frequency of online buying concerning monthly household income
- H4: Web shop design positively correlates with the frequency of online buying
- H5: The impact of advertising channels positively correlates with the frequency of online buying
- H6: The impact of perceived risks negatively correlates with the frequency of online buying
- H7: The impact of ease of purchase positively correlates with the frequency of online buying
- H8: The impact of perceived benefits positively correlates with the frequency of online buying
- H9: The impact of offering and price positively correlates with the frequency of online buying
- H10: Reference group recommendations positively correlate with the frequency of online buying
- H11: Personalization positively correlates with the frequency of online buying

2.2. Methodology used

A survey questionnaire using a Google forms tool that contained 15 questions was used as a research instrument. The questionnaire was distributed on social networks (Facebook and Instagram). The first three questions related to time spent online and the frequency of online buying, while the next seven questions were about the sociodemographic characteristics of the respondents. The last five questions consisted of a total of 48 statements, and the respondents had to express their level of agreement on a 5-point Likert scale (1 - entirely disagree, 5 - strongly agree). The questionnaire was open from March to May 2019. Three hundred twenty-four respondents completed the questionnaire, 300 of them were taken into account (only those who made at least one online purchase). The statistical program R was used to test the hypotheses.

2.3. Research results

Of the total number of respondents, 16.7% were men, and 83.3% were women. According to the age of the respondents, the distribution is as follows: 71.3% are between 23 and 26 years of age, 16.3% are between 27 and 30 years of age, 7% are between 31 and 34 years of age and 5.3% are between 35 and 38 years of age. Slightly more than half of the respondents (51.3%) have a college or university degree, 40.0% have a high school degree, 6.7% have a master's or doctorate, 1% have an elementary school degree, and 0.3% have no formal education. By regions, northern Croatia and Zagreb and its surroundings are the most represented (56.7%) (23.3%). By monthly household income, 29.7% of respondents have an income over HRK 11,000, 19.7% from HRK 5,501.00 to 8,000.00, 16% from HRK 8,001.00 to 11,000.00, and 10.6% up to HRK 3,500.00. Regarding their employment status, 49% of respondents are employed, 43.3% are students, and 7.7% are unemployed. The factor analysis showed that the statement could be grouped into eight dimensions, which explained 64.2% of the variance. The dimensions are as follows:

1. Web shop - 11 statements make the dimension; Cronbach's $\alpha = 0.927$
2. Advertising Channels - 8 statements make the dimension; Cronbach's $\alpha = 0.869$
3. Perceived Risks - 7 statements make the dimension; Cronbach's $\alpha = 0.887$
4. Ease of purchase - 6 statements make the dimension; Cronbach's $\alpha = 0.886$
5. Perceived benefits - 6 statements make the dimension, Cronbach's $\alpha = 0.889$

6. Bid and Price - 2 statements make the dimension, Cronbach's $\alpha = 0.735$
7. Reference groups - 3 statements make the dimension; Cronbach's $\alpha = 0.710$
8. Personalization - 2 statements make the dimension, Cronbach's $\alpha = 0.800$

The results of the research of the differences in the frequency of online buying concerning employment status are in Figure 4.

HYPOTHESIS 1: There is a significant difference in the frequency of online buying concerning employment status					
DESCRIPTIVE RESULTS					
		Employment status			Total
		Student	Employed	Unemployed	
Frequency of online buying	Once a day	2	0	1	3
	Several times a day	1	0	0	1
	Once a week	2	4	0	6
	Several times a week	1	6	0	7
	Once a month	33	38	3	74
	Several times a month	22	44	6	72
	Once a year	11	5	1	17
	Several times a year	58	50	12	120
Total		130	147	23	300
RESULTS OF CHI-SQUARE TEST					
		Value	df	p-value	
Pearson Chi-Square		22.874	14	0.062	
Likelihood Ratio		24.956	14	0.035	

Figure 4: Determining the significance of hypothesis 1

The obtained results show that the p-value (0.035) is lower than the alpha value (0.05), which means that the result is statistically significant, hypothesis H1 (There is a significant difference in the frequency of online buying concerning employment status) is accepted. The results of the research of the differences in the frequency of online buying concerning gender are in Figure 5.

Figure following on the next page

HYPOTHESIS 2: <i>There is a significant difference in the frequency of online buying concerning gender</i>				
DESCRIPTIVE RESULTS				
		Gender		Total
		Men	Women	
Frequency of online buying	Once a day	1	2	3
	Several times a day	0	1	1
	Once a week	2	4	6
	Several times a week	1	6	7
	Once a month	11	63	74
	Several times a month	16	56	72
	Once a year	2	15	17
	Several times a year	17	103	120
Total		50	250	300
RESULTS OF CHI-SQUARE TEST				
		Value	df	p-value
Pearson Chi-Square		4.636	7	0.704
Likelihood Ratio		4.417	7	0.731

Figure 5: Determining the significance of hypothesis 2

The obtained results show that the p-value (0.731) is higher than the alpha value (0.05), which means that the result is not statistically significant, hypothesis H2: (There is a significant difference in the frequency of online buying by gender) is rejected. The results of the research of the differences in the frequency of online buying concerning household's monthly income are in Figure 6.

Figure following on the next page

HYPOTHESIS 3: There is a significant difference in the frequency of online buying concerning monthly household income									
DESCRIPTIVE RESULTS									
		Household's monthly income							Total
		<HRK 1,800	HRK 1,801 – 3,500	HRK 3,501 – 5,500	HRK 5,501 – 8,000	HRK 8,001 – 11,000	>HRK 11,000	I don't want to answer	
Frequency of online buying	Once a day	1	0	1	0	0	1	0	3
	Several times a day	0	0	0	1	0	0	0	1
	Once a week	0	0	1	0	0	5	0	6
	Several times a week	0	0	0	0	5	1	1	7
	Once a month	1	6	13	15	13	17	9	74
	Several times a month	2	5	6	10	12	27	10	72
	Once a year	0	5	1	3	3	3	2	17
	Several times a year	6	6	8	30	15	35	20	120
Total		10	22	30	59	48	89	42	300
RESULTS OF CHI-SQUARE TEST									
					Value	df	p -value		
Pearson Chi-Square					71.290	42	0.003		
Likelihood Ratio					60.114	42	0.035		

Figure 6: Determining the significance of hypothesis 3

Monthly household income and frequency of online buying variables are dependent variables, and there is a significant difference between the frequency of online buying concerning monthly household income, hypothesis H3 (There is a significant difference in the frequency of online buying concerning monthly household income) is accepted. The results of showing the correlations between the eight factors (dimensions) and the frequency of online buying are in Figure 7.

Figure following on the next page

		Frequency of online buying
Frequency of online buying	Pearson Correlation	1
	Sig. (2-tailed)	
	N	300
WEB shop	Pearson Correlation	,134
	Sig. (2-tailed)	,020
	N	300
Advertising channels	Pearson Correlation	,012
	Sig. (2-tailed)	,836
	N	300
Perceived risks	Pearson Correlation	,137
	Sig. (2-tailed)	,017
	N	300
Ease of purchase	Pearson Correlation	-,188
	Sig. (2-tailed)	,001
	N	300
Perceived benefits	Pearson Correlation	-,010
	Sig. (2-tailed)	,867
	N	300
Offering and price	Pearson Correlation	-,046
	Sig. (2-tailed)	,431
	N	300
Reference groups	Pearson Correlation	,091
	Sig. (2-tailed)	,116
	N	300
Personalization	Pearson Correlation	,063
	Sig. (2-tailed)	,279
	N	300

Figure 7: Correlation of factors influencing online buying

Based on the correlation between the influence factors (dimensions) and the frequency of online buying, Figure 8 shows the accepted and the rejected hypotheses.

Hypothesis	Accepted	Rejected
Hypothesis 4: Webshop design positively correlates with the frequency of online buying	+	
Hypothesis 5: The impact of advertising channels positively correlates with the frequency of online buying		+
Hypothesis 6: The impact of perceived risks negatively correlates with the frequency of online buying	+	
Hypothesis 7: The impact of Ease of purchase positively correlates with the frequency of online buying	+	
Hypothesis 8: The impact of perceived benefits positively correlates with the frequency of online buying		+
Hypothesis 9: The impact of offering and price positively correlates with the frequency of online buying		+
Hypothesis 10: Reference group recommendations positively correlate with the frequency of online buying		+
Hypothesis 11: Personalization positively correlates with the frequency of online buying		+

Figure 8: Illustration of hypotheses

The figures show that hypotheses 4, 6, and 7 are accepted (p-value <0.05), others are not accepted, i.e., it was established that there were no positive associations between individual factors (advertising channels, perceived benefits, offerings and prices, reference groups, and personalization) with the frequency of online buying.

2.4. Limitations and recommendations for future research

Limitations in this research are related to the use of the sample primarily in the proportionality of the gender of the respondents (83.3% percent are female) and regional representation (almost 60% of the respondents are from northern Croatia). Furthermore, the questionnaire was distributed only through two social networks (Facebook and Instagram), eliminating respondents who do not have profiles there. For future researches, the recommendation is to distribute the questionnaire across more platforms and to include a field survey.

3. CONCLUSION

Despite the many benefits it brings, the frequency of online buying among Croatian millennials, according to research findings and Eurostat data, is still not at the level of the EU average. Croatian millennials buy online only a few times a year, mostly because of the benefits of online buying that are not present in traditional shopping (for example, 24/7 trading, ordering products from all over the world, etc.). There is still a fear of misuse, and the habit and desire to try and feel the product before buying it. The research has shown that the decision to buy online is influenced by the dimensions: web design, perceived risk of customers about using the internet to make a purchase, and the ease of the purchase process. Research findings can serve businesses that have online sales as a guideline to upgrade such sales and can be a basis for further research.

LITERATURE:

1. Darley, W. K., Blankson, C., & Luethge, D. J. (2010). Toward an integrated framework for online consumer behavior and decision making process: *A review. Psychology & marketing*, 27(2), 94-116.
2. Delafrooz, N., Paim, H.L., Khatibi, A.: Students' Online Shopping Behavior: An Empirical Study, https://s3.amazonaws.com/academia.edu.documents/30915690/am0601.pdf?response-content-disposition=inline%3B%20filename%3DEvaluating_the_selective_performance_of.pdf&X-Amz-Algorithm=, August, 2019.
3. Ecommerce news (2015). *The average online spending in Europe*. <https://ecommercenews.eu/the-average-online-spending-in-europe/>, August, 2019.
4. Eurostat (2019a). *Internet purchases by individuals*. <https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database>, August, 2019.
5. Eurostat (2019b). *Perceived barriers to buying/ordering over the internet*. <https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database>, August, 2019.
6. Khanna, P. (2015). Factors influencing online shopping during Diwali festival 2014: Case study of Flipkart and Amazon. *Journal of International Technology and Information Management*, 24:65-86, <https://core.ac.uk/download/pdf/55333684.pdf>,
7. Kumar, A., Kumar, S., Gunasekaran, A (2017.): An Empirical Study on the Factors Affecting Online Shopping Behavior of Millennial Consumers, *Journal of Internet Commerce*, https://www.researchgate.net/publication/317976936_An_Empirical_Study_on_the_Factors_Affecting_Online_Shopping_Behavior_of_Millennial_Consumers, August, 2019.

8. Nanehkaran, Y. A. (2013). An introduction to electronic commerce. *International journal of scientific & technology research*, 2(4), 190-193.
9. Osei, B.A., Abenyin, A.N. (2016), Applying the Engell–Kollat–Blackwell model in understanding international tourists' use of social media for travel decision to Ghana; https://www.researchgate.net/publication/301799071_Applying_the_Engell-Kollat-Blackwell_model_in_understanding_international_tourists'_use_of_social_media_for_travel_decision_to_Ghana, August, 2019.
10. Sivanesan, R, Anishap, P, Abisha, T. (2017.); Changing Trends in Online Shopping of Indian Consumers in Apparel Segment, <http://ijrmbs.com/vol4issue3SPL2/sivanesan.pdf>, August, 2019.
11. Wen, C. (2012). *The impact of quality on customer behavioral intentions based on the consumer decision making process as applied in e-commerce*. University of North Texas., <https://pdfs.semanticscholar.org/7638/109e537c60e055bac6c49ceedbec9f41a516.pdf>, August, 2019.

APPLIED REGRESSION ANALYSIS FOR PRIVATE EQUITY FUNDS

Petar Misevic

Assistant professor at University North, Varaždin, Croatia
pmisevic@unin.hr

Hrvoje Volarevic

Croatian National Bank, Croatia
hrvoje.volarevic@hnb.hr

Marko Peric

Doctoral student at Sheffield Hallam University, United Kingdom
b7045473@my.shu.ac.uk

ABSTRACT

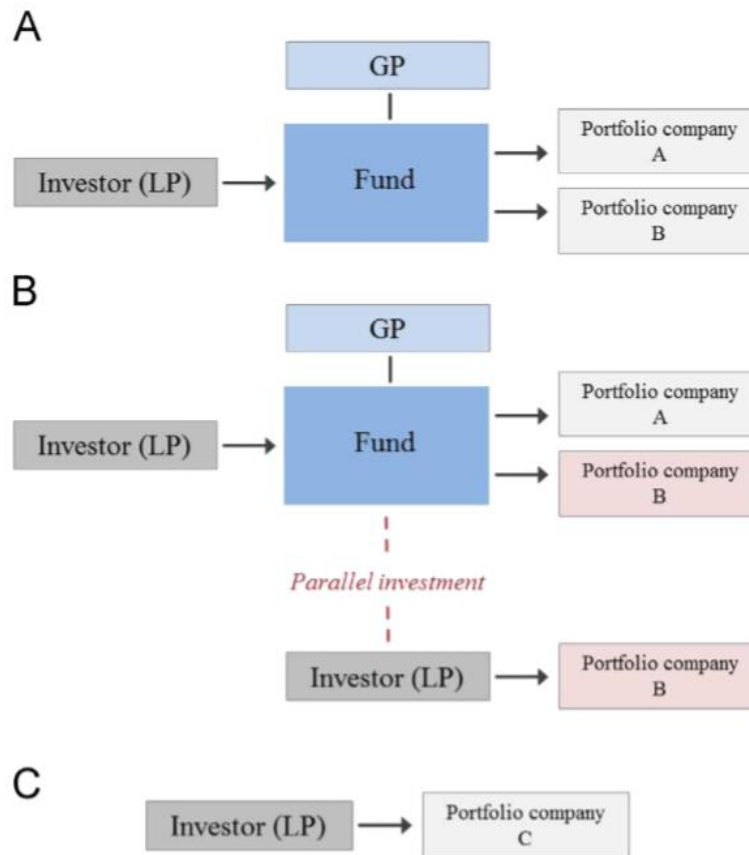
From the perspective of today's investors, it is encouraging to search for optimal subset of solutions and opportunities for propulsive investments on capital markets. Imbalances between valuation methods, performance ratios and investors' expectations in different investment phases of the private equity represent incentives for pension or private funds under the given financial discipline. In this paper, the concept and the role of committed capital follow basic terminology of limited partners toward the distribution of general partners' investments with its multiples and residuals paid-in. The linear regression model for the most promising private equity funds (456) for 19 periods on a global scale emphasize the dry powder function. The results of the authors' model, shown by data from Preqin Pro database, indicates growing risk aversion criteria through the realized gains of residuals or distribution of capital to general partners for the last decade. Additional findings with simple cases explain the performance ratios as a measure in predicting the total cost of ownership in the discussion part. Researched gaps with solutions on mentioned findings provide insight for empirical analysis of general partner and its experienced international investors. Predefined criteria that support findings is related to fund capitalisation, called up capital, distribution to paid-in capital, residual value to paid-in capital, total value to paid-in capital and its multiple ratios. In the conclusion part, the authors shall summarise all useful findings related to the area of interest and studies in science and business.

Keywords: *capital markets, distribution of capital, linear regression, private equity, total cost of ownership*

1. IMPACT AND ROLE OF CAPITAL MARKETS ON PRIVATE EQUITY FUNDS

Current conditions on capital markets create monetary incentives supported by the broader portfolio investments in alternative market regimes in which private equity funds operate. The dynamics of global capital markets put pressure on committed capital in raising assets' prices, and ticket size deals to deliver more credible results supported by valuation methods (Plenborg & Pimentel, 2016) and performance ratios (Preqin Pro, 2019) on secondary markets. Diminishing returns on fixed income instruments trigger the investors toward riskier, but more lucrative equity asset with the specific long-term pricing, liquidity and monitoring models (Morrisette & Hines, 2015). The reflection of current market circumstances has a positive impact on the outcome of financial models that presents a hard time assessing innovative investments. For example, 456 specialised funds in private equity screened by the authors present diversifying strategy for obtaining synergies from "investors towards investors" principle, from fundraising up to the liquidation phase during 19 consecutive periods (Ivashina & Lerner, 2019).

Figure 1: Forms and roles within private equity investing – limited partners (LP) and general partners (GP): (A) Traditional fund investing, (B) Co-investing and (C) Solo investing; Retrieved from L. Fang et al. / Journal of Financial Economics 116 (2015) 160–178



Taking into consideration the conditions above, private equity - as an alternative asset class - is a role model of alternative investment in entrepreneurial finance. The private equity fund investment represents direct equity investment with a lifespan of up to 10 years while creating positive cash flow in the exit phase on the alternative or secondary market (Harris, Jenkinson, Kaplan, & Stucke, 2018). Figure 1 explains controlling mechanism and compensation measures between the private equity partners supporting the owners of the fund sources (limited partners - LP) and professionals in capital deploying through investment vehicles (general partners - GP). By the statute of the funds, broadly recognized procedures give the right to the general partners to charge an annual management fee in the amount of 1% - 3% of commitment (or assets under management). Consequently, deregulation in the field of the management fee in alternative markets motivates fund vehicle investors to consume substantial growth in the by fund owners spurred management fees. Also, no less important is that limited partners redistribute carried interest in favour of 80:20 for fund owners in the liquidation phase. The connotation of sluggish performance within the partners and the industry could become recurrent process as low transparency, illiquidity, and difficulty of constructing an optimal portfolio. In the end, the biggest advantage of a private equity fund is the ability to prolong the fund lifetime till perpetuity if the condition in the statute or rule book is defined in favour of general partners. Taking the mentioned into consideration, the process of financial intermediation, deregulation and cost structure (Kaplan & Schoar, 2005; Lopez-de-Silanes, Phalippou, & Gottschalg, 2015) could force the partners focus on investment capability rather than on fundraising and ticket size. The aim of the model and work on the case model will be explained in the following chapters.

2. PERFORMANCE RATIOS IN PRIVATE EQUITY FUNDS

Broader implication of the model developed by the authors' represent a critical assessment of measuring private equity performance in the different investment phase that focuses on residuals values paid-in capital or net assets value of funds (Preqin, n.d.). The mentioned values represent the ability of a fund to utilise its residual in underlying portfolio investment. When the general partners of a private equity contribute to the limited partners with a paid-in capital, capital commitment should be fixed for a specific period (usually till the distribution phase, backwards to the limited partners). The general partners usually need 5 to 7 years for distribution of sources from the initial investment back to the limited partners, which process can boost some risks known as illiquidity (Lindsey & Weisman, 2016; Lerner & Schoar, 2004), voting transparency (Equity & Markets, 2016) and the hazard of failure. To avoid the said risk, the partners in the private equity industry use performance ratios as follows:

$$\text{Capital call (\%)} = \frac{\text{Total contribution (\%)}}{\text{Total commitment (\%)}} * 100 \quad (1)$$

Capital call (1) as a measure explains a portion of sum (including management fee) invested relative to the total capital commitment.

$$\text{Distribution to paid – in capital (\%)} = \frac{\text{Total LP distribution}}{\text{Total LP contribution}} * 100 \quad (2)$$

Distributions to paid-in capital (2) as a measure of cumulative return to investors relative to the called-in capital.

$$\text{Residual value to paid – in (\%)} = \frac{\text{Unrealised Value of Fund}}{\text{Total LP Contribution}} * 100 \quad (3)$$

Residual value to paid-in (3) as a measure explains how much capital is still in mechanism relative to the capital called-in.

$$\text{Multiple} = \frac{\text{Distributions (\%)} + \text{Residuals (\%)}}{100} \quad (4)$$

Return multiple (4) displays payback from portfolio residuals and its distributions.

Table following on the next page

Table 1: Private Equity Fund of Funds: Annual Called up Capital, Distributed and Net Cash Flow in (\$bn) (2001 – 2018)

Year	Capital Called up (\$bn)	Capital Distributed (\$bn)	Net Cash Flow (\$bn)
2001	4,3	1,5	-2,8
2002	6,8	2,5	-4,4
2003	7,1	1,9	-5,2
2004	15,3	6,9	-8,4
2005	19,0	13,9	-5,1
2006	25,0	13,2	-11,8
2007	38,6	21,2	-17,5
2008	45,2	12,5	-32,7
2009	24,8	7,1	-17,8
2010	31,8	17,2	-14,6
2011	35,2	29,6	-5,7
2012	35,0	37,2	2,2
2013	29,4	40,3	10,9
2014	33,7	83,6	49,9
2015	32,2	36,4	4,2
2016	31,1	52,4	21,3
2017	35,8	59,2	23,3
2018	30,8	50,9	20,1

Source: Preqin Pro database

The general public should be informed that the private equity performance ratios and portfolio valuations should be prosecuted under GAAP, IFRS, FAS 157, which is accessible from the IPEVC (International Private Equity and Venture Capital) guidelines (IPEV Board, 2012). From 2012 (with some exceptions), capital distribution under IPEVC presents stronghold position for general partners' ventures since net cash flow increases cash pile with a different internal rate of return (IRR). The IRR, as a performance benchmark in the private equity industry, stands for the sum of distributions of realised and unrealised investments with an applied discount rate. Any performance fees and provision for unrealised investment related to general partner are not included in the calculation. The following mentioned perspective, the net cash flows (from Table 1), favours dry powder specificity and underestimation in the next chapter.

3. REGRESSION MODEL ANALYSIS FOR PRIVATE EQUITY FUNDS

Data extracted from Preqin Pro database for linear regression model represent the most promising private equity funds (456) for 19 consecutive periods on a global scale. The role and the function of dry powder as a benchmark model are described through the residuals value to the paid-in mechanism. The dry powder mechanism relates to the amount of capital commitment ready to be called up by the general partners for the company acquisition or portfolio allocation. From the perspective of buyers, the higher level of dry powder can generate higher multiples that lead to increased deal makings. Consequently, assessing the dry powder potential may spur cost optimisation synergies and initiatives related to the favourable conditions in the sphere of merger and acquisitions. The higher amount in dry powder leads to higher multiples by generating a lower cost of equity. This finding leads the authors throughout the last 8 periods in the median fund with a significant growth for the period between 2010 and 2014. Also, for 19 consecutive periods, the median fund is evaluating investments via performance ratios (as a percentage of the base). In the model, the median fund is selected as the best option for describing the set data centre as a central tendency measure. For the analysis, the authors have used data extracted from the data analysis in excel sheets.

Table 2: Private Equity Fund of Funds Performance Benchmark (Median Fund)

Year	No. of funds	Median Fund		
		Called (%)	Dist (%) DPI	Value (%) RVPI
2018	19	9.5	0.0	101.3
2017	21	26.0	0.0	97.8
2016	25	45.0	5.2	108.6
2015	27	62.7	11.0	108.6
2014	28	75.6	13.4	120.5
2013	24	80.5	17.8	119.0
2012	23	81.3	25.6	118.0
2011	25	87.5	57.6	103.8
2010	14	91.2	65.6	99.5
2009	19	91.5	80.9	83.2
2008	47	93.3	109.0	59.9
2007	31	91.7	125.2	41.6
2006	41	95.0	120.5	26.0
2005	29	95.2	131.6	21.3
2004	17	95.7	134.9	16.6
2003	12	95.7	162.0	6.0
2002	12	94.4	158.3	4.5
2001	23	98.0	157.2	0.0
2000	19	97.0	140.3	0.0

Source: Preqin Pro database with modification made by the authors

Data from Table 2 derives an equation describing a relationship between the dependent and independent variables:

$$Y_{value\ (\%)RVPI} = \alpha + \beta * Y_{called\ (\%)N-1} + \beta * Y_{distribution\ (\%)DPIN-1} + \varepsilon_{i,N}$$

$Y_{value\ (\%)RVPI}$ stands for residual value paid-in capital by private equity or venture capital fund to general partners. α equals 1, while $Y_{called\ (\%)N-1}$ stands for the positive and statistically significant coefficient called-in for capital. Generally, the performance of $Y_{called\ (\%)N-1}$ as capital raising base point represents draw down in capital at the vintage year with the management fee. $Y_{distribution\ (\%)DPIN-1}$ stands for returns distribution to limited partners after all the deductions. $\varepsilon_{i,N}$ stands for errors or residual that is not explained by the equation or regression model. Moreover, it means that in the model exists some unexplained difference.

Table following on the next page

Table 3: Residual and probability output of limited partners in private equity over 19 observations (periods)

Correlation		1					
RESIDUAL OUTPUT				PROBABILITY OUTPUT			
Observation	Predicted Value (%) RVPI	Residuals	Standard Residuals	Predecessor	Percentile	Value (%) RVPI	
1	92,019	9,281	0,955		2,632		0
2	103,586	-5,786	-0,595	9,281	7,895		0
3	111,960	-3,360	-0,346	-5,786	13,158		4,5
4	118,852	-10,252	-1,055	-3,360	18,421		6
5	125,612	-5,112	-0,526	-10,252	23,684		16,6
6	124,863	-5,863	-0,603	-5,112	28,947		21,3
7	118,005	-0,005	-0,001	-5,863	34,211		26
8	91,917	11,883	1,222	-0,005	39,474		41,6
9	86,902	12,598	1,296	11,883	44,737		59,9
10	72,561	10,639	1,094	12,598	50,000		83,2
11	47,097	12,803	1,317	10,639	55,263		97,8
12	30,568	11,032	1,135	12,803	60,526		99,5
13	37,352	-11,352	-1,168	11,032	65,789		101,3
14	26,935	-5,635	-0,580	-11,352	71,053		103,8
15	24,147	-7,547	-0,776	-5,635	76,316		108,6
16	-1,627	7,627	0,785	-7,547	81,579		108,6
17	0,980	3,520	0,362	7,627	86,842		118
18	4,550	-4,550	-0,468	3,520	92,105		119
19	19,922	-19,922	-2,049	-4,550	97,368		120,5

Source: Data analysis in Excel made by the authors

Through the Pearson coefficient correlation model, tested correlation equals one. The tested model explains almost 96% of variations over 19 periods (Table 4). Distribution in capital supports the unified standards in capital raising and deploying. Interception explains a situation where growth value (%) of RVPI will be constant unless the distribution of (%) paid-in capital is going to deteriorate to a positive sphere. Moreover, from the result shown in the private equity regression model, limited partners as fund of funds could lurk general partners to be more robust while achieving a suitable internal rate of return. Decomposition of non-negative residuals and predecessor shows more promising results related to the source utilisation and total cost of ownership. Core role of the regression model is not to find a solution to the problem. From the perspective of business planning, residual and probability output is a good starting point for developing a critical awareness of risks in the private equity industry. From the given results, general partners should be motivated and compensated if they deliver more credible results over a more extended period, if they increase company's capability rather than ticket size deals and if they put a focus on dry powder capacity more than on fundraising capability.

Table following on the next page

Table 4: Regression Statistics test for 19 observations for private equity funds

Regression Statistics						
Multiple R	0,978488306					
R Square	0,957439366					
Adjusted R Square	0,952119286					
Standard Error	10,3106811					
Observations	19					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	2	38264,66	19132,33095	179,9671	1,08E-11	
Residual	16	1700,962	106,3101448			
Total	18	39965,62				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	85,35932966	8,849013	9,646197266	4,52E-08	66,60026	104,1184001
Called (%)	0,701023785	0,147125	4,76482935	0,000211	0,389133	1,012914078
Dist (%) DPI	-0,95107836	0,061438	-15,48029135	4,76E-11	-1,08132	-0,820835589

Source: Data analysis in Excel made by the authors

4. PROPOSITION TO THE RESULTS

The result and data from the regression model show dependence of residuals' values paid-in with other variables. The mentioned model derives distribution of the capital called-in till the subprime mortgage crisis (2008). For the period of last ten observations, a model describes high capitalisation and potential for the dry powder distribution in the residual value to paid-in. Cost of dry powder in the funds is still lower than the interest rate on *a vista* deposits in commercial banks. Moreover, it represents a robust potential for acquisition or buyouts opportunities for general partners on the market. The overall increase of standards within general partners and limited partners should be compensated through the evolution in internal rate of return (IRR) (Barber & Yasuda, 2017). Moreover, the growth of internal rate of return should always be more propulsive than total cost of ownership (Korteweg & Sorensen, 2017) represented by the weighted average cost of capital (WACC). The compound annual growth rate of individual investments in the fund portfolio can lead the investors to a high reputation risk and more volatile surroundings. Given all the mentioned, limited partners should put a focus on fund selection and funds manager (Table 5) for further ventures in the more deregulated geographical area (i.e. UK, Europe, Asia).

Table following on the next page

Table 5: Top-performing limited partners in private equity industry by geographical diversification

Firm	Headquarters	Overall No. of Funds with Quartile Ranking	No. of Funds in Top Quartile	No. of Funds in Second Quartile	Average Quartile Ranking
ATP Private Equity Partners	Copenhagen, Denmark	4	4	0	1,00
SwanCap Partners	Munich, Germany	3	3	0	1,00
Axiom Asia Private Capital	Singapore	4	3	1	1,25
Bay Hills Capital	San Francisco, US	6	4	2	1,33
Twin Bridge Capital Partners	Chicago, US	3	2	1	1,33
TrueBridge Capital Partners	Chapel Hill, US	6	3	3	1,50
Bowside Capital	Charleston, US	3	2	0	1,67
Darwin Ventures	San Francisco, US	3	1	2	1,67
Weathergage Capital	Palo Alto, US	8	5	1	1,75
Performance Equity Management	Greenwich, US	4	1	3	1,75
Greenspring Associates	Owings Mills, US	7	4	1	1,86
Industry Ventures	San Francisco, US	9	5	2	1,89
Franklin Park	Bala Cynwyd, US	16	6	6	2,00
LGT Capital Partners	Pfäffikon, Switzerland	15	5	6	2,00
Wilshire Private Markets	Santa Monica, US	13	4	6	2,00
Private Advisors	Richmond, US	8	3	2	2,00
Accolade Partners	Washington, US	5	2	2	2,00
HQ Capital International	New York, US	5	2	2	2,00
SVB Capital	Santa Clara, US	4	2	1	2,00
Emerald Hill Capital Partners	Hong Kong	3	2	0	2,00

Source: Preqin Pro database with modification made by the authors

5. CONCLUSION

Recent ventures within the partners in the private equity industry are more focused on investment execution than on distributions to the limited partners. In the industry, ticket size quality relies on teams of experts with adaptive knowledge in the field of different industries and its peers in the merger and acquisitions processes. The regression model mentioned in this paper describes basic terminology in the field of capital markets in the private equity industry. At the same time, it encourages readers to think out-of-the-box while creating shortcuts in explaining and understanding performance ratios and valuation methods in the industry and the model. Funds procedure and function roles are supported by universal laws and supranational directives that measure capital outflows and inflows in the capital markets. The main limitation of the model and findings show's growing deregulation in the field of funds procedures which is related to the distribution of the management fee contributed by general partners. Future studies could develop new criteria and mechanism for determining residual values in the funds and the process of financial intermediation in the dry powder function. After all, academic approach develops constructive opinions and thesis related to the current challenges in business and industry in general.

LITERATURE:

1. Barber, B. M., & Yasuda, A. (2017). Interim fund performance and fundraising in private equity. *Journal of Financial Economics*. <https://doi.org/10.1016/j.jfineco.2017.01.001>
2. Equity, P., & Markets, E. (2016). *Yesterday, Today, and Tomorrow*.
3. Goyal, G. (2016). Practical Applications of Forced Liquidations, Fire Sales, and the Cost of Illiquidity. *Practical Applications*, 3(4), 1.6-5. <https://doi.org/10.3905/pa.2016.3.4.148>

4. Harris, R. S., Jenkinson, T., Kaplan, S. N., & Stucke, R. (2018). Financial intermediation in private equity: How well do funds of funds perform? *Journal of Financial Economics*. <https://doi.org/10.1016/j.jfineco.2018.04.013>
5. IPEV Board. (2012). Private Equity and Venture Capital Valuation Guidelines. *International Private Equity and Venture Capital Valuation Guidelines*.
6. Ivashina, V., & Lerner, J. (2019). Pay now or pay later? The economics within the private equity partnership. *Journal of Financial Economics*, 131(1), 61–87. <https://doi.org/10.1016/j.jfineco.2018.07.017>
7. Kaplan, S. N., & Schoar, A. (2005). Private equity performance: Returns, persistence, and capital flows. *Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.2005.00780.x>
8. Korteweg, A., & Sorensen, M. (2017). Skill and luck in private equity performance. *Journal of Financial Economics*. <https://doi.org/10.1016/j.jfineco.2017.03.006>
9. Lerner, J., & Schoar, A. (2004). The illiquidity puzzle: Theory and evidence from private equity. *Journal of Financial Economics*. [https://doi.org/10.1016/S0304-405X\(03\)00203-4](https://doi.org/10.1016/S0304-405X(03)00203-4)
10. Lindsey, R. R., & Weisman, A. B. (2016). Forced Liquidations, Fire Sales, and the Cost of Illiquidity. *The Journal of Portfolio Management*. <https://doi.org/10.3905/jpm.2016.42.2.043>
11. Lopez-de-Silanes, F., Phalippou, L., & Gottschalg, O. (2015). Giants at the Gate: Investment Returns and Diseconomies of Scale in Private Equity. *Journal of Financial and Quantitative Analysis*. <https://doi.org/10.1017/S0022109015000113>
12. Morrisette, S. G., & Hines, S. (2015). An Investor's Guide to Search Funds. *The Journal of Private Equity*, 18(3), 21–40. <https://doi.org/10.3905/jpe.2015.18.3.021>
13. Plenborg, T., & Pimentel, R. C. (2016). Best Practices in Applying Multiples for Valuation Purposes. *The Journal of Private Equity*, 19(3), 55–64. <https://doi.org/10.3905/jpe.2016.19.3.055>
14. Preqin. (2019). *Preqin: Performance Ratios and Example*. (X).

APPLYING GAME THEORY TO THE EXAMPLE OF AXELROD'S TOURNAMENT

Damira Dukec

University North

104. brigade 1, 42 000 Varaždin, Croatia

ddukec@unin.hr

Damira Kecek

University North

104. brigade 1, 42 000 Varaždin, Croatia

dkecek@unin.hr

Ivana Zic

University North

104. brigade 1, 42 000 Varaždin, Croatia

ivzic@unin.hr

ABSTRACT

This paper presents the application of the Axelrod's tournament example in game theory. Game theory is a branch within the economy and deals with the analysis of strategic problems in different environments. The basic idea of this paper is to demonstrate and explain the example of Axelrod's tournament. Axelrod's tournament is based on the Prisoner's Dilemma with repetitions in order to obtain the best possible strategy for further action. Practical part of the paper is written in object-oriented language JavaScript. JavaScript is a simple programming language that can be used online, where no additional files or programs are needed. Axelrod's Tournament is implemented with six strategies. Strategies used in this paper are ALLC, ALLD, TESTER, JOSS, RANDOM and TFT. Only cooperation that took place between two strategies was scored, where non-cooperation and half cooperation do not win any points. To ensure that all strategies interact with each other and to ensure higher accuracy of the results, 90,000 iterations were selected. Based on the results obtained, conclusion confirming Axelrod's tournament has been adopted.

Keywords: *Axelrod's tournament, game theory, Nash equilibrium, Prisoner's Dilemma*

1. INTRODUCTION

Game theory is a science discipline that tries to explain the interaction between individuals or a group. The definition of a game theory can be explained by a choice of a strategy for resolving conflict, competition but also a strategy for cooperation. As a scientific discipline, the game theory emerged only in the 20th century, i.e. when the first real foundations were laid. It is primarily ranked among the young branches of economic science, but is also applicable in all other sciences such as biology, psychology, law and others. With the advent of computers and modern devices that can process data quickly and provide answers and best solutions, it is thought that theories will evolve and become more complex and usable in other sciences, not just economics. The purpose of this paper is to present an example of computer interaction between two individuals who by their choice choose to cooperate or clash in order to achieve a specific goal according to the Axelrod's model, and to analyze the results obtained. The paper consists of four chapters. After the introductory part, the second chapter describes the theoretical background of the game theory and Axelrod's tournament. The third chapter describes the example used in the paper. The principle of the game is explained, as well as the strategies used, and the results obtained are described.

The last, fourth chapter is the conclusion of the paper, which describes concluding considerations of the theoretical part of the paper and the analyzed case.

2. THEORETICAL BACKGROUND

Game theory is a relatively new scientific discipline. It is based on mathematics and is typically applied in economics; however, nowadays game theory is also applied in many other sciences such as biology, philosophy, etc. It was developed in the 20th century by virtue of mathematician John von Neumann and economist Oscar Morgenstern (Neumann and Morgenstern, 1944). Game theory is a certain type of strategy that takes place between two or more people, and nowadays it is possible to simulate games using computer programs. It is found everywhere in the environment, in conversation, negotiations, competitions, work, nature, animals; the list of application is almost unlimited. Theory as such helps individuals or groups to obtain certain information according to given inputs so that they can decide which is the best output, i.e. the best solution with the least loss for that person or group (Kopal and Korkut, 2011). Game theory is not necessarily a game that is played solely for the sake of winning, but also for cooperation between opponents with a view to a better outcome. The basic division of game theory is very simple. There are three main categories: strategy games, games of chance and games of skill. Games of chance are a type of games that involve a person against nature. The player's victory is controlled only in the part in which the person participates, and the second part depends on the natural laws that cannot be controlled, so it is defined as a matter of "luck", "fate", "fortune" ... The environment impacts the game in a way that the result cannot be affected. Games of chance are divided into uncertainty games and risk games (Kopal and Korkut, 2014):

- Risk game is a type of game in which the player is aware of every result of the environment and therefore of the possibility of success or failure. The concept of expected value gives the solution of risk games. The goal is to find the limit within which the risk will be neutralized provided the player wins.
- Uncertainty game is a type of game with a player on one side and nature, i.e. environment on the opposite side. There is no possibility of knowing the outcome in this type of game and accordingly the game is solved using three principles, namely maxmax, minmax and maxmin.
 - The first principle is the most optimistic and the player is encouraged to opt for the strategy with which they can get the most. Such a principle puts the player at greatest risk.
 - The second principle is the maxmin principle, the so-called Wald principle according to which the player must choose the best strategy from all the bad strategies offered, avoiding both winning and losing (Wald, 1945).
 - The third principle is the minmax principle; Savage's principle is that the player must choose a strategy that they will not regret, i.e. they must play in such a way as to minimize the loss, taking into account their previous actions (Savage, 1951).
- Games of skill are single-player games and the opponent is nature that is constant in these cases and has no real effect on the outcome. The outcome of the game really just depends on the player. Games like these lack the component of interdependence and are therefore classified as incorrect games of game theory. The most famous examples of this type of games are conflict resolution, swimming at 100 meters, passing exams. The outcome of the game depends solely on the player (Kopal and Korkut, 2014).
- Strategy games are types of games involving two or more players. The environment is independent in such games. Players must be aware that one player's move affects the other player's move and therefore the outcome of the game. In most cases, strategy games arise as a direct disagreement between two or more players.

Examples of strategy games are competitive pricing of the same products, disagreement between two countries, vehicle racing... Strategy games are divided into games with two or more players and, as a result, we divide them into conflict games, games that require cooperation and mixed games of conflict / cooperation. Cooperative strategy games, zero-sum games, and mixed-motive games emerge from this division (Kopal and Korkut, 2014).

- Cooperative strategy games are games where the decisions of two or more players match. Zero sum games are games where the decisions of the players are always different and the solution of the game is always zero or constant. Mixed-motive games are games where players do not have the same conflicts but also the same cooperations, and they are the games closest to real-life. Game theory contains the word game, however, the goal is not to win, but to find the best strategy and full utility for the player (Kopal and Korkut, 2014).

The written history of game theory began in the 1950s with the introduction of mathematics into game theory and is considered one of the greatest economic and intellectual achievements of the 20th century. The greatest merits, as mentioned earlier, are attributed to John von Neumann and Oscar Morgenstern, and to the book "Game Theory and Economic Behavior." The first record of game theory was found in the Babylonian Talmud in 500 BC in a collection of treatises on Jewish law, ethics, customs and history (Aumann and Hart, 1992). Game theory is found everywhere in the environment and has always been used. The application of game theory is very diverse. Economic science uses it in the analysis of customs arrangements and free trade, in the context of oligopolistic markets, in macroeconomic policy, as part of a set of mathematical techniques used to analyze events, in microeconomics between two producers who decide on the market price of a similar product (Selten, 1965). Law, for example, uses a game model when faced with incomplete or inaccurate information. The classic issue that arises in law is that prisoners do not want to admit the truth, they suppress it, they bargain; therefore, in some cases the truth is never known (Baird, Gertner and Picker, 1995). Game theory is applied in ethics, political and moral philosophy, where we find ourselves predicting, explaining, and evaluating human choice in the environment when choices and evaluations depend on other players and the outcome of the goal itself (Braithwaite, 1955). Biology combines game theory with evolution theory, explains the emergence of new species, the psychology of the individual and the group, behavior, interaction with each other, and clearly shows us the outcomes (Darwin, 2008). The implementation of game theory in evolutionary theory has led to new insights into human and animal behavior (Smith and Price, 1973). The best known examples are found in the branches of biology in which scientists study two or more species to help each other, although in nature the rule is that the fittest survive. Game theory has refuted this, as is evident in examples in which two or more living beings cooperate to survive. This kind of cooperation also exists in people, when, despite their disagreements, they come to an agreement, that is, solve certain problems for the benefit of other people, that is, for the common good (Kopal and Korkut, 2014). There are several types of games that take on different characteristics depending on the context and environment. These features have been roughly divided, however, each game may contain one or more features of other games. These are fundamental divisions but with the development of new games, it can be assumed that a new division will develop (Dixit and Skeath, 2009):

- Sequential Games - also known as dynamic games. These are games in which moves between two or more players alternate giving the other player information about the move of the first. Therefore, each player has the opportunity to change their move and adapt to the new situation in the game.
- Simultaneous games - so-called static games. The type of games where players select moves at the same time, and the moves themselves depend on the players themselves, not the counter-players' counter-moves. The time function is turned off in games like this, the

choice of strategy lies with the individual player or group of players, who do not know the moves of the opposing team, but have to think what strategy the opposing player or team will choose.

- Zero sum games - are strategy games where the strategies of two or more players are conflicting, completely opposite. One player winning means another player losing and there can only be one winner in one game. Examples: stone-paper-scissors, cross-circle, chess.
- Variable sum games - are strategy games where the goal is not to win, but to cooperate due to the fact that while not cooperating, the outcome of the game can be negative for both players, while cooperating, both players will win, that is, they can get a much better result by cooperating. Examples: Prisoner's Dilemma, deer hunting, playing coward.
- One-off games - are games that players only play once. This type of game is played by aggressive strategies due to the fact that players do not know the opponent, their strategies and the game only happens once, which reduces the consequences of remorse, which increases the dominance and cruelty of the game.
- Iterated games - are games played by players more than once, repeatedly. Strategies in iterated games may depend on previous moves, players and their strategic reputation. Known strategies used in iterated games are: meta strategy, strategy of repeating the same move in all repetitions of the game, trigger strategy, "eye for an eye", "tit for tat" and many others. We can divide them into finite and infinite. The finite ones are limited by the time duration or amount of repetitions. Endless games can last indefinitely until the game is over.
- Perfect information games - are games where all players have game-related information, a rival player, know previous moves and decide on their next move based on this information.
- Cooperative games - are games where players of the opposite parties are considered to cooperate and agree for a positive common outcome. They are divided into transferable utility games and non-transferable utility games.
- Non-cooperative games - are games where it is considered that the players of the opposite parties choose their interest, strategies and choose not to cooperate with the opposing player.
- Symmetric games – types of games where changing the player or the payout does not change the strategy and flow of the game.
- Asymmetric games – types of games where changing the player, payoff or environment changes the game and strategy.

One of the best examples of game theory is the Prisoner's Dilemma. It is most commonly used as a prime example of game theory although the dilemma is just one example of games within game theory. The basic problem in which two players or two parties who should cooperate do not cooperate is the backbone of the game invented and described by Merrill Flood and Melvin Dresher in the 1950s when researching global nuclear strategy at the RAND Corporation (Flood, 1958). A key concept in game theory is the Nash equilibrium. Nash equilibrium is the best game solution with simultaneous moves, in which players, if they adhere to their specific strategies, do not succeed in gaining more benefit by choosing another strategy. Nash equilibrium is a combination of strategies, for each individual player that best fits the strategies and decisions of each individual teammate. It should be taken into account that balance does not give the best group payout for all players. It's about uncooperative balance. An agreement among the players would bring greater benefits. (Pindyck and Rubinfeld, 2005)

3. AXELROD'S TOURNAMENT

This chapter explains the Axelrod tournament on which the empirical part of the paper is based. Axelrod made two tournaments. The first tournament consisted of 15 strategies and the second tournament used 63 strategies. The conclusions and results left scientists in doubt as they did not expect such results.

The game is based on the Prisoner's Dilemma where there is a scoreboard. Two players are involved at the same time, each with one strategy selected. Each player has the right to cooperate or not to cooperate, i.e. playing defect. In the case where both players cooperate, each player receives 3 points. When one player plays cooperation and another defects, the player who played the cooperation gets 0 points and the player who played to defect gets 5 points. If both players do not cooperate but play to defect, they both get 1 point. Tournament results have shown that good strategies go much better than bad strategies. The conclusion is that the success of one strategy depends on the other strategy offered. The second tournament confirmed the conclusion of the first tournament and proved again that good strategies appear better (Axelrod, 1984). In the example used in this paper, only 6 strategies were used. For the sake of simplicity and implementation of the program itself and demonstration of it, an object oriented JavaScript language and JSBin tool were selected. These tools are easy to use, free and accessible to all. Two players participate in the tournament. Each player has the right to use one of the 6 strategies offered in one iteration, i.e. the game. The strategies that are allowed are: ALLC, ALLD, RAND, TFT, JOSS, and TESTER. The following is a description of each strategy:

- ALLC - (Always cooperate) a strategy in which the player always cooperates. When one player within a multi-iteration game constantly chooses to cooperate, the player uses a cooperative strategy.
- ALLD – (Always defect) a strategy in which the player always plays betrayal (defection). When one player within a multi-iteration game constantly chooses not to cooperate, that is, defect, then the player uses a non-cooperative strategy.
- RAND – (Random) a strategy in which a player randomly selects between two strategies. When one player chooses to cooperate in one iteration and not cooperate in another, then the player uses a random strategy.
- TFT – (Tit for tat) a strategy in which the player chooses to cooperate in the first move and then repeats the opponent's move (tit for tat). When a player within one multi-iteration game first chooses to play a cooperation and then watches the opponent's move and plays the next iteration according to that move, i.e. if the opponent in the first iteration plays the cooperation, in the next iteration the player will play the cooperation. If the opponent plays non-cooperation in the first iteration, the player will play non-cooperation in the second iteration even though they have played cooperation in the first iteration.
- JOSS – (Johann Joss) a strategy that is the same as TFT, but every fifth game is played as a conflict. When a player within one game with multi-iterations first chooses to play a cooperation and then watches the opponent's move and accordingly plays the next iteration, i.e. if the opponent in the first iteration cooperates, in the next iteration the player will play the cooperation. If the opponent plays non-cooperation in the first iteration, the player will play non-cooperation in the second iteration even though they have played cooperation in the first iteration. Except that in every fifth iteration, he or she is playing non-cooperation, although the opponent in the previous iteration may have played cooperation.
- TESTER – a strategy that plays conflict in the first move, and in the second move if the opposing player cooperates, plays TFT, if the opposing player does not cooperate then randomly (RAND) cooperates and plays the conflict. When a player within one multi-iteration game first chooses to play non-cooperation, then if the opponent plays a cooperation, the player continues to play iteration as TFT, and if the opponent plays non-cooperation then the player continues to play iterations at random, that is, the RAND game.

To ensure that each player has played at least once all strategies, a large number of iterations have been set up. In this example, the number of iterations is 90,000. Within each iteration the player can play cooperation or defect. Cooperation gives each player 1 point. If one player plays a cooperation and the other defect or vice versa, then both players lose points.

The third case is when both players play to defect and then both players lose points. Multiple iterations of one player constitute that player's strategy. Scoring is shown in Table 1.

Table 1: Scoring matrix

<i>PLAYER 2</i>	COOPERATION	PLAYER 1	
		COOPERATION	DEFECTION
		Reward for mutual cooperation 1 point	Sucker`s payoff 0 points
	DEFECTION	Defection 0 points	Punishment for mutual defection 0 points

Source: Authors

The program works by randomly selecting strategies and conflicting them in n steps. In this way, random selection of strategies avoids dependence on the order of strategies (the final result is strictly dependent on the order in which the strategies clash), the so-called "path dependency", while stabilizing the average of the final result with many iterations. The path dependency is explained so that the decisions we make for any circumstance are limited by the decisions we have made in the past or the events we have experienced, although those decisions may no longer be relevant for making new decisions. Also, random selection of strategies through a large number of iterations eliminates the need for a so-called multi-agent system as the final result is on average the same.

4. RESULTS AND DISCUSSION

This section presents and explains the results obtained from the game described earlier. The results are presented as numerical values for each strategy. Table 2 shows the results of the game. Two players participated in the game. Each player had 6 strategies at their disposal and the choice of cooperation and non-cooperation. Due to the non-use of the multi-agent system, a large amount of 90,000 iterations were used to make sure that each player played every strategy and that each strategy came into conflict with each strategy. The number of iterations was 90,000.

Table 2: Test results

STRATEGY	RESULT
TFT	10,856
ALLC	15,699
ALLD	0
TESTER	11,550
JOSS	3,081
RANDOM	7,928

Source: Authors' code program solution.

After the program has processed all 90,000 default iterations, with 6 different strategies and two players, and choosing whether or not to cooperate, by default, scores are only summed up when two players cooperate and then get 1 point each. Although the program made for work is simplified and no points for non-cooperation and partial cooperation are introduced into the game, but rather a punishment for not getting points, we come to a similar conclusion that cooperation always has more points, that is, benefits. The conclusion is that cooperating strategies have high scores, TFT with 10,856 points, ALLC with 15,699 points. The ALLD strategy was expected to be pointless because it was programmed not to cooperate and non-cooperation earns 0 points. JOSS is programmed not to cooperate when it enters in every fifth iteration and displays a score of 3,081 points. Random has more than 50 % cooperation in this case. Last strategy, Tester strategy which is stealth TFT in half cases, therefore high scores are not surprising. With this example, we have proved that in fact no strategy is better than the other, but that addiction arises from the fact of randomness which two strategies will clash. What surprised the experts when testing the Axelrod tournament in 1984 was that good cooperative strategies had more points, which was confirmed in this example. By using Axelrod's tournament as an example of game theory, it has been proven that all strategies are equally good and that the winning of one strategy depends on a randomly chosen strategy of the opponent.

5. CONSLUSION

Game theory is a young branch of science that is becoming increasingly popular and interesting to use with the help of computers and various programs. The combination of natural problems explained through mathematics, forms the core of game theory. The theoretical part of the paper covers the history of game theory as well as its application in various sciences from biology, politics to law and philosophy. Basic concepts and classification are described. One of the basic games is the Prisoner's Dilemma in one-off games and the Prisoner's Dilemma with iterations on which Axelrod's tournament is based. The practical part of the paper consists of the implementation of the Axelrod's tournament in order to determine the best strategy for choosing between two products that need to be launched on the market. The code is written in JavaScript for easy implementation. JavaScript is a simple programming language that can be run through a browser or online program and no additional files or programs are required. The example of Axelrod's tournament in a simplified version with only six strategies was used. Selected strategies are ALLC, ALLD, TESTER, JOSS, RANDOM and TFT. For the purposes of easier monitoring and summarizing the winners, only cooperation was scored, where non-cooperation and half cooperation were not scored. 90,000 iterations have been executed to ensure that all strategies are mutually selected and to gain a better understanding of the accuracy of the results. The original Axelrod's tournament proved that good strategies that cooperate appear better, as confirmed in this paper.

LITERATURE:

1. Axelrod, A. (1984). *The Evolution of Cooperation*. Basic Books, New York.
2. Aumann, R., Hart, S. (1992). *Handbook of Game Theory with Economics Applications*, Amsterdam, North-Holland.
3. Baird, D. G., Gertner, R. H., Picker, R. C. (1995). Game theory and the law. *Public choice*, 95(1-2), (p. 201-204).
4. Braithwaite, R. B. (1955). *Theory of Games as a Tool for the Moral Philosopher*, Cambridge: Cambridge University Press.
5. Darwin, C. (2008). *Postanak vrsta*, Zagreb: Školska knjiga.
6. Dixit, A., Skeath, S. (2009). *Games of Strategy*, New York: Norton.

7. Flood, M. M. (1958). Some Experimental Games, Research Memorandum RM-789, RAND Corporation, Management Science.
8. Kopal, R., Korkut, D. (2011). *Teorija igara*, Zagreb: Comminus and VPŠ Libertas, 2011.
9. Kopal, R., Korkut, D. (2014). *Uvod u teoriju igara*, Zagreb: Effectus.
10. Pindyck, R. S., Rubinfeld, D. L. (2005). *Mikroekonomija*, Zagreb: Mate.
11. Savage, L. J. (1951). The theory of statistical decision. *J. Am. Stat. Assoc.*, 46 (p. 55-67).
12. Selten. R. (1965). Spieltheoretische Behandlung eines Oligopolmodells mit Nachfrageträgheit – Teil I Bestimmung des dynamischen Preisgleichgewichts, *Zeitschrift für die gesamte Staatswissenschaft*, (p. 301–324).
13. Smith, M. J., Price, G. R. (1973). The logic of animal conflict, *Nature*, 246, (p. 15-18).
14. von Neumann, J., Morgenstern, O. (1944). *Theory of Games and Economic Behavior*, Princeton: Princeton University Press.
15. Wald, A. (1945). Statistical decision functions which minimize the maximum risk. *Ann. Math.*, 46, (p. 265-280).

SPECIFICS OF RETAIL SUPPLY CHAIN MANAGEMENT

Davor Dujak

*Josip Juraj Strossmayer University of Osijek,
Faculty of Economics, Osijek, Croatia
davor.dujak@efos.hr*

ABSTRACT

Retailers have prevailing power in most of contemporary supply chains. While this power stems primarily from the dependence of other supply chain members on them, retailers manifest their power by imposing and carrying out numerous activities in the supply chain in collaboration with their partners, that is, other members of the supply chain. In this case it is possible to talk about retail supply chain management. The paper describes and analyzes contemporary retail supply chain management activities, highlighting its specificities with respect to traditional manufacturer-led supply chain management. For this purpose analysis of relevant secondary sources has been conducted. The work aims to clarify the role and significance of retail supply chain management in contemporary supply chains.

Keywords: *retailing, retail supply chain management, business logistics, competitiveness*

1. INTRODUCTION

The power of an enterprise in the supply chain stems from the dependence of other members of the supply chain on it. Supply chain strength increases with increasing dependency. And the dependence on a member of the supply chain will generally be determined by his access to end consumers, i.e. his market share - the more market share he has, the more dependence of other members on him, and the greater his power in the supply chain. The significant increase in market share is usually due to the process of concentration in the market. Concentration and downstream verticalisation have been traditionally empowering the development of controlled and tenable distribution channels for manufacturers (Zentes, Morschett & Schramm-Klein, 2011). But in last 20 to 30 year channel and supply chain power has shifted to retail side in most of contemporary supply chains. This shift of power is most commonly illustrated by weakness of manufacturers in negotiations with retailers what results in new vertical systems (Dujak et al., 2017) which are mostly integrated in upstream direction. There are two main retailer's activities: 1) marketing to ensure adequate demand for its product and services assortment, and 2) logistics or supply chain management to ensure 7R¹ on supply side. When retailers gained significant power in supply chain they started to impose new or tailored supply chain management solutions to its partners upstream the supply chain. All in order to optimize the total supply chain, and of course primarily own business. In parallel with the development of these activities, numerous researchers analyze retail supply chain management (Ayers & Odegaard, 2017; Ray, 2010; Gustafsson, Jönson, Smith & Sparks, 2009; Agrawal & Smith, 2015; Alagiri & Kalai Selvan, 2007; Finne & Sivonen, 2009; Dujak, 2012). It can be concluded that contemporary retail supply chain management assumes managing the supply chain by retailers where retailers takes a keyword in the supply chain initiating collaborative supply chain management activities with other members of supply chain, and acting as the one who actually manages the whole (or most) of the supply chain. Due to high power-dependency relationship, retailers' decisions regarding supply chain management are extremely affecting other members of supply chain in almost all areas of their business. This dominant approach to supply chain management from retailers' side is prevailing especially in FMCG sector, where retail power is even stronger than in other supply chains.

¹ 7R = Right product, Right place, Right condition, Right time, Right price, Right quantity, Right customer.

Increasing retailers' power in (especially food) supply chain has been proved in practice worldwide (Ghosh & Eriksson, 2019; Neuninger, 2019; Das Nair, 2019; Finger et al., 2018; Wood, 2013, Fuchs et al., 2009; Fernie & Sparks, 2018), and retailers are gaining increased control over the supply chain (Wulfraat, 2019). But only few papers (Ge, 2019; Randall et al., 2011; Hübner et al., 2013) analyse specifics of RSCM activities. This paper aims to provide clear framework of specifics of retail supply chain management by presenting a review of theoretical contribution to the retail supply chain management field. Paper builds upon and summarize author's previous researches on retail supply chain management (Dujak, 2012; Segetlija, Mesarić & Dujak, 2012; Dujak et al., 2014; Dujak et al., 2017; Dujak, 2019) and significantly expands them by providing a comprehensive framework of the functioning of retail supply chain management. In comparison with traditional notions of supply chain management, retail supply chain management has specifics in all areas of traditional supply chain management (except production) and they are presented in a paper in following order: retail sourcing, retail demand management, retail inventory management and distribution network design and transportation collaboration.

2. RETAIL SOURCING

Although the retail sourcing process is mostly the same as the manufacturing sourcing process, there are nevertheless some specificities. As with any sourcing process is necessary to start from the "make or buy" decisions, i.e. insourcing or outsourcing. This decision may be aimed at considering the sourcing of the product assortment and/or the sourcing of the various services (primarily logistics) that take place in supply chain management. In retailing, as opposed to manufacturing, outsourcing is much more prevalent, i.e. it is necessary to purchase products that will constitute the retail product assortment. One part of the product assortment can also be private labels (retail brands or store brands) that for retailing represent a form of outsourcing. For private labels, the retailer retains product design and usually outsources the production itself - the manufacturer produces the product under the retailer's private label for sale in retail stores. Private label trend is a growing trend in the retail market and there are certain retail formats like discounter that generate the vast majority of their revenue through the sale of their own brands. While globally around 17%, private label's market share in the EU is 32 % with three countries around 50% (Spain, Great Britain and Switzerland), and followed by North America (18%). The rest of the world has below 10% of market share of private labels (Nielsen 2018; PLMA, 2019). When analysing services, the situation varies from service to service. Lately, the trend is to maintain the transportation and distribution service of most products, and this is most often done through centralized distribution system. Research has shown that more successful retailers (with better sales) tend to organize even their overseas shipping arrangements (Busch, 2006). When it comes to sourcing strategies, it has to be said that retailers of predominantly food products work with a much larger number of suppliers than the manufacturer do. This makes it harder for a retailer to choose only one sourcing strategy, such as single sourcing or sole sourcing. More suppliers are needed to meet the diverse needs that arise from a large number of customers. However, there has been a trend of decreasing number of suppliers and turning towards key suppliers. A key supplier in a particular product category that is modelled on consumer preferences and purchasing habits is called a category captain. It is also possible to have multiple key suppliers in one category, then called category advisers. Through negotiation with suppliers, modern grocery retailers most often require: small-scale distribution (small-quantity shipments), more frequent delivery with shorter delivery times, smaller packages tailored to the requirements of the retail store or shelf – i.e. retail ready packaging, packaging labelling adapted to retailers' standards (custom barcode or RFID tagging system), centralized distribution versus direct store delivery, product quality control to improve the level of customer service, participation in the design of certain products (most notably private labels),

vendor managed inventory (VMI), etc. Therefore, the vendor evaluation process is different and other service level benchmarks are put at the forefront. The impact of retailers has increased in the field of product assortment filtering as well as in the development and design of new products. Potential collaboration extends from product development, through packaging, promotional and display activities, to corporate brand identity (Varley, 2014). Some of the product design specifics that retailers primarily benefit from are:

- The design of logistics units with fewer individual products tailored to smaller outlets and more frequent deliveries - today is arguably the most cost-effective design aspect for retailers.
- Retail ready packaging or shelf ready packaging - saves time for replenishing the shelf, reduces the required shelf space and improves product visibility on the shelf.
- incorporating product design into the design concept of the overall layout of a store or individual parts that serve to expose products more effectively (such as various special shelves or auxiliary displays),
- Customization of product design for multichannel or omni-channel retailing - to enable the product to flow equally well with classic grocery channels, online retailers or catalog retailers, and at the same time meet all the specific requirements of each individual channel (related to advertising, customer awareness, etc.).

And finally, the growing global character of sourcing should not be left out. Global sourcing is one of the key competitive advantages of successful retailers today. Global sourcing alone has many benefits but also some potential problems (Tokatli, 2008; Ganesan et al, 2009; Cook, 2007; Assaf et al, 2006). Additionally due to the fact that China has become a "world factory", modern retailing is unthinkable without global sourcing.

3. RETAIL DEMAND MANAGEMENT

Demand management in the context of supply chain management is defined by Dujak et al. (2017) as the preparation of supply chain members for future events in the supply chain through coordinated efforts to forecast expected future demand, jointly influencing demand and accordingly create their supply. Demand management usually starts from a single economic entity and is done only in the economic entity, however, the real opportunities come when the economic operator connects with other members of the supply chain and integrates process of demand management with the processes of suppliers and customers (Croxtton, Lambert, Garcia-Dastugue & Rogers, 2008). Most authors agree that demand management includes: demand forecasting and planning, supply planning in accordance with demand, and collaborative influencing on demand and supply. As in all other demand management approaches, retail demand forecasting is core of demand management. Ge (2019) specifies unique challenges for demand forecasting in retailing:

- It has to deal with censored demand (observed demand is affected by out of stock).
- Since new products regularly enter retail product assortment, new product forecast is becoming increasingly important;
- Product complementarity and substitutability can significantly influence demand forecasting;
- Because of very wide product assortment with many product categories with totally different characteristics, retailers have to use different forecasting approaches.

With the purpose of a more efficient demand management modern retailers (along with other members of their own supply chain) perform category management. This process approach to managing product categories as strategic business units enables retailers and their suppliers a significant impact on the demand of end customers. Demand management through category

management is carried out through a series of strategies and tactics, aimed largely at the retail assortment management and its space management. In this way, category management processes become the intersection, but also the starting point of marketing and supply chain activities of retailers. In analyzing of retail value (supply) chain, Finne & Sivonen (2009) developed demand management process called Shopper-oriented demand management process model that proof a fact that demand management in retailing is actually implementation of category management. According to ECR Europe (2014), category management is a retailer/supplier process of managing categories as strategic business units, producing enhanced business results by focusing on delivering consumer value. The biggest change that was made by introducing category management process into retailing practice is a fact that customers / final consumers have become those who decide which SKU will constitute certain category through. They influence category structure with their behaviour during the purchase of products for meeting a specific need or desire, and retailers (and/or manufacturers, market research agencies) observe this behaviour and make conclusions and implement them in category structure. This way new sets of products are grouped into groups of products that satisfy one or more connected customer needs, and they are called product categories. So, now unit of observation and object of marketing and logistics practices are not 4 or 5 departments in whole product assortment, but 50-150 smaller product categories. Each has its own team of people led by the category captain. According to Dujak et al. (2017), the activities of category management in retail can be directed in two directions of the supply chain:

- a) to customers / consumers - in order to increase demand for the category by
 - increasing customer traffic in the store (the number of customers who visit the store), and / or
 - increasing the probability of purchasing in the category of the customers who are already in the store.These activities are done through set of process activities with main accent on space management (both on store and shelf level) and category assortment management.
- b) to suppliers / manufacturers - with the aim of improving the supply and logistics (i.e. coordination in supply chain management with suppliers) by providing information on demand and other information required to ensure optimization of the chain, and requesting additional work and information about category from supplier.

Category management and supply chain management are inevitably connected. The result of category management process is planogram which directly influences assortment decisions (number of SKU faces and its position on the shelf) by reflecting consumer needs or influencing on consumer habits. In this way, category management significantly impacts consumer demand itself. By influencing consumer demand category management also initiates and changes order fulfilment process as a trigger of all other retail supply chain management activities.

4. RETAIL INVENTORY MANAGEMENT AND DISTRIBUTION NETWORK DESIGN

According to Ge (2019), retailers face following problems in inventory management: replenishment issues, transshipment problem - 'handles the necessary movements of goods between warehouses within an echelon, e.g. within the retailer's network' (Ge, 2019), and inventory placement. This problems are interrelated and interact with each other. In quest for optimal solutions in given situation, retailers must take into account numerous factors but never forget basic principles of inventory management that apply throughout the supply chain. When retail inventory management is analysed within retail supply chain management (i.e. in collaboration with other supply chain members), it should be started with inventory placement issues (the issue of inventory location in the supply chain).

As location in the supply chain is a constituent element of the supply (or distribution) network design, we can conclude that inventory management and supply network design are inextricably linked. The value of inventories is increasing as they move downstream in supply, and hence the retailer's intention is to move them more upstream in supply chain. This way they significantly decrease the cost of inventory holding, but, at the same time, they are risking to increase potential out of stock (OOS) costs because of delivery lead time extension and potentially lower level of logistics service. OOS in retailing means a situation when there is no products on the retail shelf/fridge/display and retailer can not sell products and earn money. The reasons for not having products on the shelf could be connected with supplier's delay to deliver the product for any reason, or with retailer itself – maybe he didn't order the product on time, or didn't order enough, or he has products in retailer's store warehouse, but it is not on the shelf – for the customer it is the same as that there is no product in the store, because he can not buy it. Despite mentioned challenges, modern retail chains are moving inventories from their stores upstream in supply chain, mostly by changing distribution system. More traditional distribution system is called direct store delivery (DSD), and here almost all transportation and warehousing is done by supplier - manufacturer or distributor (Figure 1). It means that most of the suppliers come with their trucks to each store at different time intervals - from once a week, up to once a month or even once in two months – delivering only their products. Deliveries are made based on the store orders mainly created by store managers in certain intervals (Dujak, 2019). The longer the delivery intervals, the greater the amount of stock in the store. And intervals are usually very long (1-3 weeks) because it is not possible for suppliers to be every day or every second day in hundreds of stores – neither in operational or cost aspect.

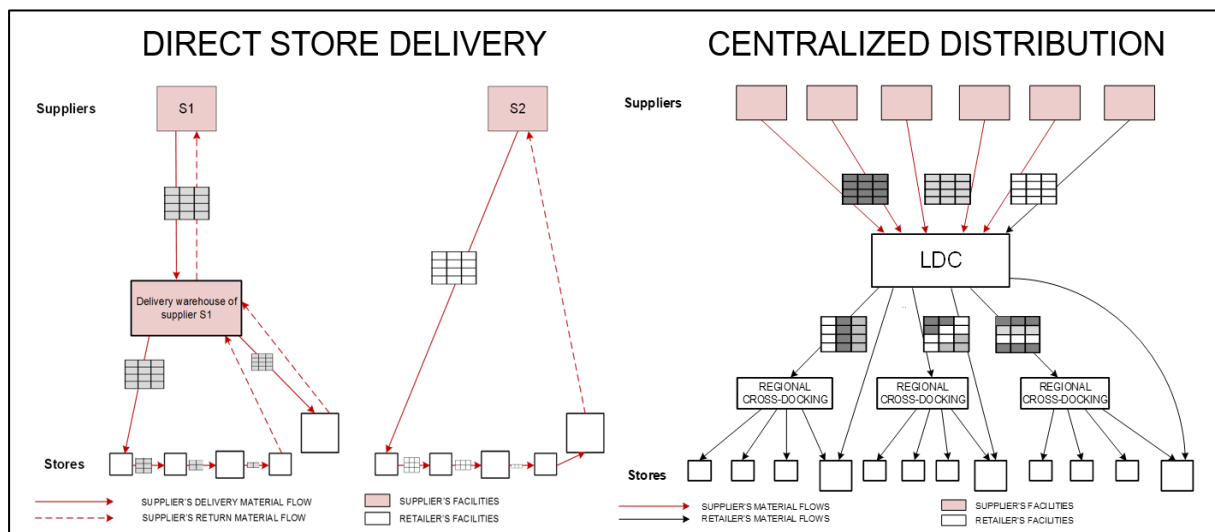


Figure 1: Direct store delivery vs centralized distribution system model (Author)

On the other side, centralized distribution (CD) is distribution system where retailer takes over control of distribution to all stores. Suppliers deliver products for all retailer's stores to one point (usually retailer's distribution centre), order picking is made, and picked and consolidated heterogeneous shipments are then controlled, packed, and loaded for transportation to stores (see Figure 3). For efficient CD system it is important to implement functional crossdocking warehouse in retailer's distribution centre as one more specifics of retail supply chain management (in warehouse activities). This way, retailers take bigger control under transportation and warehousing costs, decrease ordering costs (as only one order is made for all stores), and, if system collaboration between retailer and supplier works well, they are able to decrease OOS costs as well.

Still both distribution system are used and sometimes one retailer uses both systems in his distribution. In general, CD is better choice for retailers with smaller number of stores and for retailers whose stores represent bigger retail formats. On the other hand, DSD is more suitable for retailers with lots of stores that are smaller formats. One more specifics for retail supply chain management is dealing with problem of inventory record inaccuracy – e.g. different quantity of actual inventory in the store versus the quantity in retail information system. Inventory record inaccuracy can significantly affect store performance, inventory replenishment. Ishfaq & Raja (2019) were analyzing certain inventory record inaccuracy mitigation strategies in retail stores and concluded that replenishing store more quickly is mainly better option than raising inventory levels.

5. TRANSPORTATION COLLABORATION IN RETAIL SUPPLY CHAIN MANAGEMENT

Transportation accounts for significant part of retail logistics costs, and its further improvements should be searched through collaboration in the supply chain. That does not mean ignoring all the well-known principles of transportation which each economic operator must take into account separately as well as a whole. On the contrary, it means further exploitation of these principles through collaboration with one or more members of the supply chain. Retailing transportation has certain challenges (i.e. objectives) that are different than the ones in production part of supply chain. Ray (2010) highlights these specific challenges in the retail transport: managing cold chain, Just In Time deliveries, managing global logistics, multiple mode and multi zone transportation, pressure on reducing lead times, increasing compliance requirements, increasing importance of shipping tracking, cross-docking, milk runs, large number of stock keeping units (SKUs), vendor managed inventory (VMI - continuous replenishment challenges), special packaging and building requirements, seasonal demand. In pursuit of meeting above challenges through transportation optimization, retailers face different limitations (Ray, 2010): vehicle capacity, vehicle types, handling resources (at source and destination locations), opening hours of locations (transportation routes must be synchronized with supplier's or store opening/working hours), maximum storage time at location (specific for city centre areas or similar areas with timely limited restriction), limits of distance, duration, stopovers, access restriction to some store locations, stocking constraints in means of transport (e.g. rules on stacking of different products on each other), drop sequence (rules of stowage of the most appropriate schedule for unloading), depot location. For transportation is important to become part of the coordinating efforts of supply chain management, or the retail supply chain management. There are different ways how to leverage transportation collaboration in supply chain. Collaboration in transportation could be vertical, horizontal or lateral and in any case is usually based on use of information and communication technology (ICT). The ECR Europe is proposing a different strategy of cooperation in transportation between retailers and suppliers, one of which proposes the optimization of transport through the joint development of consolidation centres, optimizing the overall network and shared user facilities (Mason et al., 2007). One of the vertical initiatives to optimize the transportation occurred in the USA, called Collaborative Transportation Management - CTM and was developed by the Collaborative Transportation Management subcommittee of the organization called Voluntary Interindustry Commerce Solutions Association (VICS). CTM is defined as "a holistic process that brings together supply chain trading partners and service providers to drive inefficiencies out of the transport planning and execution process. The objective of CTM is to facilitate interaction and collaboration between the principal parties to the transportation component of the supply chain ... to improve operating performance by eliminating inefficiencies." (Sutherland et al., 2004). Collaboration on transport can be horizontal if company collaborate with complementary economic entities or with competitors.

Most developed stage of collaboration in transportation is the lateral collaboration in the supply chain where both advantages of vertical and horizontal collaboration are used. Since lateral collaboration proved most effective, some examples of lateral cooperation in order to better optimize the transport supply chain are (Mason et al., 2007; Christopher, 2016): pallet networks, "Empty miles" programs and telematics. Pallet networks are distribution network for palletized freight transport. Pallet networks are most common in the United Kingdom (UK). They operate in a way that transportation companies that are involved in pallet network, lift pallet network (laden) at local suppliers, consolidate shipments for the region and sent to a central distribution hub where they are reallocated to their final destinations. This is followed by reversible process of branching, deconsolidation and delivery to final destination (The Pallet Network, 2019). ICT play an important role in these processes. The pallet network may include economic operators senders, recipients, transportation entities or companies that transportation is not a primary activity, but have unused transportation capacity. All economic entities may be included as members or as users of pallet networks. Economic operators who engage in the pallet network don't have obligation of integration of their business with others. This kind of lateral collaboration in the supply chain enables small and frequent deliveries (e.g. next day delivery) in a cost effective manner, which is resulting in smaller inventory levels and higher share of just-in-time operations. This way transport intensity is reduced (Christopher, 2016; Mason et al., 2007). The "Empty Miles" project is also initiated by the VICS organization in the USA, and included the major retailers, manufacturers and carriers. Given the fact that on the roads an average of between a quarter and a third of truck are driving empty, the goal of this program is to improve the utilization of truck capacity through sharing of transport arrangements (instead of returning empty to its destination, trucks are loaded with competitor's, supplier's or customer's cargo that goes into "their" direction). In a similar manner, stimulated by the initiative of the Institute of Grocery Distribution (IGD) forty major UK retailers and manufacturers have agreed to share their transportation (Christopher, 2016). Craig (2018) defines telematics as "a method of monitoring an asset (car, truck, heavy equipment, or even ship) by using GPS and on-board diagnostics to record movements on a computerized map". When it comes to use of telematics in transportation, terms vehicle telematics or fleet telematics are most frequently used. Since the initial purpose of establishing and monitoring vehicle location (vehicle telematics), telematics has developed into a complex system of fleet telematics, by which economic entities whose primary or secondary activity is transportation are increasing the efficiency of their vehicles and employees, and reduce the various direct and indirect costs associated with transportation. Fleet telematics system allows the exchange of information between all vehicles in the fleet and the central system to support decision making. The same occurs in the reverse direction (Dujak, 2012). Some of key application areas of telematics are: location and navigation, engine diagnostics, data recording and tracking, analysis of data on traffic accident, safety, infotainment system, and cooperation. After the initial development of individual telematics system, retailers have initiated a joint telematics systems that stakeholders (suppliers, retailers and carriers and their warehouses) provides insight into the progress of each truck and its cargo - is it late, will arrive earlier or who have problems. It should be emphasized that telematics represents not only the benefits of an economic entity that performs transportation, but these benefits affect the performance of the entire supply chain, i.e. improve supply chain management through (Dujak, 2012):

- faster and more accurate exchange of information,
- shortening the time of delivery to the customer at the entire chain,
- better preparation for delivery on the basis of more updated information,
- increased sense of security for their own product in transport, etc.

6. CONSLUSION

In many contemporary supply chains the retail echelon has assumed market power in the supply chain. Therefore, practice and theory are inevitably facing growing share of supply chain management activities imposed by huge retail chains – retail supply chain management. This article intend to provide brief theoretical overview of retail supply chain management activities which significantly differentiate it from traditional supply chain management (mainly initiated by manufacturers). It can be concluded that in all traditional supply chain management areas (except production logistics) retailers are introducing significant changes and innovations that improves their position in supply chain, but also optimize whole supply chain through either cost reduction or added value creation. It remains to be seen how supply chain power relations will develop in the future and the extent to which most of retail supply chain management activities will be accepted and continued to be developed or discarded.

LITERATURE:

1. Agrawal, N., & Smith, S. A. (Eds.). (2015). *Retail supply chain management*. 2nd Edition, Springer US.
2. Alagiri, D. & Selvan N. K. (Eds.). (2007). *Retail Supply Chain Management : An Introduction*. Icfai Books, The Icfai University Press.
3. Assaf, M., Bonincontro, C., & Johnsen, S. (2006). *Global sourcing i purchasing—post 9/11 : New Logistics Compliance Requirements and Best Practices*, J. Ross Publishing, Inc.
4. Ayers, J. B., & Odegaard, M. A. (2017). *Retail supply chain management*. Boca raton: CRC Press, Taylor & Francis Group.
5. Busch, J. (2006). The Latest in Retail Sourcing and Product Trends, *Spend Matters*, from <http://www.spendmatters.com/index.cfm/2006/12/11/The-Latest-in-Retail-Sourcing-and-Product-Trends> (accessed November 15, 2018).
6. Christopher, M. (2016). *Logistics & supply chain management*. Fifth Edition, Pearson UK.
7. Cook, T. (2007). *Global Sourcing Logistics : How to Manage Risk and Gain Competitive Advantage in a Worldwide Marketplace*, AMACOM, American Management Association.
8. Craig, M. (2018). What Is Telematics? Geotab, from <https://www.geotab.com/blog/what-is-telematics/> (accessed April 14, 2019).
9. Croxton, K. L., Lambert, D.M., Rogers, D.S. & Garcia-Dastugue, S.J. (2014). The Demand Mngement Process, In Lambert, D.M. (Ed.), *Supply Chain Management : Processes, Partnerships, Performance*. 4th edition. Ponte Vedra Beach, Florida: Supply Chain Management Institute.
10. Das Nair, R. (2019). The spread and internationalisation of South African retail chains and the implications of market power. *International Review of Applied Economics*, 33(1), 30-50.
11. Drucker, P. (1993). *Managing in Turbulent Times*. New York: Harper & Row.
12. Dujak, D. (2012). *Role of Retail Trade in Supply Chain Management*, Ph.D. Thesis, Faculty of Economics in Osijek.
13. Dujak, D. (2019). Causal Analysis of Retail Distribution System Change from Direct Store Delivery to Centralized Distribution, *IBIMA Business Review*, Vol. 2019 (2019), Article ID 400418, DOI: 10.5171/2019.400418.
14. Dujak, D., Franjković, J., & Šebalj, D. (2014). The Impact of Retail Ready Packaging on FMCG Supply Chain Members. In *The 5th International Students' Symposium on Logistics and International Business*.
15. Dujak, D., Segetlija, Z., & Mesarić, J. (2017). Efficient demand management in retailing through category management. In *Efficiency in Sustainable Supply Chain* (pp. 195-216). Springer, Cham.

16. ECR Europe (2014). Glossary, from <http://www.ecr-europe.org/toolbox/glossary> (accessed November 25, 2014).
17. Fernie, J., & Sparks, L. (Eds.). (2018). *Logistics and retail management: emerging issues and new challenges in the retail supply chain*. 5th Edition, Kogan page publishers.
18. Finger, R., Hirsch, S., & Lanter, D. (2018). Profitability of Firms in EU Food Retailing. In *2018 Conference, July 28-August 2, 2018, Vancouver, British Columbia* (No. 277105). International Association of Agricultural Economists.
19. Finne, S. & Sivonen, H. (2009). *The Retail Value Chain: How to gain Competitive advantage through Efficient Consumer Response*. Kogan Page Limited, London & Philadelphia.
20. Fuchs, D., Kalfagianni, A., & Arentsen, M. (2009). Retail power, private standards, and sustainability in the global food system. *Corporate power in global agrifood governance*, 29-59.
21. Ganesan, S., George, M., Jap, S. & Palmatire, R. W. (2009). Supply Chain Management and Retailer Performance: Emerging Trends, Issues, and Implications for Research and Practice, *Journal of Retailing* , Vol. 85, No. 1, pp. 84-94.
22. Ge, D., Pan, Y., Shen, Z. J. M., Wu, D., Yuan, R., & Zhang, C. (2019). Retail supply chain management: a review of theories and practices. *Journal of Data, Information and Management*, 1-20.
23. Ghosh, R., & Eriksson, M. (2019). Food waste due to retail power in supply chains: Evidence from Sweden. *Global Food Security*, 20, 1-8.
24. Gustafsson, K., Jonson, G., Smith, D. & Sparks, L. (2009). *Retailing Logistics & Fresh Food Packaging : Managing Change in the Supply Chain*. Kogan Page Limited, The Chartered Institute of Logistics and Transport, London, 2009.
25. Hübner, A. H., Kuhn, H., & Sternbeck, M. G. (2013). Demand and supply chain planning in grocery retail: an operations planning framework. *International Journal of Retail & Distribution Management*, 41(7), 512-530.
26. Ishfaq, R., & Raja, U. (2019). Empirical evaluation of IRI mitigation strategies in retail stores. *Journal of the Operational Research Society*, 1-14.
27. Mason, R., Lalwani, C. & Boughton, R. (2007). Combining vertical and horizontal collaboration for transport optimisation, *Supply Chain Management: An International Journal* , 12 (3), pp. 187–199.
28. Neuninger, R. (2019). The effect of concentration of retail power on the specialist knowledge of retail staff in the food and beverage sector: A case study of wine retail. In *Case Studies in Food Retailing and Distribution* (pp. 25-36). Woodhead Publishing.
29. Nielsen (2018). *The rise and rise again of private label*. The Nielsen Company (US), LLC.
30. PLMA (2019). *Private label popular across Europe*, the Private Label Manufacturers Association from <https://www.plmainternational.com/industry-news/private-label-today> (accessed October 1, 2019).
31. Randall, W. S., Gibson, B. J., Clifford Defee, C., & Williams, B. D. (2011). Retail supply chain management: key priorities and practices. *The International Journal of Logistics Management*, 22(3), 390-402.
32. Ray, R. (2010). *Supply Chain Management for Retailing*. New Delhi, India: Tata McGraw Hill Education Private Limited.
33. Segetlija, Z., Mesarić, J. & Dujak, D. (2012). Distinctive Features of Retail Supply Chain Management - Transportation Perspective. *Proceedings of the 9th International Conference on Logistics & Sustainable Transport 2012*, Ipavec, V. M. (Ed.). Celje, Slovenia: University of Maribor, Faculty of Logistics, Celje, Slovenia, pp. 284-292.

34. Sutherland, J., Goldsby, T.J. & Stank, T.P. (2004). *Leveraging Collaborative Transportation Management (CTM) Principles to Achieve Superior Supply Chain Performance*, in *Achieving Supply Chain Excellence through Technology*, 6, Montgomery Research: San Francisco, CA, 2004., pp. 193., from http://mthink.com/sites/default/files/legacy/ascet/content/pdf/ASC6_wp_sutherland_goldsby_stank.pdf (accessed November 15, 2011)
35. The Pallet Network (2019) from <http://www.tpn.ie/> (accessed April 15, 2019)
36. Tokatli, N. (2008). Global sourcing: insights from the global clothing industry - the case of Zara, a fast fashion retailer, *Journal of Economic Geography*, 8(1), str. 21-38.
37. Varley, R. (2014). *Retail product management: buying and merchandising*. 3rd Edition, Routledge.
38. Wood, S. (2013). Revisiting the US food retail consolidation wave: regulation, market power and spatial outcomes. *Journal of Economic Geography*, 13(2), 299-326.
39. Wulfraat, M. (2019). Direct store delivery versus centralized distribution, MWPL International, http://www.mwpvl.com/html/dsd_vs_central_distribution.html (accessed January 17, 2018).
40. Zentes, J., Morschett, D. & Schramm-Klein, H. (2011). *Strategic Retail Management: Text and International Cases*, 2nd Edition, Gabler Verlag.

ON MATTERS OF ECONOMIC AND POLITICAL INEQUALITY IN THE CONTEXT OF DIGITAL POLICIES: THE ROLE OF JOURNALISM

Marina Biti

*University North, Croatia
marina.biti@unin.hr*

Iva Rosand Zigo

*University North, Croatia
irosandazigo@unin.hr*

ABSTRACT

The field of journalism is being explored from the viewpoint of convergence processes in a broader social context, as well as from the perspective of converging media. The article deals both with dystopic and with the utopistic theories of the future of technology, taking both perspectives into account in order to analyze the crisis of journalism from different angles. Attention is given to the need to neutralize political control of the media in order to enable growth of truly independent, existentially unthreatened media able to provide intellectual and ethical input to the society and thus acting as a corrective force, i. e. as a true 'analogue complement' to the digital reality capable of transforming digital platforms into generators of actual value to the society, referred to as 'digital dividends'. Finally, this is also seen as a precondition for a human-oriented cultural development which is – and undoubtedly will be in the future – becoming ever more dependent on digital practices, and therefore inevitably under a growing pressure of social and political forces competing for influence across the digital sphere.

Keywords: *convergence, analogue complement to digital reality, digital dividend, crisis of journalism*

1. INTRODUCTION

Convergence processes, aided by the so-called convergence policies, are usually understood as processes that undermine the global divide between the rich and the poor, as they are proclaimed to work against the negative distribution of the world's wealth and privileges. There are experts in the field of economy who sustain the view that the economies in different parts of the world are bound to branch out in the direction of more unified effects by the very nature of the market forces that direct them towards similar goals. Global policymakers, on the other hand, seek to accelerate the process by targeting inequalities with measures defined within the so-called convergence policies, designed to reduce economic (and other) inequalities and aiming at an overall rise in the economic growth across the world's countries and continents. Implementation of convergence policies has been greatly facilitated thanks to the development of digital technologies that provide the means to access and involve people and businesses throughout the world. The entire phenomenon is not only economic but also cultural, and it did indeed trigger new cultural initiatives across the globe, involving people of different nationalities, social and economic statuses in cultural processes, not only as users but also as potential or actual creators of cultural content. It is mainly through the cultural field that the potential of the new media was visibly evidenced as the digital technologies did effectively contribute to the democratization of culture and to the convergence processes between what was traditionally termed as "high" and "low" culture. The so-called "high" culture, previously enjoyed only by the elites, now became not only broadly accessible but also open to the influences from "below", which resulted in the creation of new genres that mixed classical and popular content.

2. RESEARCH

Popular genres, often pertaining to local cultures were on the other hand discovered by new and distant audiences, undergoing processes of adaptation and, in some cases, actually finding their way into the cultural mainstream. Cultural codes were perhaps the first to mutate and to converge, giving rise to hope that the converging potential of the digital media might also produce an overall positive impact on the world's inequalities, beyond the cultural sphere. Yet, the surface effects often overshadow actual effects of digital intervention into reality, and not all of the less likable effects penetrate into the zone of visibility. This is true when it comes to culture, and likely to be even truer when it comes to other areas of life. The fact that the focus of this discussion is not exclusively on culture, nor that the term itself is treated in the narrow sense of the word, adds to the complexity of the topic that takes interest in this broader phenomenon. When it comes to terminology and the meaning of culture, we will be coming close to what Henry Jenkins termed as convergence culture (Jenkins, 2006) while referring to the intricacies of the mediated reality in all fields of life (culture, economy, politics etc.) that in the age of technology come to be affected by "the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences" (Jenkins, 2006: 2). An understanding of that very flow is hence a prerequisite to grasping the actual effects of the convergence processes, which will take this discussion beyond the surface of the media content to the real-life content that often remains hidden or shadowed by the medium itself, if not even left outside its reach. Assessment of actual effects of media and convergence policies will furthermore be needed in order to evaluate their impact on real-life positions of people and groups in the global arena, and these effects will be used to point to the need of critical corrections in the sphere of media policies and in the actual management of the digital media. While, on one side, the goal of this discussion certainly is to detect weaknesses which impede the convergence policies in producing broadly experienced improvements to the economic and political realities lived in different parts of the world and at different levels of social hierarchies (everywhere!), on the other side it will resist adopting either a utopistic or a dystopic view on the future that usually accompanies this type of analysis. We believe that there are grounds to defend both views, but remain firmly and pragmatically focused on the corrective practices needed in the present for the sake of improving the future, perhaps not to the level of utopistic perfection, but to the best possible extent. For such ends, we will attempt to highlight the main focal points relevant for the creation of new media policies; we will furthermore attempt to shed light on deviations of technologically induced transformational processes that involve not just the media, but also the bonds and the crossings between the analogue reality (realities) and the desired benefits of "digital complements" that the new era offers to the users of Internet. Such benefits can come into being only if the entire process is continuously scrutinized by principled criticism, which will finally bring us to the role of the media, mainly that of critical journalism immersed in contradictory conditions of its own digital conversion that undermines the needed critical distance of today's journalists from the very processes within which the contemporary media exist and function. The technological tools that are nowadays available brought about a whole range of participatory practices that changed the way humans interact in different areas of life, and there are numerous examples, not only in the field of culture, to document that the initiatives "from below" can actually penetrate into the public sphere.¹ This provides arguments that can effectively contradict the dystopic forecasts for the future, not meaning, however, that the utopistic concept of participatory culture is to be accepted as unquestionable.

¹ The „startup“ model of doing business that has seen extensive growth of companies like Facebook, Apple or Uber, testifies of the new possibilities to penetrate into the global business „from below“. The concept has, in the meantime, developed into a business philosophy that goes by the term *agile development*, and is sometimes also referred to as *lean startup* (Reis, 2011 and Blank, 2013)

This is because there are also numerous testimonies that show that participatory processes can easily be manipulated with or even subjected to manipulation through mechanisms of surveillance that limit the power and the ability of participants to freely form opinions, express themselves and act in their own interest. Such mechanisms affect the public sphere in ways that favour the interests of stronger players in the digital arena: governments and powerful corporations. Therefore, the upsides and the downsides of technological development need to be viewed in mutual correlation. It is necessary to bear in mind the very nature of the convergence processes which is dynamic and largely erratic, and not lose sight of the tendency of these processes to produce twofold effects: those of blending the differences on one side, and those of creating new inequalities on the other. Interests vary and often collide, and the collisions between and among them are more likely than not to produce diverging subprocesses than to favour a smooth convergence of inequalities, and the first is not necessarily directly felt at the source of such collisions but rather at new locations and/or at new levels. This is because media platforms are no more than tools, and the use of any tool, no matter how sophisticated, depends not only on the ability of users to apply it but also on the abilities and, by all means, on the will of the tool-designers to make it both useful and safe, and protect it from possible misuse. The more sophisticated a tool, the greater the social value, but at the same time, the stakes increase when it comes to dangers of manipulation. Avoiding the traps and deviations on the route to a technologically enhanced future has thus become one of the greater challenges of our time. While it is up to the scientists to build that route, it is often up to the journalists to point to the flaws, accidental or intended, and warn of the dangers to human freedoms and economic rights of the entire population of people drawn into the process. It is thus rather misguided to discuss the technology itself in utopistic or in dystopic terms, while it remains necessary to monitor its implementation and to detect ways in which it can enhance or undermine the quality of life of its users. Furthermore, seeing the global scope of the phenomenon, it is above all important to approach this topic with an understanding of the workings of the convergence processes and to assess the relevant data from a broader, macroeconomic perspective. The word 'convergence' is usually used in positive contexts, and it suggests that we are participating in the process of annulment of social and material inequalities, be it between and among the nations, be it between and among social groups within individual national frames. The idea that convergence processes need to be speeded up and aided by directed human action is also the base of the policies of the European Union. The EU strategy, drafted in a document known as 'Europe 2020' is hence based on common goals regarding areas of employment, research and development, climatic change and energy consumption, education, reduction of poverty and social exclusion. Within this framework, all the member states developed their own programmes of stabilization and convergence, addressing specific national issues that need to be solved in order for a particular country to develop in the direction of the common goals. Control mechanisms have been designed to supervise the processes from country to country, providing input as to the need to introduce further corrective measures. Convergence policies aim at the stabilization of the broader EU frame, primarily in a macroeconomic sense, which is expected to facilitate implementation of convergence policies in all areas of life covered by the expressed goals and in each of the countries. That balance, however, is no easy target to achieve seeing that the differences between countries are hardly few and hardly minor. For example, the gross domestic product per capita in Croatia in 2018 amounted to 14,6 thousand American dollars, while that figure was almost three times greater in Germany, amounting to 48,7 thousand. This is just a single example of many differences that do in fact challenge the unification processes, the reflexes being manifold: e.g. the refugee crisis, the Brexit issue, the 2010 crisis in Greece... It is hardly a novelty that the convergence policies are hard to implement, that any spontaneous convergence can happen only over a long period of time (if it happens at all), and that any

attempt to control the erratic and unreliable nature of social forces faces the forces of resistance of those parties who see it in their interest to preserve the status quo. While the use of technologies largely changed the modalities of all these processes, the changed conditions had little effect on the actual relations in the social and economic sphere. If we broaden the perspective and adopt a bird's eye view to examine the effects of convergence processes on the world as a whole, using basic indicators that reveal the distribution of poverty and wealth across the globe, it becomes clear that there are some side effects to the global development that do not raise much hope for a balanced future but rather point to displacements of the formerly existing disbalance, and even to its deepening. Economic inequalities have, according to the World Inequality Report (2018), in fact, been on the rise since 1980 (until 2016) despite the technological progress which coincides with the period. During the 2018-2016 period, inequality – when compared to the previous three decades – inequality remained on the same levels in the countries which constitute “the inequality frontline”: in the Middle East, Subsaharan Africa and in Brazil. At the same time it became greater in Western Europe and in the United States of America, where the initial 10% of wealth was held by 1% of the richest population judging by their income in 1980, whereas the percentage of the wealthy grew up to 12% in Europe and doubled in America, reaching 20%. At the same time, the average growth of income within the poorest half of the world population was somewhat improved, not thanks to the Western policies but due to the economic rise that took place in China and in India, remaining however lower by a whole 100% if compared to the growth evidenced in relation to the 1% of the wealthy population. Alongside this relative fall, the growth of income is next to non-existent in the group that spans across 1 and 50% of the population that includes lower and middle-income categories of citizens across Northern America and Europe. The question which emerges from all this data is the following: is the division becoming sharper rather than being in the state of disappearance, i. e. is the world as a whole, slowly but steadily, converging towards poverty? Can the participatory technological tools bring about a positive shift in these tendencies and what are the obstacles to a more desirable global outcome, impeding their truly beneficial enactment? In another relevant report, the ‘World Development Report: Digital Dividends’ (2016), the issues related to technological development are more directly addressed, while the goals expressed by the document encompass inclusion, efficacy, and innovation. The report stresses that technologically enabled communication is becoming increasingly able to overcome poverty and social biases that limit people's access to employment, and provides examples such as the increase of women's access to the labour market or the increased use of textual, video and voice platforms by people with disabilities which in consequence enabled a higher level of inclusion of such groups into the social life and into the market(s). Furthermore, systems of digital identification which provide access to numerous private and public service have become accessible even to those people who, due to specific circumstances, do not own all the necessary identification documents, such as maybe their birth certificate. Positive changes have also come about due to the ever more widespread use of smartphones which have evolved into devices which enable not only voice and video communication but also provide information on meteorological changes, guidance of movement, warnings of dangers and opportunity alerts etc., integrating functions once dispersed across books, newspapers, photographs, records, tapes, typewriters, TV, film, radio, drawing blocks, diaries and more, and enabling the users to connect and interact among themselves and with the world of realities that they may wish to enter. The smartphone thus became an indispensable device that clearly reveals not only the technology but also the psychological, liberating potential of the converged media. It is therefore hardly surprising that owning such a device has risen to the very top of existential priorities even in very poor households which tend to value their access to information above and beyond their elementary needs, such as the use of the running water or sanitary spaces.

Unfortunately, there is more poverty beyond the poverty that we know of, as there remain parts of the world that are still completely out of touch with the technological advancements of the new age, where people live in extremely inhuman circumstances, isolated from information and with no access to Internet. The mentioned report states that such people may be as many as four million people across the world, which brings us back to the issues of inequality and to the need to be aware of the drastic contrast between the prospects and the dynamics of life in civilization in the age of information, and the physical and mental immobility of a large portion of humanity that remains trapped in the pre-information age. Both reports do stress that the convergence processes cause dramatic changes in the mediated map of reality, largely serving better outcomes, but they also provide indications that these changes have little or no impact, if not even a negative one on the realities of actual people immersed in difficult life circumstances. Both reports also point to the fact that the world remains economically marked by inequalities, which is best observed when a global view is adopted. One might be inclined to attribute the ever-growing gap between poverty and wealth to problems like wars and migratory processes, which the luckier part of the world population witnessed only via media images. However, it remains much harder to explain, and even harder to justify, the gradual disappearance of the so-called average citizens, positioned in or near the middle of the census hierarchy, between the rich and the poor. With all the opportunities to voice the needs of the silent majority, that citizen which pertains to the abstract notion of social middle grounds, whether considered averagely rich or averagely poor, ought to have grown stronger rather than weaker in the age of technology, at the very least when it comes to the more developed parts of the world. Surprisingly, however, this representative of the middle or relatively lower class of citizens on the property census scale, too close to poverty to be safe and not close enough to wealth to be able to move forward, seems to have stumbled into the very gap that divides the rich and the poor, struggling to survive within that narrow space. Thus, it is the so-called "average citizen" that seems to have turned into the weakest link in the social chain since this chain came to be exposed to the converging forces instigated by the technological development. Insufficiently prepared for the challenges of technological revolution and insufficiently educated to assume a favourable position that might provide access to the "digital dividends"², this average citizen can be characterized as the silent victim of contemporary convergence processes. This class of citizens may appear to be alive and well on paper, seeing that average values can always be calculated from highest and lowest figures, yet in reality this category seems to be facing the threat of extinction. While there are obviously many reasons to look more deeply into the impact of digital technologies on the world's divisions and articulate the right of access to Internet as one of the basic human rights in the modern times, there are also many reasons to examine ways in which digital goods are handled as to ensure that this process brings about benefits rather than damages to human, democratic, economic and cultural rights of media users and consumers. Robert McChesney, a media critic whom Jenkins categorized (alongside Marka Crispin Miller and Noam Chomski) as a "critical pessimist" (Jenkins, 2006:247), warns of damages which are just as likely to occur as benefits. McChesney wrote his study from the perspective of political economy, which he sees as „an understanding of capitalism and its relationship to democracy“ (McChesney, 2013: 13), largely focusing on issues of corporative and political colonization of the Internet by political bodies and media giants, and emphasizing, among other things, the question of quality of media reporting and journalistic ethics in the digital context.

² There is a definition of the term 'digital dividend' that was used to refer to the transfer from the analogue to the digital system of television broadcasting which had freed a large part of the radiofrequency range for other uses, such as telephony. In this context, however, we are using the term to match the meaning it is given in the World Development Report, which places it in a social context and speaks of added value to the society procurable by the use of digital technologies, that depends on the existence of what the report calls „analogue complements“, such as economic reforms and regulatory measures that aim to ensure just competition among service providers and a higher level of responsibility towards the end-user

In his discussion which was incidentally published not long before the publishing of NSA documents which the Guardian had obtained from Edward Snowden, McChesney criticized the interconnectedness of corporative media, surveillance systems and military industry, issuing a call to save the democratic potential of the digital sphere from the political and economic interest of powerful subjects within the American capitalist reality. In the sixth chapter of his book, McChesney examines possibilities of corrective action, which brings him, and this discussion, to the topic of journalism. As in other books which he wrote, McChesney claims that the field of journalism is in deep crises caused by broader political and economic processes, while he sees more specific causes in the downfall of economic models within which journalism functioned at a time when digitalization was at its beginnings, as well as in the influence of advertising on the entire field. He points to contradictions between the public interest and the corporative media, concentrated ownership, centralized set-ups and profit-oriented workings of the private capital. He calls for stimulative and protective measures such as public investments to enable the independent functioning of the media, presently engulfed by corporative and political interests of the capital holders. He does point to the fact the fundamental problem of journalism does not lie in the digital medium itself, but rather in its entrapment in the context of political economy which sustains or even blocks its liberating dimension. Hence, his appeal for the development of new, uncorrupt media policies that would provide space for a new generation of educated independent journalists, able to carry out the corrective mission of journalism and dismantle the discrepancies that undermine the benefits that the digital age could otherwise provide for the citizens. McChesney is hardly alone in his criticism of journalism nor is he the only one who points to the damaging effects of financial and political influences of corporative and political subjects on the access to information, to its use and its misuse. The crisis of journalism, with emphasis on the possibilities of self-reform, is also the topic discussed of a book written by Abe Aamidor, Jim Kuypers and Susan Wiesinger (Aamidor et al. 2013). Victor Pickard on the other hand, positions that crisis in the context of "historic inequality and pending environmental collapse when a strong press is desperately needed to expose problems, their causes, and their solutions" (Pickard, 2014). Siles and Bockowski (2012) examine the relations between production in reception seeking to identify the space for positive advancement of the media in features such as digitally enabled interactivity, also analyzing the technological tools that adequately used, might open to path to better practices. While highlighting different aspects of the problem and even debating amongst themselves, all these authors, in fact, contribute to the unveiling of the problems of journalism and help build a complex mosaic of methods that, jointly enacted, might contribute to corrective action focused on the need to eradicate the misuse of information in the digital age. Above all, they contributed to an awareness of the deviant phenomena, though such deviation still remains a fact not readily admitted by any involved party, be it in national spaces that the mentioned criticism focuses on (mainly America and Canada in the quoted examples), be it globally. What all these studies have in common is that they are focused on finding solutions to the problems which they discuss, or at least on finding parts of solutions that might contribute to the needed revitalization of the corrective function of present-day journalism. The topic yet needs to be initiated in Croatia which is, no less than the rest of the world but perhaps with an even lower degree of public awareness than in America and Canada, contaminated by economic and political influences on the field of journalism, which beyond any doubt works against the benefits of free information flow to the society as a whole.

3. CONCLUSION

The need for independent and critical journalism that points to deviations and contributes to positive corrective action is fundamental to the notions of social balance and healthy development, and as such, not likely to be contested by anyone.

Seeing that the technologically accelerated reality changes the way it appears practically on daily bases, we are, as individuals, hardly in the position to identify directions of manifold processes which we are subjected to, which only increases the need for unbiased input that can shed light on the processes beyond everyday experience, provide orientation, and facilitate choices within the dynamic environments of the modern world. It therefore of crucial importance to voice the plea for independent and existentially secure journalism, because only as such it can also provide irreplaceable intellectual and ethical resources, or – putting it in the terms of the quoted World Development Report – act as a valuable “analogue complement” to the digitalized reality, that upon which depends our ability to use digital platforms as generators of functional and measurable “digital dividends”. The somewhat metaphorical term refers to real-life benefits achievable across digital interaction, measurable in terms of information flow that contributes to the overall quality of life, and in terms of fair opportunities and improved cultural and business practices secured by mechanisms that safeguard the human rights and the rule of law across countries and territories. On the other hand, if conditions for strengthening unbiased journalism are not procured, the fight against malpractices and punishable violations of human rights remains weak and unlikely to bring about the needed social and economic “dividends”, leaving the convergence policies at a merely declarative level, to be misused by parties whose interests, political and/or material, lie elsewhere. While the crisis of journalism tends to expand from the North American centers across Europe and beyond, the negative trends and aggressive action remains on the rise. Even if no society, let alone the weaker players in the global arena, can be immune to such processes, choices do exist. Journalism, along with societies, can continue to develop in one of the two opposite directions. If we continue to pursue the negative trends we are indeed likely to lose control over the values that we declaratively defend, and we might indeed find ourselves pushed onto the road to a dystopic future where all individuals with something to lose, primarily the proverbial “average citizen”, will be facing the ever-widening gap between the rich and the poor, and be helplessly subdued by interests that exist far beyond them. However, if we take measures to free the corrective power of the “fourth force” of the society, as journalism is sometimes referred to, space can be created for the needed corrective action and chance for a better future can indeed be embraced. That choice still exists, and it is a choice that will be made for us even if – or especially if – we try to sustain from it. That choice is, in the long run, a cultural one, seeing that culture is the framework within which our very humanity is defined, and seeing that each era challenges the concept of humanity in a new way. So can our humanity survive and grow on digitalization? Yes, it can, but there are challenges to meet. We should perhaps be reminded that all authoritarian forces in history always acted in the name of some abstract greater good, and at the cost of humanity. In the digital age, we face the call to humanize the digital space against threats of the overall defacement that leaves room for invisible interests of parties which remain faceless themselves, and which act against individual rights of people who remain caught up in their actual circumstances and in their actual worlds. Therefore all the critical resources need to be unleashed to enable the real-life circumstances to be improved, and for the digital world to be contained as service to the needed improvements.

LITERATURE:

1. Aamidor, Abe – Jim A. Kuypers – Susan Wiesinger (2013) *Media Smackdown: Deconstructing the News and the Future of Journalism*. New York: Peter Lang
2. Ang, Ien (1991) *Desperately Seeking the Audience*. London: Routledge.
3. Blank, S. Why the Lean Startup Changes Everything. *Harvard Business Review* 3, May 2013
4. Deuze, Mark (2008) The Professional Identity of Journalists in the Context of Convergence Culture. *Observatorio (OBS*) Journal*, 7, pp. 103-117

5. Gasher, Mike – Colette Brin – Christine Crowther – Gretchen King – Errol Salamon – Simon Thibault, (ur.) (2016) Journalism in Crisis: Bridging Theory and Practice for Democratic Media. Toronto-Buffalo-London: University of Toronto Press
6. Gitlin, Todd (2003) Media Unlimited. New York: Owl Books.
7. Jenkins, Henry (2004) The cultural logic of media convergence. *International Journal of Cultural Studies* 7(1), pp. 33–43.
8. Jenkins, Henry (2006) Convergence culture - where old and new media collide. New York: New York University Press.
9. Kalamar, Denis (2016) Convergence of media and transformation of audience/ Konvergencija medija i transformacija publike. *Informatologia*, Vol. 49 No. 3-4, 190-202
10. McChesney, Robert – John Nicols (2010) The Death and Life of American Journalism: The Media Revolution that Will Begin the World Again. Philadelphia: Nation Books.
11. McChesney, Robert W. (2008) The Political Economy of Media: Enduring Issues, Emerging Dilemmas. NYU Press. May 1, 2008.
12. McChesney, Robert W. (2013) Digital Disconnect: How Capitalism is Turning the Internet Against Democracy, New York, NY: New Press
13. Pickard, Viktor (2014) Wither(Ing) Journalism? Public Books:
<https://www.publicbooks.org/withering-journalism/> Accessed on Oct. 10. 2019.
14. Reis, E. (2011) The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business, New York
15. Rheingold, Howard (2002) Smart Mobs: The Next Social Revolution. Basic Books.
16. Siles, Ignacio – Pablo J. Boczkowski (2012) Making sense of the newspaper crisis: A critical assessment of existing research and an agenda for future work. *New Media and Society*. Vol. 4. No. 8.
17. Stevenson, Deborah – David Rowe & McKay, Kiernyn (2010) Convergence in British Cultural Policy: The Social, the Cultural, and the Economic. *The Journal of Arts Management, Law, and Society* 40 (4), pp. 248-265.
18. World Bank (2016) World Development Report 2016: Digital Dividends.
<http://documents.worldbank.org/curated/en/961621467994698644/pdf/102724-WDR-WDR2016Overview-ENGLISH-WebResBox-394840B-OUO-9.pdf>. Pristupljeno 18. 11. 2018.
19. World Inequality Report (2018), Eng. version. World Inequality Lab,
<https://wir2018.wid.world/files/download/wir2018-summary-english.pdf>. Pristupljeno 18. 11. 2018.

STATE AID AND TAX RULINGS ISSUED BY EU MEMBER STATES IN SELECTED CASES

Doris Beganovic

Norton Rose Fulbright, Brussels, Belgium

Nenad Rancic

*Associate Professor at Faculty of Law,
University of Zagreb, Croatia
nrancic@pravo.hr*

Ozren Pilipovic

*Assistant Professor at Faculty of Law,
University of Zagreb, Croatia
opilipovic@pravo.hr*

ABSTRACT

Free movement of goods, alongside three other fundamental freedoms, namely free movement of capital, persons and services, is the key feature of the European Union. However, member states, restricting the free movement of goods in the form of national legislative, may threaten the effective operation of internal market, as well as certain restrictive practices exercised by the various private companies. Not only do such business practices harm one of the four fundamental freedoms of the EU, but they can also have a detrimental effect on business efficiency, harm consumers and, are likely to disadvantage small and medium size enterprises. This is why the enforcement and compliance with competition law rules is crucial for the effective functioning of the EU. Therefore, state aid is generally prohibited unless it is justified by reasons of general economic development. To ensure that this prohibition is respected, and exemptions are applied equally across the European Union, the European Commission is in charge of ensuring that State aid complies with EU rules. The subject of state aid and illegal tax rulings issued by various EU member states for the benefit of multi-national companies is the main theme of this paper. In the first part, general rules which govern the state aid are described. Secondly, procedures that Commission undertakes with regard to various types of State aid are assessed. Lastly, the most famous selected cases where the violation of the State aid rules were established, are presented and discussed.

Keywords: *competition, free movement of goods, government aid, state subsidies*

1. INTRODUCTION

The creation of free internal market has been a fundamental aim of the European Union since its formal creation in 1957. There are a number of articles contained in the Treaty on European Union (Treaty of Maastricht, TEU) and Treaty on Functioning of European Union (Treaty of Rome, TFEU) which prohibit tariff and non-tariff barriers to trade with the aim of ensuring the free market and free movement of goods, which, alongside three other fundamental freedoms, namely free movement of capital, persons and services, is the key feature of the European Union. The enforcement and compliance with competition law rules, by both member states and companies, is crucial for maintaining highly competitive free internal market and the effective functioning of the EU. A guiding principle in the European Union is that any State intervention should limit as much as possible the risk of crowding out or replacing private investments, of altering commercial investment incentives and ultimately of distorting competition. Thus, it needs to be ensured that public funds are carefully used, and that aid is complementary and does not substitute or distort investments of market players.

The decision whether a concrete governmental intervention is compatible or unlawful aid is taken solely by the European Commission (Elixmann & Neumann, 2013).

2. EU RULES ON STATE AID

Article 107 of TFEU¹ states that "any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market". This has been broken down into a commonly used four step test to help work out if an action will be state aid. The test is cumulative and state aid will only exist if all four parts are met. For state aid to exist, the following must be satisfied:

1. there must be an undertaking
2. aid is granted by the state or through state resources
3. to a certain undertaking
4. thereby creating a selective advantage
5. the transfer of resources distorts or has the potential to distort competition and trade between EU countries. The consequence of establishing that state aid exists is not prohibition of same but that it is deemed to be incompatible with internal market.

Examples of state aid include: direct state grants or subsidies, such as 'rescue' aid, tax or other social security exemptions, loans at preferential interest rates, guarantees or indemnities on favorable terms, preferential grants or loans, disposal of land or buildings at less than full market value, debt write-offs, waiving of profits or other returns on public funds, export assistance, 'sweeteners' to attract investment into a region, 'forgiveness' of liabilities (for example, employers' social security payments or license fees) and many more. It is important to note that the mentioned rules say that the European Commission must give prior clearance to any state aid, and that countries must not grant the aid until it is cleared by the Commission. Meaning that if aid is granted without permission it will almost always automatically be deemed to be unlawful and the company that received it can be ordered to pay it back. However, there are two exceptions to this rule and aid can indeed be deemed to be compatible with the rules; namely when the sum involved is small and when it is covered by the General Block Exemption Regulation.

2.1. Undertaking

Undertaking is defined as 'every entity engaged in an economic activity regardless of the legal status of the entity and the way it is financed' (Case C-41/90, EU:C:1991:161). Economic activity is considered to be any activity consisting in offering goods and services on a given market (Joined cases C-180/98 to C-184/98, EU:C:2000:428). Important condition is that undertakings have to pursue economic objectives and not only social (Case C-364/92, EU:C:1994:7) and the definition of undertaking may also apply to individuals (Case C-309/99, EU:C:2002:98). The term is widely interpreted and encompasses professions such as lawyers (Case C-309/99, EU:C:2002:98) and sports players (Case C-519/04 P, EU:C:2006:492). Also, bodies that pursue purely social objectives and not economic objectives do not fall under the definition of undertaking.

2.2. Aid granted

Contrary to undertakings, there is no clear definition of what constitutes a state aid, and this can then be broadly interpreted. However, it is certain that there must be a financial transfer from

¹ Article 92 of the Treaty of Rome (Traité, 1957) specifically numerated situations in which state aid was allowed. This was done in order to boost economic growth and development of the poorer regions of countries that entered EEC.

State to the undertaking. The form and rational do not matter and the aid granted must be artificial compared to the market. The latter means that beneficiaries could not have obtained the advantage on the market, or at least not at those conditions, reflecting the market investor principle (de Burca & Craig, 2015).

2.3. Aid granted by MS or through state resources

This condition implies that form of transfer can be direct or indirect and that it can be made by either central, regional or local governments or emanations of states to undertakings. Also, private bodies can govern the transfer of aid. Transfer must selectively apply meaning that it cannot constitute a general measure of economic policy (de Burca & Craig, 2015).

2.4. Aid must distort or threatened to distort competition by favoring certain undertakings or production of certain goods.

Aid must have put recipient in more advantageous position that it would have been without the benefit, meaning that the company is better off after the aid and the aid strengthens its position (de Burca & Craig, 2015). However, as mentioned previously, not every aid will be contrary to the rules. According to the binding Commission Regulations 1407/2013, *de minimis* aid constitutes giving less than 200,000 euro over 3 years (or 100,000 euro for road transport) and does not demand a notification to the Commission. It can be seen that if a state is helping small and medium enterprises, it is fine and in accordance to the rules.

2.5. Aid must affect trade between Member States

There is an effect on trade if aid strengthens financial position of undertaking as compared to others within EU since aid would render more difficult for undertakings from other Member States to penetrate that market (Foster, 2017). However, it is important to keep in mind *de minimis* aid which has to firstly be fulfilled.

2.6. Exemptions

There are two types of justifications which exist when the state aid is established: automatic and possible. According to the article 107(2) TFEU, list of automatic justifications is following:

1. Aid with a social character granted to individual consumers provided that it is granted without discrimination related to the origin of the product (government giving rebates to individual consumers and indirectly helping companies)
2. Aid to make good the damage caused by natural disaster or exceptional circumstances
3. Aid specific to Germany and its certain areas affected by its division.

If one of these three situations are established, the aid is deemed to be compatible with internal market.

On the other hand, possible justifications, as mentioned in art. 107(3) TFEU are with the discretion of Commission which can decide whether aid is deemed to be compatible with internal market or not. List of possible justifications is following:

1. Aid to promote economic development of areas where the standard of living is abnormally low or where there is serious underemployment (Judged in Union context)
2. Aid to promote execution of important project of common European interest or to remedy a serious disturbance in economy of a MS
3. Aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest (also regional aid as opposed to the 1st)

4. Aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union contrary to the common interest
5. Other categories of aid decided by the Council on proposal of the Commission (Regulation 994/98)

3. PROCEDURE FOR STATE AID

The state aid system is based on the ex ante control. The Member States have to notify the Commission with plans to grant new aid or alter existing aid. Thus, there are two types of procedures which can be triggered depending on the type of aid.

3.1. Existing Aid

Commission keeps constant review of existing aid (108(2) TFEU) but in case it believes that existing aid is not compatible with internal market anymore, procedure under article 108 (2) applies. The existing aid is considered to be aid which predates the Treaty, aid declared compatible by the Commission, individual aid fitting in approved scheme, aid notified but there was no action by Commission and aid exempted under art. 107 (2,3) TFEU. Commission will issue notices to the Member States to submit their comments. If the Commission still finds out that the aid is not compatible with the internal market or it is being misused, it shall decide that the State concerned abolishes or alters aid within certain period. In case of no compliance with the Commission's decision, the Commission or any other interested state may refer the matter to the Court of Justice of the European Union. Besides the Commission's central role, the Council has certain powers in exceptional circumstances. It can act on the application by the Member State. In those cases, if the case has already been initiated by the Commission the application has an effect of suspending the procedure before the Commission, until the Council has made its attitude known. It may unanimously decide that the aid is compatible with the internal market. The Council has three months to give its opinion. If it does not act in the prescribed time, the Commission can proceed with its decision (Article 108 (2) TFEU).²

3.2. New Aid

The Commission has to be informed of any plans to grant or alter aid by Member States under the procedure in art. 108(3) TFEU. If Commission considers that the intended plan is not compatible with the internal market, it shall initiate the formal procedure. Member States have to wait before they can put the measure into effect and implement the grant of aid during period from notification to response of the Commission (Article 108(3) TFEU). Commission then engages in informal procedure with Member States where it can request extra information from MS and third parties have no right to be consulted. Commission must come with preliminary view within 2 months, otherwise MS can implement grant of aid. In case of doubts about whether aid is compatible with the internal market, Commission starts formal procedure under article 108(2) TFEU (de Burca & Craig, 2015).

3.3. Non-notified Aid

In a case of non-notification to Commission, aid is deemed to be illegal or unlawful but not necessarily incompatible. In general, the procedure is the same as for the notified aid. There are some particularities. The Commission is vested with the power to examine any information regarding alleged unlawful aid from whatever source. Usually the competitor is the one to give the information. Here the Commission acts after a complaint or on its own initiative. The Courts and the Commission were struggling with the unconditional nature of the obligation to start the procedure after receiving the complaint. Regulation 734/2013 introduced certain conditions to be fulfilled in order to confer the Commission a power to start a preliminary examination.

² For more details see: de Burca & Craig, 2015.

The interested party must submit the complaints in a particular form (de Burca & Craig, 2015). The Commission has a power to issue injunctions. There are three types of potential injunctions. After the initiation of the formal investigation procedure, the Commission may request information from any other Member State, from an undertaking, or association of undertakings. Where, despite a reminder, the Member State concerned does not provide the information requested within the period prescribed by the Commission, or where it provides incomplete information, the Commission shall by decision require the information ("information injunction"). Those are interlocutory decisions. Another option is that the Commission, after giving the Member State concerned the opportunity to submit its comments, adopts a decision requiring the Member State to suspend any unlawful aid until the Commission has taken a decision on the compatibility of the aid with the internal market ("suspension injunction"). Those injunctions have been rarely used in practice. The injunctions may only be effective in situation where the Member State has not entirely paid, or the state aid is expected to be paid in instalments.²⁴ The last possibility is to issue the so called "recovery injunctions". The Commission can adopt a decision requiring the Member State to recover any unlawful aid provisionally, until the Commission decides on the compatibility of the aid with the internal market. Three criteria have to be fulfilled: there are no doubts about the aid character of the measure concerned, there is urgency to act and most importantly there is a serious risk of the substantial and irreparable damage to the competitor. (Article 13 of the Regulation) (Pošćić, 2017).

4. STATE AID AND TAX RULINGS

European Commission considers that a measure by which the public authorities grant certain companies a favorable tax treatment that places them in a more favorable financial position than other companies amounts to state aid. From 2013, the Commission has been investigating such tax ruling practices. Since November 2014, the commission has analyzed more than 1,000 tax rulings in all 28 member states, including tax arrangements relating to about 300 companies. Brussels still has 42 continuing investigations, including into Nike's tax treatment in the Netherlands and Ikea's arrangements in the country. Task Force Tax Planning Practices was set up to follow up on public allegations of favorable tax treatment of certain companies and 6 decisions rendered until today. One of them survived the challenge by appeal and two of them were subsequently overruled by The General Court of EU. In a preliminary phase, Commission decides to initiate a formal investigation into matter and in its decision, Commission expresses doubts about an alleged State aid measure, such as a tax ruling. In an investigation phase, Commission renders a final decision after investigation. Final decision concludes that either: the doubts expressed are not founded or confirms the initial doubts of the Commission, resulting in a negative decision (Petropoulos, 2018).

4.1. State aid which Luxembourg granted to Fiat

Fiat Finance and Trade, based in Luxembourg, provides financial services, such as intra-group loans, to other Fiat group car companies. It engages in many different transactions with Fiat group companies in Europe. The Commission's investigation showed that a tax ruling issued by the Luxembourg authorities in 2012 gave a selective advantage to Fiat Finance and Trade, which has unduly reduced its tax burden since 2012 by €20 - €30 million. Given that Fiat Finance and Trade's activities are comparable to those of a bank, the taxable profits for Fiat Finance and Trade can be determined in a similar way as for a bank, as a calculation of return on capital deployed by the company for its financing activities. However, the tax ruling endorses an artificial and extremely complex methodology that is not appropriate for the calculation of taxable profits reflecting market conditions.

In particular, it artificially lowers taxes paid by Fiat Finance and Trade in two ways:

1. Due to a number of economically unjustifiable assumptions and down-ward adjustments, the capital base approximated by the tax ruling is much lower than the company's actual capital.
2. The estimated remuneration applied to this already much lower capital for tax purposes is also much lower compared to market rates.

As a matter of principle, if the taxable profits are calculated based on capital, the level of capitalization in the company has to be adequate compared to financial industry standards. Additionally, the remuneration applied has to correspond to market conditions. The Commission's assessment showed that in the case of Fiat Finance and Trade, if the estimations of capital and remuneration applied had corresponded to market conditions, the taxable profits declared in Luxembourg would have been 20 times higher (European Commission Press Release, 21.10.2015).

4.2. State aid implemented by the Netherlands to Starbucks

Starbucks Manufacturing EMEA BV ("Starbucks Manufacturing"), based in the Netherlands, is the only coffee roasting company in the Starbucks group in Europe. It sells and distributes roasted coffee and coffee-related products (e.g. cups, packaged food, pastries) to Starbucks outlets in Europe, the Middle East and Africa. The Commission's investigation showed that a tax ruling issued by the Dutch authorities in 2008 gave a selective advantage to Starbucks Manufacturing, which has unduly reduced Starbucks Manufacturing's tax burden since 2008 by €20 - €30 million. In particular, the ruling artificially lowered taxes paid by Starbucks Manufacturing in two ways:

1. Starbucks Manufacturing pays a very substantial royalty to Alki (a UK-based company in the Starbucks group) for coffee-roasting know-how.
2. It also pays an inflated price for green coffee beans to Switzerland-based Starbucks Coffee Trading SARL.

The Commission's investigation established that the royalty paid by Starbucks Manufacturing to Alki cannot be justified as it does not adequately reflect market value. In fact, only Starbucks Manufacturing is required to pay for using this know-how – no other Starbucks group company nor independent roasters to which roasting is outsourced are required to pay a royalty for using the same know-how in essentially the same situation. In the case of Starbucks Manufacturing, however, the existence and level of the royalty means that a large part of its taxable profits are unduly shifted to Alki, which is neither liable to pay corporate tax in the UK, nor in the Netherlands. Furthermore, the investigation revealed that Starbucks Manufacturing's tax base is also unduly reduced by the highly inflated price it pays for green coffee beans to a Swiss company, Starbucks Coffee Trading SARL. In fact, the margin on the beans has more than tripled since 2011. Due to this high key cost factor in coffee roasting, Starbucks Manufacturing's coffee roasting activities alone would not actually generate sufficient profits to pay the royalty for coffee-roasting know-how to Alki. The royalty therefore mainly shifts to Alki profits generated from sales of other products sold to the Starbucks outlets, such as tea, pastries and cups, which represent most of the turnover of Starbucks Manufacturing (European Commission Press Release, 21.10.2015). On 24 September 2019, in the cases T-636/16 - Starbucks and Starbucks Manufacturing Emea v. Commission, T-755/15 - Luxembourg v. Commission, T-759/15 - Fiat Chrysler Finance Europe v. Commission, T-760/15 - Netherlands v. Commission the General Court of EU overruled the European Commission's decision that Starbucks had enjoyed a selective advantage in the Netherlands but confirmed assessment that

Fiat had benefited from an unlawful tax ruling in Luxembourg (Rios, 2019).³ EU General Court confirmed the Commission's decision on Fiat Chrysler Finance Europe, since the tax ruling resulted in lowering the company's tax liability "as compared to the tax that it would have had to pay under Luxembourg tax law." The European Commission applied in both cases the 'arm's length principle' according to which profits in a multinational group must be allocated within different parts of the company in a way that reflects economic reality, under the market conditions that would apply to independent businesses. "Both the Netherlands and Starbucks had argued that under the so-called "arm's length principle" the commission did not have the competence to adjudicate the tax arrangements. This is because taxation remains a national competence under EU law. However, the ECJ ruled that the commission did have the powers to investigate if taxation arrangements between different entities of the same group were used in a way that would not be legal in normal market conditions and where stand-alone companies were concerned (Conelly, 2019). Luxembourg and the Netherlands contested the use of this principle arguing that it violates member states fiscal autonomy. However, in both rulings, the Court backed the Commission's application of the principle. "The judgments confirm that, while member states have exclusive competence in determining their laws concerning direct taxation, they must do so in respect of EU law, including state aid rules ..." (Rios, 2019). In the Starbucks-Netherlands case, the Court argued that the Commission had failed to demonstrate how the company benefited from an economic advantage as a result of tax rulings issued by the Dutch authorities in 2008. Other U.S. companies under investigation in the EU include Nike Inc. over its tax dealings in the Netherlands, Anheuser-Busch InBev NV and a branch of Pfizer Inc. for their tax arrangements in Belgium. In the case against McDonald's Corp. the Commission found no evidence of illegal state aid. "The Fiat Chrysler case related to tax arrangements struck between the company and the Luxembourg tax authorities in September 2012. The so-called "tax ruling" was granted to Fiat Chrysler Finance Europe (FFT). Both Luxembourg and the company appealed the decision on the basis that the commission had been attempting to bring about "tax harmonization in disguise" and that the case was against the "arm's length principle". The plaintiffs also disputed the commission's view that the tax arrangements restricted competition and trade between member states. The court found that the commission did not engage in "tax harmonization" but simply exercised its powers under EU law. This was through attempting to verify whether the tax deal gave the company an advantage that stand-alone companies would not enjoy under "normal" taxation. The court also found that the pricing of intra-group transactions was "not determined under market conditions." In other words, the commission was entitled to explore whether the taxing of such activity would have also applied in normal market conditions where stand-alone companies were involved. The commission was therefore right to compare the fiscal burden in intra-group situations with a "normal" market situation where stand-alone companies were concerned, and the same fiscal measure applied (Conelly, 2019).

4.3. Excess Profit exemption in Belgium – Art. 185§2

Belgian company tax rules require companies to be taxed on the basis of profit actually recorded from activities in Belgium. However, the 2005 "excess profit" scheme, based on Article 185§2, b) of the 'Code des Impôts sur les Revenus/Wetboek Inkomstenbelastingen', allowed multinational companies to reduce their tax base for alleged "excess profit" on the basis of a binding tax ruling. These were typically valid for four years and could be renewed. Under such tax rulings, the actual recorded profit of a multinational is compared with the hypothetical average profit a stand-alone company in a comparable situation would have made. The alleged difference in profit is deemed to be "excess profit" by the Belgian tax authorities, and the

³ A similar case involving a tax ruling benefiting Apple in Ireland, for which the tech-giant was ordered to repay €13 billion in 2016, is still pending.

multinational's tax base is reduced proportionately. This is based on a premise that multinational companies make "excess profit" as a result of being part of a multinational group, e.g. due to synergies, economies of scale, reputation, client and supplier networks, access to new markets. In practice, the actual recorded profit of companies concerned was usually reduced by more than 50% and in some cases up to 90%. The Commission's in-depth investigation showed that by discounting "excess profit" from a company's actual tax base, the scheme derogated both from:

1. normal practice under Belgian company tax rules. It gives multinationals who were able to obtain such a tax ruling a preferential, selective subsidy compared with other companies; and
2. the "arm's length principle" under EU state aid rules. Even assuming a multinational generates such "excess profits", under the arm's length principle they would be shared between group companies in a way that reflects economic reality, and then taxed where they arise. However, under the Belgian "excess profit" scheme such profits are simply discounted unilaterally from the tax base of a single group company.

The scheme's selective tax advantages could also not be justified by the argument raised by Belgium that the reductions are necessary to prevent double taxation. In fact, the adjustments were made by Belgium unilaterally. The scheme does not require companies to demonstrate any evidence or even risk of double taxation. In reality, it resulted in double non-taxation (European Commission Press Release, 11.01.2016). In joint cases T-131/16, *Belgium v European Commission* and T-263/16, *Magnetrol International v European Commission*, EU General Court annulled Commission decision 2016/1699. (InfoCuria, 2019). The EU General Court decided that the Belgian excess profit ruling ("EPR") regime is not a State aid scheme. "The General Court analyzed in this respect the alleged encroachment by the Commission upon Belgium's exclusive tax jurisdiction in the field of direct taxation and the argument that the EPRs did not constitute an aid scheme. The General Court rejected the alleged encroachment. Even though direct taxation falls within the competence of the Member States, such competence must be exercised consistently with EU law. Interventions by Member States in the field of non-harmonized areas, such as direct taxation, are thereby not excluded from the scope of the State aid rules. Consequently, the Commission is entitled to investigate and decide whether or not a certain direct tax measure qualifies as State aid and is compatible or not." (Huyghe, 2019). "The General Court of EU decided that the Commission wrongly qualified the Belgian excess profit ruling system as a broader 'scheme' rather than examining the 66 tax rulings individually. According to the General Court, the fact that the Belgian tax authorities had a margin of discretion over all of the essential elements of the excess profit rulings, allowing them to influence the amount and the characteristics of the tax exemption and the conditions under which the exemption was granted, precludes the existence of an aid scheme. This was also precluded by the fact that excess profit exemptions did not follow automatically from Belgian tax law, but necessarily depended on the adoption of further implementing measures (i.e. tax rulings) by the Belgian tax authorities. Finally, the General Court, notes that there was not a systematic approach on the part of the Belgian tax authorities and that the taxpayers eligible for an excess profit ruling were not defined in a general and abstract manner. ... Where the Commission in other State aid cases typically challenged individual rulings, it only adopted such a general approach in the Belgian excess profit case. The General Court of Justice now gives a clear message that the Commission has gone too far by claiming that as a general rule the excess profit exemption is illegal State aid." (EY, 2019). "The autonomy that Member States enjoy in the field of direct taxation must be exercised in compliance with EU State aid law. A State aid measure is considered to be a "scheme" when (a) no further implementing acts are necessary, (b) the granting authority has no discretion in how the measure is applied and (c) the

measure defines the eligible beneficiaries. Administrative discretion turns an aid measure into “individual aid”. ... This is because Belgium succeeded to persuade the General Court that its tax authorities enjoyed considerable discretion when evaluating requests for advance rulings and issuing such rulings. ... The findings in paragraph 94 of the judgment have an important consequence and raise an intriguing question. The consequence is that it is now established that the advance rulings were not in fact based on the provisions of the relevant Belgian law. Belgium was acting in an ad hoc manner. Ad hoc decisions can make public measures selective. The question is what is the ultimate strategy of Belgium? Inevitably, the Commission will have to reopen the case. But then it will be much more difficult for Belgium to argue that it was not acting in an ad hoc manner, if it has already succeeded to persuade the General Court that the practices described by the Commission were not prescribed in law. Of course, there is also the possibility that Belgium will argue that the Commission described something that did not exist in reality. But it is very unlikely that the Commission identified non-existent practices. In fact, the following part of the judgment confirms that the Belgian authorities had significant decision-making discretion.” (Nicolaidis, 2019).

5. CONCLUSION

Since the development of the internal market is a continuous process, clear and appropriate measures for its protection are required. One of the ways to assure that free intra EU movement of goods is preserved is by enforcing the State Aid rules. Even though the State Aid is not necessary automatically incompatible with the internal market, its rules and procedures play an important role. This paper tried to address the problems occurring when Member States issue favorable tax rulings to certain multi-national companies and the modus operandi of those companies. It is quite clear that certain (Benelux) Member States are repeatedly involved in these cases and that conduct of multinational companies is actually quite similar. There are too few cases and decisions of the EU General Court to establish a guideline for EU Commission and concerned parties to follow. But if look on rulings in these few afore mentioned cases as a beginning of eventual future judicial practice we could conclude that the "arm's length principle"(under which member states enjoy autonomy in direct taxation) is violated if tax deal gives the company an advantage that stand-alone companies would not enjoy under "normal" taxation. Therefore, it does not comply with EU rules and the EU Commission has the right to interfere in order to level the “market playing field”. The autonomy of member states in matters of direct taxation is also confirmed, unless it breaches the EU rules on state aid. However, in these cases it is on EU Commission to prove beyond reasonable doubt that these breaches exist due to favorable national tax laws. EU Commission’s rulings in cases regarding state aid implemented by Ireland to Apple, state aid granted by Luxembourg to Amazon and state aid implemented by Luxembourg in favor of ENGIE are still under appeal in front of EU The General Court, from countries and companies concerned. Final verdict in those cases will, together with those presented in this paper, be crucial in defining the EU judiciary’s view on this rather new, still undefined and complex subject.

LITERATURE:

1. de Burca, G., Craig, P. (2015). EU Law: Text, Cases, and Materials. Oxford University Press, Oxford.
2. Case C-41/90, EU:C:1991:161, Klaus Höfner and Fritz Elser v Macrotron GmbH.
3. Case C-364/92, EU:C:1994:7, SAT Fluggesellschaft mbH v Eurocontrol.
4. Case C-309/99, EU:C:2002:98, Wouters and Others v Algemene Raad van de Nederlandse Orde van Advocaten,.
5. Case C-519/04 P, EU:C:2006:492, David Meca-Medina and Igor Majcen v Commission of the European Communities.

6. Conelly, T. (24.09.2019). Starbucks wins, Fiat loses fight against EU tax orders. Retrieved 1.10.2019. from <https://www.rte.ie/news/business/2019/0924/1077832-starbucks-fiat-ruling/>
7. Elixmann, D., Neumann, K. H. (2013). The broadband State aid rules explained. Retrieved 12.12.2018. from https://ec.europa.eu/regional_policy/sources/conferences/state-aid/broadband_rulesexplained.pdf
8. European Commission Press Release. (21.10.2015). Commission decides selective tax advantages for Fiat in Luxembourg and Starbucks in the Netherlands are illegal under EU state aid rules. Retrieved 25.01.2019. from http://europa.eu/rapid/press-release_IP-15-5880_en.htm
9. European Commission Press Release. (11.01.2016). State aid: Commission concludes Belgian "Excess Profit" tax scheme illegal; around €700 million to be recovered from 35 multinational companies. Retrieved 25.01. 2019. from http://europa.eu/rapid/press-release_IP-16-42_en.htm
10. EY. (2019). General Court of the European Union annuls the Commission's decision on the Belgian excess profit rulings. Retrieved 1.10.2019. from <https://www.ey.com/be/en/newsroom/news-releases/ey-tax-alert-eu-general-court-annuls-decision-on-belgian-excess-profit-rulings>
11. Foster, N.G. (2017). Foster on EU law. Oxford University Press, Oxford.
12. Huyghe, A. (15.02.2019). Belgium's Excess Profit Rulings Do Not Constitute a State Aid Scheme. Retrieved 15.09.2019. from <https://www.bakermckenzie.com/en/insight/publications/2019/02/belgiums-excess-profit-rulings>
13. InfoCuria. Judgement of the General Court (Seventh Chamber, Extended Composition) 14.02.2019. Retrieved 1.10.2019. from <http://curia.europa.eu/juris/document/document.jsf?jsessionid=57177CDBB93A04857674E974E707792A?text=&docid=210761&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=13546940>
14. Joined cases C-180/98 to C-184/98, EU:C:2000:428, Pavel Pavlov and Others v Stichting Pensioenfonds Medische Specialisten.
15. Nicolaides, P. (19.03.2019) Many Tax Rulings Do Not Make a Single Aid Scheme. Retrieved 1.10.2019. from <http://stateaidhub.eu/blogs/stateaiduncovered/post/9464>
16. Petropoulos, G. (2018). State aid and tax rulings: Clarifying the European Commission's approach. Retrieved 25.01.2019. from <http://bruegel.org/2018/04/state-aid-and-tax-rulings-clarifying-the-european-commissions-approach/>
17. Pošćić, A. (2017). *EU and comparative law issues and challenges series - Procedural Aspects of EU State Aid Law*. Faculty of Law, Josip Juraj Strossmayer University of Osijek, Osijek.
18. Rios, B. (24.09.2019). Euractiv. *EU justice dismisses Starbucks tax ruling case, upholds Fiat*. Retrieved 1.10.2019. from <https://www.euractiv.com/section/competition/news/eu-justice-dismisses-starbucks-tax-ruling-case-upholds-fiat/>
19. Traité instituant la Communauté Économique Européenne et documents annexes (1957). Retrieved 1.10.2019. from <https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:11957E/TXT&from=EN>

DESIGNING THE COMPLETE ICT SOLUTION FOR A MODERN MANUFACTURING COMPANY

Dunja Srpak

University North

104. Brigade 3, 42000 Varaždin, Croatia

dunja.srpak@unin.hr

Ivan Sumiga

University North

104. Brigade 3, 42000 Varaždin, Croatia

ivan.sumiga@unin.hr

Josip Srpak

Oprema d. d.

Gospodarska ulica 5, 42230 Ludbreg, Croatia

jsrpak@gmail.com

Ladislav Havas

University North

104. Brigade 3, 42000 Varaždin, Croatia

ladislav.havas@unin.hr

ABSTRACT

In today's business environment, investing in information technology is more than remunerative. To receive the real state of a company, the key element is the realization and implementation of the complete ICT solution. To prepare and realize such a complex system, continuous interaction of all participants is required, from the top management to direct participants of each production segment: personnel in the financial and accounting sectors, planning and analyzing sector, procurement and sales personnel, logistics, occupational safety and quality control... In addition to human resources, proper hardware support is also needed built into the automated machines and devices within the manufacturing location that will deliver operational data to the system. In order to survive and be competitive in the market today, the access to the right information in the shortest possible time is essential. Data warehouses and business intelligence form the foundation on which business people make their strategic and tactical business decisions. The ability to analyze snapshots of the observed subject's state of affairs in the past and to look for similarities and differences in behavior over a period of time makes one of the greatest advantages of the data warehouse over previous transaction systems. Newer technology has enabled the development of ETL (Extract, Transform and Load) applications with minimal delay, and thus the emergence of data warehouses that work in real or near real time. This paper provides guidelines for the development and design of a comprehensive ICT solution and addresses some of the consequences that this solution could have for modern businesses.

Keywords: *business intelligence, data warehouse, hardware support, ICT solution*

1. INTRODUCTION

A manufacturing company has the main goal produce value-added goods via various manufacturing resources such as machines, tools, and human resources. The information technologies (ITs) relates closely to the advance of manufacturing technologies and their design and operation.

When the manufacturing system needs different types of decision-making at all of its levels and domains of business activities, prompt and effective, the decisions oft depend on the quality and quantity of data. The adoption of the Internet has significantly influenced the evolution of manufacturing technologies. The IoT as an extension of the Internet, can be applied in modern manufacturing company for connecting things, sensors, actuators, and other smart technologies: computer numerical control (CNC) and industrial robots, the technologies for computer-aided design (CAD), computer-aided manufacturing (CAM), and computer-aided processing planning (CAPP), computer integrated manufacturing (CIM)... Hardware systems for data acquisition instrumentation usually consists of some basic elements to collect, process, and share data among objects. Early manufacturing systems had the open loop; with few sensors, humans played a central role in observing the system's behavior and making decisions accordingly. Today's technologies with the automated solutions use of electronic sensors and data collection equipment for data acquisition and processing have been rapidly evolved to support closed-loop decision making. A comprehensive literature review is given on Internet of Things (IoT) infrastructure in [1], as well as the opportunities and challenges in adopting IoT infrastructure in manufacturing enterprises. The evolution of manufacturing system paradigms is discussed in order to identify the requirements of decision support systems in dynamic and distributed environments of a Modern Manufacturing. The relation of information technology (IT) infrastructure and Enterprise Systems (ESs) is explored to identify the technological gaps in adopting IoT as an IT infrastructure. There is concluded that the IoT infrastructure (anytime, anywhere, anything data acquisition systems) can be applied in collecting and sharing data among manufacturing resources but it needs the modularization, standardization, and the development of enabling technologies for safe, reliable, and effective communication and decision-making. The intelligent system that integrates both hardware and software functions of different CNC controllers, self-developed PC board, or PLC drivers, for innovative service via remote cloud computing for machine tool solutions is described in [2]. The developed platform was demonstrated by applying it to the aerospace and automotive industries, combining the advanced manufacturing technology with information and communication technology (ICT) applications. The concept of Industry 4.0 called "Intelligence in Production" implies that the intelligent machines of the next generation of manufacturing communicate with control and management systems autonomously in order to fulfill every task. The development of an innovative-intelligent system for planning, control, and testing can help machine operators to ensure production quality and efficiency during operating process. The growth of competitive market globalization have led to the goals of TQCSEFK, i.e., fastest Time-to-market, highest Quality, lowest Cost, best Service, cleanest Environment, greatest Flexibility, and high Knowledge. The potential applications of the new technologies such as of Internet of Things (IoT) and cloud computing (CC) in manufacturing are investigated in [3] as well as the relationship among cloud manufacturing (CMfg) service system, IoT, and CC. With the application and support of IoT and CC technologies, the intelligent perception and Connection, Communication, Computing, and Control (i.e., 4C). Still, the contradiction between sharing the manufacturing information and the protection of privacy of the core technology by using IoT and CC technologies has to be solved, as well as the standards, protocols, safety, reliability, and management level of applying IoT and CC in manufacturing. The next problem is then how to realize the intelligent data mining of these collected data, and then to process them and generate the information useful to the manufacturing procedures. Therefore, this article emphasizes one of the main tasks of the modern business ICT system to utilize, as much as possible, of the data collected through the IoT system (big data), and to convert it using business intelligence (BI) into smart data. In the fourth industrial revolution, the upgrade of already existing manufacturing systems as well as the introduction of new information and communication technologies (ICT) in automation systems is crucial to meet the requirements of the modern

production. The agile information processing framework for foundry purposes is presented in [4], with the application for planning, executing and analysis accessible via webbased user interfaces providing control of each single system. This leads into a service orientated architecture triggering the individual underlying systems as services, which are connected using web communication technology to exchange data along a shared information model. The data storage is modular to ensure scalability and interoperability with other manufacturing departments. How to improve the business conditions with modern ICT solutions, by integrating business and technical systems is also discussed in [5], especially in small and Medium Enterprises (SMEs) in [6,7], and from economic modeling aspect in [8,9], in order to remain concurrent in today's highly competitive markets. This paper is organised as follows: After reviewing the necessary hardware support in the introduction, section 2 presents the process for developing information system modules that can be applied to all functional units within the company. Section 3 explains the importance of creating a data warehouse, using historical business data for quality business decision-making. In conclusion, the advantages of using modern and complete ICT solutions and the consequences of implementing these solutions are presented.

2. DEVELOPMENT OF INFORMATION SYSTEM

The production subsystem should provide all interested parties, from management, owners, to machine workers in real time with instant access to all the necessary data. Thereby, the place of retrieving data is not important, in order to enable each participant to make quality business decisions, or take appropriate actions. From the system designers point of view, all data should be entered in one place only and be accessible to all interested parties. An evolutionary model can be applied to the development of a production subsystem [10,11]. Customers usually know what to expect from a new system, however, once certain system functions are defined, new ideas often come up, especially for graphical representations. The development of an information system can be viewed through the stages: planning, analysis, design, fabrication and testing, and implementation and maintenance.

2.1. Planning

In planning phase, it is necessary to describe the objectives of the project, available budget and timeframes of the fabrication as well as the names of people in the company and developing engineers involved in a project with defined tasks. The hardware and software components required to realize the system with expected pricing and delivery times should be defined. The project of the realization must be separated on the activities with associated participants and the realization times, and the final objectives of the activity must be indicated. The activities must be connected into expected functional unit. Mechanisms for monitoring the progress of projects and reports need to be elaborated. During the implementation, various unplanned situations may occur, so a risk analysis should be made: the likelihood of occurrence and proposals to reduce the impact of risky situations on the project. The plan can be revised in individual segments during the project development. That indicates that planning is an iterative process that will end when the project is completed. Throughout the activity, management has to be informed of the expected and the realized costs. The election of the contractor of the system should be realized through a competition in which the requirements should be defined in general terms as not to prejudice specific solutions. In this way, through multiple bids, a number of different proposals for specific solutions can be obtained, from which the one is chosen that is considered to be optimal or the most suitable for a particular production system.

2.2. Analysis

IT engineers start with the system analysis based on requests in coordination with the customers. The functions that are to be realized must be defined in the specifications, as well as the equipment (hardware and software) that is required to implement the application functions. Requirements must be clearly and transparently written in order that all participants included in the design of systems can unambiguously realize them. The system users elaborate the demands on particular segments of the system from their perspective. Because users have very different profiles and expectations - from managers, directors, and heads of departments to lawyers, economists, and manufacturing workers, due to misunderstanding, the problems in communicating with software engineers can be expected. As a result, changes or adjustments to the initial specifications occur during the analysis. In this way, final, real demands are made iteratively. Thereby, it is important to document individual user requirements in order to detect and group the same or similar requirements. It is vital that each user stress their needs so that software engineers can evaluate which hardware and software tools are suitable of meeting all requirements. With the analysis of the current and desired state the procurement of the necessary hardware and software tools is suggested. Finally, all requirements must be verified. Functions must be clearly defined. Function descriptions and parameters must be unique. Different users must not require conflicting restrictions for the same function. To check the expected performance, the function should define the test method. Through the analysis carried out, the existing and the new system should be compared in order to highlight the improvements made by the new system in order to justify the investment in the system. For the purposes of system design, a graphical representation of business processes expressed through functions and their interaction with other parts of the system is very useful. How the functions operate on individual program parameters can be described by a flowchart or the data flow model. A schematic illustration of common functional units within a manufacturing company is shown in the Fig. 1.

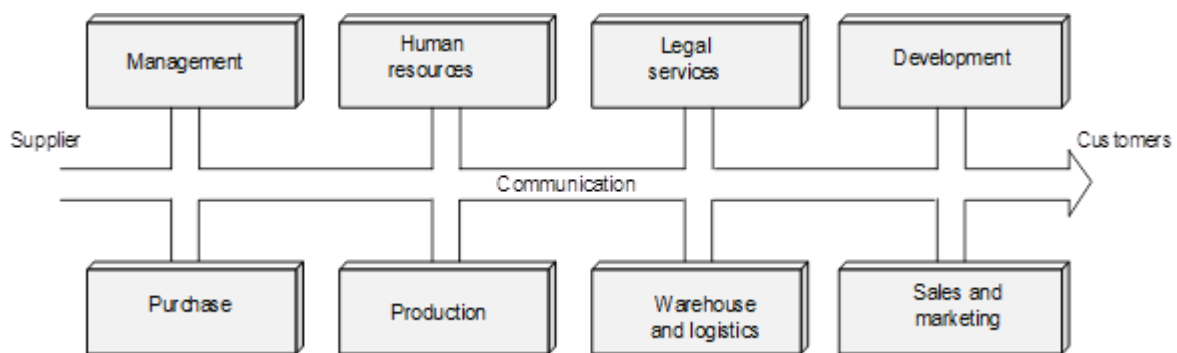


Figure 1: A schematic illustration of common functional units within a manufacturing company

2.3. Design

Software engineers design the system based on an analysis of the written requirements and wishes of the users. The hardware components of the system are defined in detail. In order to create the software, it is necessary to define the input data, the processing to be done and the outputs as a result of these processing. In order to define the requirements clearly, the collaboration with the system users is needed again. Possible variants of each problem should be considered and an optimal solution should be chosen through discussion, given the available hardware and software tools. Databases are modeled through data entities, associated attributes, and inter-entity relationships. Today, an object-oriented approach to software development is used. System requirements are described using an object model.

This involves identifying object classes, their hierarchical organization, and linking them to other classes through common attributes. Functions and data flows can be described using diagrams and pseudocodes.

2.4. Fabrication and testing

The information system designed in this way is developed using object-oriented software tools. There are many different software development tools available today. Tools that support languages like Java, scripting, database programming, use of case tools, etc. can be used.

At this stage of system development, due to the wrong assessment in the previous stage, there is the danger that the requirements of the users are too high, given the cost of hardware and software tools, or the selected tools cannot fulfill the wishes of the users. If this happens, the previous stages of system development should be corrected with feasible activities.

Program coding in the chosen programming language should be followed by detailed testing and debugging. It is important that the written code is documented in detail.

2.5. Implementation and maintenance

When programs are thoroughly tested, they can be implemented on defined computers. Existing data must be converted into the new system and put the system on trial operation. Users need to be educated to use the new software and provide them with quality manuals with detailed and comprehensible materials - instructions on how to perform each activity, from data entry, processing, report generation, etc. After adjusting and adopting new software solutions by users, operational use of the new system follows. The missed errors are detected and corrected during the usage period. Due to changes in the environment (legal, technological, etc.), the programming system needs to be adapted to the new circumstances. Therefore, there is virtually no difference between developing and maintaining a program. Initial development can be treated as a first step in the further evolution of the program.

3. DATA WAREHOUSE AS AN ESSENTIAL ELEMENT OF BUSINESS DECISION MAKING

In today's global and IT globalization, survival and competitiveness in the market is directly dependent on access to the right information in the shortest possible time. In the very beginnings of ICT system development, the importance of storing historical business data was recognized [12]. The inability of classic operating systems to display the behavior of the observed model in the past has been one of the drivers of data warehouse development. A data warehouse is a database of a special data structure that allows relatively quick and easy execution of searches and queries over large amounts of data [13]. The data warehouse was created as a system designed for business decision support (BDSS-Business Decision Support System). At the core of this concept is the idea of the existence of a special data structure whose main features are as follows:

- The data model is very simple, intuitive and easy to understand for the end user.
- The data model was created for read-only.
- The data warehouse is periodically filled (ETL process) with data collected in the production system (data from multiple sources).

3.1. ETL process

Data warehousing is a continuous and time-consuming process that does not end with the initial loading of data, but that the data warehouse is refreshed with new data at some, more or less regular, time intervals (day, week, month, quarter, year). Most data warehouses load their fact tables and dimension tables from different sources. It is very important that this data is cleaned and transformed before loading, to ensure consistency of the database and to facilitate quality

business decisions. Data are extracted, transformed and cleaned by ETL processes (Fig. 2) , and fed into a database structurally organized in a way that is suitable for further analysis. In the extraction process, data from multiple sources is identified in the operating system, extracted and combined into a common database, so as to be easily integrated into the data warehouse. In the transformation process, this data is refined and adapted to a standard attribute scheme. Data warehouse filling is done in batch processing outside office hours (usually at night). The global economy of today emphasizes the increasing importance of real and timely information. The key to success lies in understanding the behavior of clients and being able to adapt quickly to the dynamics of changing their needs.

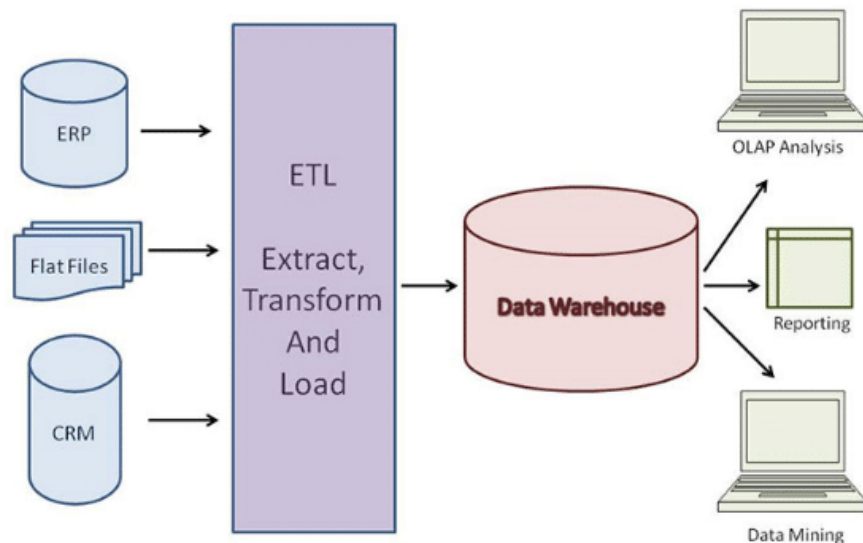


Figure 2: The ETL process

Traditional ETL processes, which take hours or days, certainly cannot meet this need because they create warehouses that are weeks or months behind their original systems. This delay has not been considered a problem in the past as data warehouses were not considered operational and business critical applications. The popularity that data warehouses have experienced among their users has changed the way they are used. Analysts have realized that warehouses give them a holistic view of their business, behavior and trends among users of their products. Ideally, this information should be brought closer to those who are in direct contact with clients, which increases the possibility of good (or even better) business relationships. Of course, in this case, the information must arrive with as little delay as possible. Today's technology has made it possible for many real-time or near-real-time Data Warehousing to appear on the market. Figure 3 shows one real-time warehouse.

Figure following on the next page

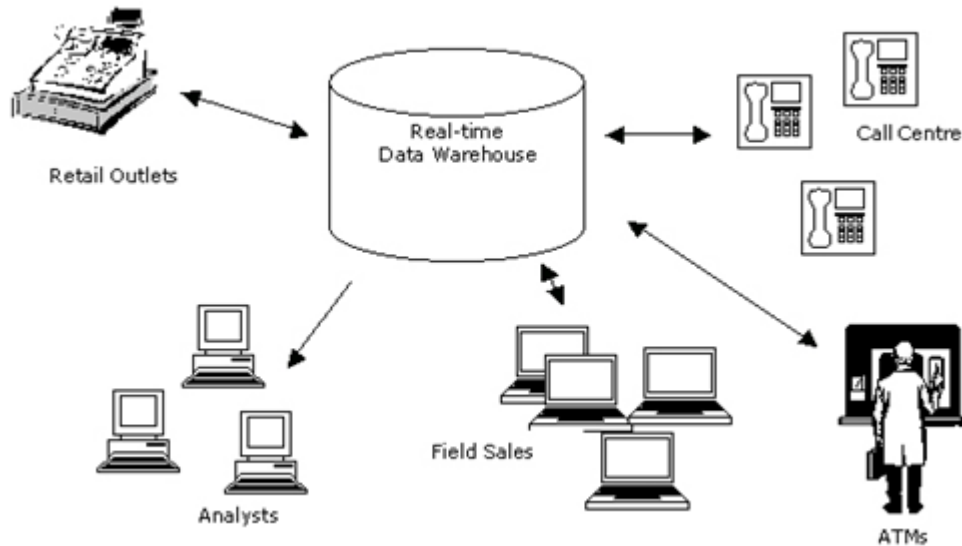


Figure 3: Real-time data warehouse

Real-time data warehouse contains fully up-to-date data and is synchronized with the source system, while in almost real-time warehouses, there is a minimal delay from the time the data was created and when it appeared in the warehouse.

3.2. Dimensional data model

Conventional OLTP (Online Transaction Processing) systems require a normalized data set to minimize redundancy in order to achieve high processing speeds in the case of retrieving a limited number of records. In the case of retrieving large amounts of records at the same time, which is often the case in data warehouses, this relational model is unacceptable [14]. For this reason, a dimensional data model is introduced in data warehouses. The dimensional model improves query efficiency and availability to the data itself, because it is denormalized and better optimized for data queries. The dimensional model is a conceptual and logical model, designed to provide fast access to data. In the dimensional model, business processes are described through dimensions that are organized hierarchically. The most common way of representing a dimensional model is a cube (three-dimensional model), where the required cross-section of the dimension is located. In practice, the number of dimensions can be greater than three, so in this case we are talking about a "multi-dimensional cube" or "hypercube". The most common way to implement a dimensional model is to have a stellar structure (star schema) that consists of a single fact table and surrounding dimensional tables. An example of a star schema is shown in Fig. 4.

- Fact table: ORDERS
- Dimensional tables: TIME, PRODUCT, CUSTOMER

Figure following on the next page

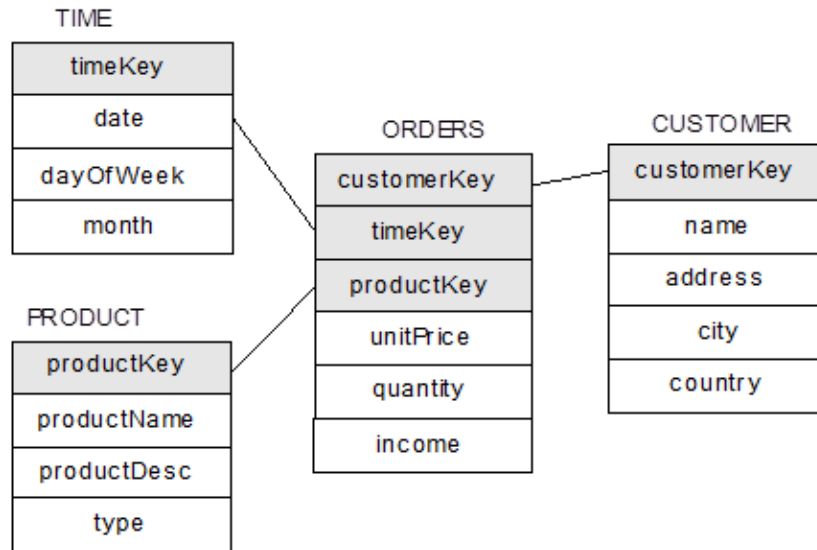


Figure 4: An example of a star scheme of business application

Fact tables are places for storing numerical indicators of an observed entity, and each fact is the center of interest in the process of making a business decision. The fact table lists all measures of the relevant fact and one key to each dimension that describes the fact. Dimension tables contain attributes related to particular facts and group them and separate them into logical entities, such as: time, space, products,... Well-designed data warehouses contain dimension tables with many such attributes, thus increasing the amount of information available to end users.

3.3. Data mining and OLAP

In addition to data storage and data warehouse terms, terms such as data mining and OLAP (On-Line Analytic Processing) are often mentioned. Data mining is the process of identifying and comparing data to obtain potentially useful and understandable samples [15]. Using the data mining methods, it is possible to predict the market trend and customer behavior, and with that information get a better product or service and improve your business, make more profit, but it does not have to be used solely for business purposes. The usual flow of data mining is shown in Fig. 5.

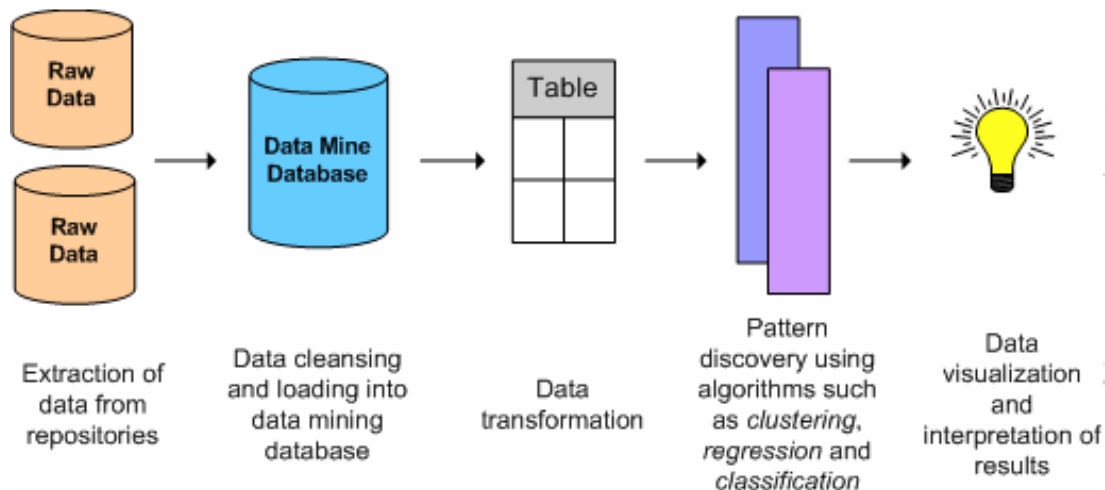


Figure 5: Flow of data mining

OLAP analysis encompasses a set of tools that support end-user business decision-making based on a dimensional (multi-dimensional) approach [16]. The aim of this approach is to enable the user to gain insight into the meaning of the data on which the user then makes the decisions. This toolkit also includes tools that help users view data in the form of various graphs and tables.

4. CONSLUSION

By following the proposed process of building an IT system, a company can profit significantly in the long run by reducing production costs, increasing flexibility, efficiency and product quality and shortening reaction time to expected and unexpected changes in business processes using the high knowkedge. The challenge for analysts and business people is to turn that information to the satisfaction of their clients, in order to achieve greater and better business results. While the future will surely provide concrete answers to all of the above questions, the search for new answers must not stop.

LITERATURE:

1. Bi, Z, Xu, LD, Wang, C, (2015), Internet of Things for Enterprise Systems of Modern Manufacturing, *IEEE Transactions on industrial informatics*. Vol.10 (2), pp. 1537-1546
2. Lin, YL, Lin, CC, Chiu, HS, (2015), The Development of Intelligent Service System for Machine Tool Industry, *2015 1ST INTERNATIONAL CONFERENCE ON INDUSTRIAL NETWORKS AND INTELLIGENT SYSTEMS (INISCOM)*, pp. 100-106, DOI: 10.4108/icst.iniscom.2015.258992,
3. Tao, F, Cheng, Y, Xu, LD, Zhang, L, Li, BH, (2014), CCIoT-CMfg: Cloud Computing and Internet of Things-Based Cloud Manufacturing Service System, *IEEE Transactions on Industrial Informatics* Vol.10 (2), pp. 1435-1442 DOI:10.1109/TII.2014.2306383
4. Rix, M, Kujat, B, Meisen, T, Jeschke, S, (2016). An agile information processing framework for high pressure die casting applications in modern manufacturing systems *PROCEEDINGS OF THE 48TH CIRP CONFERENCE ON MANUFACTURING SYSTEMS*, Book Series: Procedia CIRP, Vol. 41, pp. 1084-1089, DOI: 10.1016/j.procir.2015.12.134,
5. Grabot, B, Thoben, KD, Hribernik, K, Emmanouilidis, C, von Cieminski, G, Kiritsis, D, (2016), Current trends on ICT technologies for enterprise information systems, *COMPUTERS IN INDUSTRY*, Vol. 79, pp. 14-33, DOI: 10.1016/j.compind.2015.06.008,
6. Cragg, T McNamara, T, (2018), An ICT- based framework to improve global supply chain integration for final assembly SMSES, *Journal of entrprise information management*, Vol. 31 (5), pp. 634-657, DOI: 10.1108/JEIM-04-2014-0038,
7. Shamsuzzoha, A, Toscano, C, Carneiro, LM, Kumar, V, Helo, P, (2016), ICT-based solution approach for collaborative delivery of customised products, *PRODUCTION PLANNING & CONTROL*, Vol. 27 (4), Pages: 280-298, DOI: 10.1080/09537287.2015.1123322,
8. Vandani, B, Ahmadzadeh, E, (2019), Designing a realistic ICT closed loop supply chain network with integrated decisions under uncertain demand and lead time, *KNOWLEDGE-BASED SYSTEMS*, Vol. 179, pp. 34-54, DOI: 10.1016/j.knosys.2019.05.003,
9. Kecek, D, Boljuncic, V, Milkovic, M, (2019), Effects of final expenditures on ICT goods and services on the croatian domestic output and imports - the input-output approach, *ECONOMIC RESEARCH-EKONOMSKA ISTRAZIVANJA*, Vol. 32 (1), pp. 531-554, DOI: 10.1080/1331677X.2018.1556109
10. Sommerville, I, (2007), *Software Engineering*, 8th ed., Pearson Education,
11. Pressman, R, (2009), *Software Engineering: A Practitioner's Approach*, 7th ed., McGraw-Hill,

12. Inmon, WH, (2005), Building the Data Warehouse (Fourth Edition). Wiley Publishing,
13. Kimball, R, (2003), The Soul of the Data Warehouse, Part 3: Handling Time ,
www.intelligententerprise.com,
14. Kimball, R, Ross. M, (2002), The Data Warehouse Toolkit: The Complete Guide to
Dimensional Modeling (Second Edition). John Wiley & Sons, Inc.,
15. Berry, M.J.A. & Linoff, G.S. (2000), Mastering Data Mining, Wiley: New York,
16. Codd, E. F., Codd, S.B., Salley, C.T., (1993), Providing OLAP to User-Analysts: An IT
Mandate, Codd & Date Inc..

INFLUENCE OF STUDENT SATISFACTION WITH COMMUNICATION DIMENSION ON THE OVERALL SATISFACTION WITH STUDY

Emina Terzic

*Faculty of Education,
University of Travnik, Bosnia and Herzegovina
eminas79@gmail.com*

Goran Kozina

*University North, Croatia
Goran.kozina@unin.hr*

ABSTRACT

This study explores the satisfaction of students from the University of Travnik with higher education. The research is focused on determining the impact of how satisfied the students are with communication between them and the teaching staff and the impact of informal communication on students' satisfaction with their communication with the office for student affairs, as well as the media of communication. In the study, a questionnaire based on the Likert scale from 1 to 7 was used as a means of data collection. The research sample includes 126 students from the University of Travnik. The results of the regression analysis revealed a significant and positive impact of students' satisfaction with communication between them and the teaching staff and informal communication in response to their overall satisfaction with higher education. The emergence of privately owned higher education institutions in contrast to those owned by the state has led to the creation of harsh competition in the higher education market and the necessity for applying the general theoretical principles of management and marketing in the governance of these institutions. In today's competitive academic environment where students have many options available to them, factors that enable educational institutions to attract and retain students should be seriously studied. However, students' satisfaction with informal communication has a greater contribution to explaining student satisfaction with higher education.

Keywords: *students satisfaction, communication, higher education*

1. INTRODUCTION

Higher education is considered to be one of the most important components for the development of an individual, but also of the economic and social development of any nation. (Mukhtar et al., 2015). The emergence of privately owned higher education institutions in contrast to those owned by the state has led to the creation of harsh competition in the higher education market and the necessity for applying the general theoretical principles of management and marketing in the governance of these institutions. In today's competitive academic environment where students have many options available to them, factors that enable educational institutions to attract and retain students should be seriously studied. Higher education institutions, which want to gain a competitive edge in the future, may need to begin searching for effective and creative ways to attract, retain and foster stronger relationships with students. To make the matter harder, as a private institution, it does not have the privilege to receive any subsidies or financial assistance from the government (Teo, 2001). The concept of a student as a customer is not new. It was first used 16 years ago (Crawford, 1991) and its use has been continued in studies by other authors as well (Hill, 1995, Narasimhan, 2001). Students pay tuition and expect the greatest possible equivalent for the money they give, and for this reason, students are viewed as costumers whose satisfaction is extremely important to keep existing and attracting new

students. The goal of a higher education institution must not be profit but the satisfaction of customers, in other words, students. A satisfied customer will come again, spread the word about his/her content and stay loyal. Hence, the higher education institution will maximize its profit (Scott, 1999). The impact of globalization has not been bypassed by higher education. In this competitive environment in which they operate, today's higher education institutions face the challenge of retaining existing students, attracting new ones and ensuring their satisfaction with academic experience (Grossman and Rhodes, 2002, Thomas and Galambos, 2004). The development of the global education market has forced higher education institutions to apply market-oriented management strategies, concepts, formulas and techniques in order to distinguish themselves from competition and attract as many students as possible while meeting their needs and expectations, and thus increase their income. As a result, universities must consider themselves as a "profit-making organisation" that is operating in a competitive marketplace (Oldfield and Baron, 2000). When it comes to university staff, there is a need to develop awareness of the necessity of satisfying the needs of students in a way that meets customers' expectations in the same manner as meeting customers' expectations in business organizations (Kanji et al., 1999).

2. LITERATURE REVIEW

Appleton-Knapp and Krentler (2006) imply that students' satisfaction with their educational experience should be the desired outcome in the management of higher education institutions. Satisfied customers often become loyal, repeat customers, meaning they will continue to purchase the products and/or services and recommend them to others. In other words, students' satisfaction will result in recommendations of that certain faculty to friends, neighbors and colleagues (Blackmore et al., 2006). A large number of potential students decide on a particular faculty based on the experience of others. The application of the Bologna Declaration in higher education systems enabled student mobility from one university to another and that imposed on universities the necessity of treating a student as a customer, making their voices heard and for them to be respected (William, 2002). Keeping existing students is as important as bringing new ones because it is much more expensive to attract new students than to retain existing ones (Helgesen and Nasset, 2007). Satisfaction is the feeling of happiness that people obtain when they have fulfilled his or her needs and desires (Saif, 2014). Customer satisfaction is achieved when a product or service meets customers' expectations (Petruzzellis, 2006). Students' satisfaction can be defined as the perception of enjoyment and accomplishment in the learning environment (Sweeney and Ingram, 2001). It is a positive predecessor of student loyalty, but also a result of the education system (Navarro, 2005). When it comes to students' satisfaction, one cannot ignore the Self-Efficacy Theory (Bandura, 1977)). This theory relates to beliefs about one's capabilities to learn or to perform certain activities. Essentially, students set academic and personal goals based on their own self-assessment. Students with a high self-assessment level visualize positive outcomes and set high goals for themselves. Those with lower self-assessment levels are constantly doubting themselves. They visualize scenarios that contain obstacles to achieving their goals and predict failure. Communication between a student and a professor plays a key role in helping students achieve greater success and a higher level of self-efficacy. According to Maslow (1943), humans need to feel a sense of belonging and acceptance and these needs come right after their physiological and safety needs. Hija treba koju je razvio Abraham Maslow (1943) je fokusirana na uticaj motivacije na ljude. There are five different levels of Maslow's hierarchy of needs: physiological needs, security and safety needs, social needs, the need for appreciation and respect (esteem needs), and self-actualization needs. In order to achieve ultimate goals, however, a number of more basic needs must be met. The hierarchy of needs can serve as a conceptual framework for communication at the faculty.

Specifically, the physiological needs of students include the need for books, computers, internet connection. Security and safety needs are met in a way that colleagues, professors, teaching assistants and other faculty staff make the student feel comfortable at the university. Social needs are met through communication with the teaching staff and other faculty members, as well as with colleagues. Positive and intensified interaction at the faculty will ensure that the needs for appreciation and respect are met. Meeting the need for self-actualization is achieved by allowing students to demand the knowledge they deem necessary; allowing them to personalize the learning process and allowing students the opportunity to give their own opinions on how to transfer knowledge. Student satisfaction is linked with students' perception of enjoyment and accomplishment in the learning environment (Sweeney and Ingram, 2001). The sense of belonging to the group and being accepted by other students are key factors in achieving success and completing studies (Kumar, Johnson, and Hardemon, 2013). Therefore, in order to achieve success in studies which determine the satisfaction of students, it is necessary, according to the Hierarchy of needs (Maslow, 1943), to develop a sense of belonging to the faculty and satisfaction with the communication with colleagues and faculty staff. Student satisfaction is a multidimensional process conditioned by various factors (Weerasinghe et al., 2017). Numerous studies have dealt with factors that influence students' satisfaction and their retention. In these studies, factors that were often underestimated are related to communication within the faculty. On a global scale, interest has been shown to explore the importance of effective communication in organizations and in educational institutions (Bush, 2011; Gorton and Alston, 2010, OECD, 2008). Informal contacts of students with faculty staff are connected with the retention of students (Terenzini and Pascarella, 1980) and the retention of students is conditioned by students' satisfaction (Druzdzal and Glymor, 1995). Garcia-Aracil (2009) has conducted a survey in eleven European countries and the results show that contact with colleagues has a positive impact on students' satisfaction. According to research conducted by Yusoff et al. (2015), students' relationship with professors and teaching assistants, assistance provided by the faculty staff and received feedback all have a significant impact on student satisfaction. Nasser et al. (2008) investigated students' knowledge of services and programs in relation to their satisfaction. The study found that great knowledge about university procedures, rules and reputation raises the level of student satisfaction. The quality of feedback, the relationship between teachers and students and the interaction with colleagues have a great impact on students' satisfaction with the university (Sojkin, 2012; Kuh and Hu, 2001). Douglas et al (2008) concluded that communication is one of the most important sources of satisfaction and dissatisfaction among students at the faculty.

3. METHODOLOGY

3.1. Aim of the research and research questions

The aim of the research is to determine how students perceive communication at the university, how satisfied they are with it and how satisfaction with communication affects the overall satisfaction of students at a private higher education institution.

The research will answer the following questions:

- Q1. How well can satisfaction with informal communication and communication with the teaching staff predict students' overall satisfaction in higher education?
- Q2. Which satisfaction measure better predicts students' overall satisfaction in higher education: informal communication or communication with the teaching staff?
- Q3. What is the level of satisfaction of students with the Student Affairs Office?
- Q4. How satisfied are students with the media of communication?

3.2. Data collection instrument

A questionnaire as a means of collecting data was used in this survey. The questionnaire consists of six sections: demographic characteristics of the respondents, total satisfaction with higher education, satisfaction with informal communication, satisfaction with communication with the teaching staff, satisfaction with communication with the student affairs office and satisfaction with the media of communication. The questionnaire used is based on the questionnaire developed by Ana Tkalac Vercic (2009), called UPZIK, which uses the Likert scale from 1 to 7, with 1 being extremely dissatisfied and 7 extremely satisfied. The questionnaire was modified for research purposes at a higher education institution.

3.3. Research sample

The questionnaire was distributed to 200 students in the second, third and fourth year of studies. Out of 200 distributed questionnaires, 150 completed questionnaires were received. 126 of them were usable. Prior to completing the questionnaire, the respondents received information on the purpose of the research and instructions on how to fill in the questionnaire accurately.

3.4. Data analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS). The reliability of the measuring instrument was tested to confirm that the results of the analysis were reliable and valid.

4. RESULTS AND DISCUSSION

4.1. Profile of the respondents

Demographic information includes the following characteristics of the respondents: gender, age and year of study. Demographic characteristics are presented in Table 1 and are based on frequencies and percentages. In this study, there were 44 (34,9%) male students and 82 female students (65,1%). This study included 101 (80,2%) students between the ages of 18-25; 46 (36,5%) of the students are sophomores and 39 (31%) of them are juniors, while 41 (32,5%) are seniors.

	Frequency	Percentage	Cumulative percentage
Gender			
Male	44	34,9%	34,9%
Female	82	65,1%	100,0%
Total	126	100,0%	
Age			
18-25	101	80,2%	80,2%
25-30	10	7,9%	88,1%
31-40	8	6,3%	94,4%
41-50	5	4,0%	98,4%
over 50	2	1,6%	100,0%
Total	126	100,0%	
Year of study			
Second	46	36,5%	36,5%
Third	39	31,0%	67,5%
Fourth	41	32,5%	100,0%
Total	126	100,0%	

Table 1: Profile of the respondents

4.2. Descriptive Statistics

For the dependent variable - students' satisfaction with higher education, only one item measurement on the Likert's seven-point scale was used. The independent variable - students' satisfaction with communication with the teaching staff consists of eight parts, and the independent variable - satisfaction with informal communication includes four parts. The Likert's seven-point scale was used to measure the independent variables. In Table 2 it can be noticed that students are generally satisfied with higher education ($M = 5.56$) as well as with communication between them and the teaching staff ($M = 5.74$) and with informal communication ($M = 5.01$). The lowest result of students' satisfaction with higher education is 1, which tells us that there are students who are extremely dissatisfied with their studies. The highest result of students' satisfaction with higher education is 7, which tells us that there are students who are extremely satisfied with their studies. Results for the independent variable - students' satisfaction with communication with the teaching staff range from 2.5 to 7, and for the independent variable - satisfaction with informal communication, they range from 1 to 7. Therefore, we see that the results show that there are students who are extremely dissatisfied with informal communication, as well as those who are extremely satisfied with this dimension of communication. The independent variable - students' satisfaction with communication with the teaching staff does not have any low results, but the research found the existence of students who are extremely satisfied with this dimension of communication.

	N	Minimum	Maximum	Mean
Satisfaction with higher education	126	1	7	5,56
Satisfaction with communication with the teaching staff	126	2,50	7,00	5,74
Satisfaction with informal communication	126	1,00	7,00	5,01
Valid N (listwise)	126			

Table 2: Image result for Descriptive statistics of measureswww.ibm.com
 Descriptive statistics

4.3. Reliability of research

The results of the reliability teste are presented in Table 5 The Cronbach coefficient Alpha = 0.83, points to a very good reliability and internal agreement of the measuring scale for this sample of respondents.

Cronbach's Alpha	N of Items
,832	12

Table 3: Statistical reliability

4.4. Factor analysis (satisfaction with communication)

The principal component analysis (PSCA) was used to determine the level of students' satisfaction with higher education. Before carrying out the analysis, the suitability of data for factor analysis was evaluated. A review of the correlation matrix revealed many coefficients of a value of 0.3 and higher. The value of the Kaiser-Meyer-Olkin's indicators is 0.86, which exceeds the recommended value of 0.6. Bartlett's sphericity test has reached a statistical significance, which points to the factuality of the correlation matrix.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,857
Bartlett's Test of Sphericity	Approx. Chi-Square	803,857
	df	66
	Sig.	,000

Table 4: KMO and Bartlett's test

Analysis of the main components revealed the presence of two components with characteristic values over 1, which explain 40.5% and 22.9% variance. This two-factor solution explained a total of 63.3% variance. (Table 4)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4,861	40,506	40,506	4,861	40,506	40,506	4,798
2	2,744	22,864	63,370	2,744	22,864	63,370	2,933
3	,967	8,056	71,426				
4	,584	4,869	76,294				
5	,566	4,718	81,012				
6	,479	3,990	85,002				
7	,381	3,175	88,177				
8	,361	3,011	91,188				
9	,350	2,919	94,107				
10	,285	2,376	96,484				
11	,225	1,878	98,362				
12	,197	1,638	100,000				

Table 5: Results of factor allocation

In order to better understand these two factors, the oblique rotation was used. The rotation revealed the existence of a simple structure. The first factor has eight factor loading and the second factor has four factor loadings and all the variables give considerable loading to only one factor. In Table 5 we see that between these two factors there is a weak positive correlation ($r = 0.13$).

Component	1	2
1	1,000	,130
2	,130	1,000

Table 6: Intercorrelation matrix

Table 6 shows the factor loadings of all variables, the correlation between the variables and factors and the common factors explain part of the variance for each variable. The main factor loadings create variables for factor 1 and they relate to the communication with the teaching staff (professors and teaching assistants). We will name this factor Students' satisfaction with communication between them and the teaching staff Variables which relate to informal communication give main factor loadings to factor 2, therefore we will name this factor Students' satisfaction with informal communication. The correlation coefficients of the variables and factors confirm our conclusion on the division of two factors based on factor loadings. In the part of the table that refers to the part of the variance explained by the common factors, we see that all variables fit well into their factor with other variables because they have a value greater than 0.3.

Item	Factor loadings		Correlation coefficients of variables and factors		Part of the variance explained by the respective factors
	Factor 1	Factor 2	Factor 1	Factor 2	
Kindness and curtsy of professors in communication with students that need assistance	0,871	-0,057	0,863	0,057	0,749
Professors reply promptly to emails	0,861	-0,104	0,847	0,008	0,729
Familiarity of teaching assistance with students' problems/difficulties	0,803	0,015	0,805	0,119	0,649
Availability of teaching assistants	0,765	0,121	0,781	0,221	0,624
Familiarity of professors with students' problems/difficulties	0,764	0,056	0,771	0,155	0,590
Professors reply promptly to emails	0,746	-0,08	0,735	0,017	0,547
Availability of professors	0,710	-0,044	0,704	0,048	0,498
Teaching assistants are friendly and helpful in communication when students need help	0,592	0,107	0,606	0,184	0,379
The amount of time spent in informal communication	-0,002	0,905	0,115	0,904	0,818
The amount of information transmitted informally	0,014	0,844	0,123	0,846	0,715
The amount of gossip at the Faculty	-0,109	0,822	-0,002	0,808	0,664
Number of decisions made on the basis of informal communication	0,119	0,772	0,219	0,788	0,635

Table 7: Matrix of Factor Loadings and Correlations of Variables and Factors for PCA with oblique rotation of a two-factor solution for items of the satisfaction with communication scale

4.5. Relation of students' satisfaction with informal communication and communication with the teaching staff and their overall satisfaction with higher education

A review of the results of the regression analysis in Table 8 indicates that the overall regression ($F = 15.946$) is statistically significant at the level of 0.01 (Sig.F). The coefficient of determination (R^2) and multiple correlations (R) show that it is possible to explain the variance of students' satisfaction with higher education 20.6% by the influence of satisfaction with informal communication and communication with the teaching staff and that their correlation is 0.45. When comparing the influence of independent variables individually, and satisfaction with informal communication and communication with teaching staff have a statistically significant impact on student satisfaction. The values of Beta coefficient (0.280) and t -value (3.463) for satisfaction with communication with teaching staff are statistically significant at the level of 0.01. The values of Beta coefficient (0.326) and t -value (4.024) for satisfaction with informal communication are statistically significant at the level of 0.01. Thus, the variable satisfaction with informal communication has a greater contribution in explaining Students' satisfaction with higher education, and both independent variables have a statistically significant and positive relationship with the dependent variable.

R=0,45	R ² =0,21	F - relation=15,946	Sig. F=0,000				
				Beta	Part	t-value	p
Student's satisfaction with communication with the teaching staff				0,28	0,30	3,463	0,000
Students' satisfaction with informal communication				0,33	0,34	4,024	0,000

Table 8: Relationship of satisfaction with informal communication and communication with teaching staff with study satisfaction

5. CONCLUSION

This paper describes the results of the research conducted on students of the second, third and fourth year of undergraduate studies at the University Travnik. The results of the research revealed a significant and positive impact of students' satisfaction with communication between them and the teaching staff and informal communication in response to their overall satisfaction with higher education, which is also the answer to our first research question. The second research question was to determine which of the two dimensions of communication better predicts students' satisfaction with higher education. The results showed that satisfaction with informal communication has a greater contribution in explaining student satisfaction. The research revealed that students are generally satisfied with communication with the office for student affairs, as well as with the media of communication. Achieving student satisfaction has become an extremely important challenge for faculties and their management because satisfied student students create a positive image for the faculty which will ultimately have a strong impact on the attractiveness of faculties for future potential students. The study found that creating an environment in which students are satisfied with communication leads to a positive impact on students' overall satisfaction with higher education

LITERATURE:

1. Appelton-Knapp, S.I. and Krentler, K. A. (2006). Measuring students expectations and their effects on satisfaction: the importance of managing student expectations. *Journal of Marketing Education*, 28(3), pp. 254-264.
2. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), pp. 191-215.
3. Bush, T. (2011). Theories of Educational Leadership and Management (4th edition). London: Sage Publications Inc.
4. Crawford, F. (1991). Total quality management. Committee of Vice-Chancellors and Principals, Occasional paper, London.
5. Douglas, J., McClelland, R. and Davies, J. (2008). The development of conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education*, 16(1), pp.19-35.
6. Druzdzel, M. J. and Glymour, C. (1995). Application of the TETRAD II program to the study of student retention in US colleges, Procedia of the AAAI-94 KDD Workshop, pp. 419-430.
7. Garcl a-Aracil, A. (2009). European graduates' level of satisfaction with higher education. *Journal of Higher Education*, 57(1), pp. 1-21.
8. Gorton, R. & Alston, J. A. (2011). School Leadership and Administration: Important Concepts, Case Studies, and Simulations. New York.
9. Grossman, J. & Rhodes, J. (2002). The test of time: Predictors and effects of duration in youth mentoring. *American Journal of Community Psychology*, 30, pp. 199-219.
10. Helgesen, O. and Nettet, E. (2007). What accounts for students loyalty? Some field study evidence. *International Journal of Education Management*, 21(2), pp. 126-143.

11. Hill, F.M. (1995). Managing service quality in higher education: the role of the student as primary consumer. *Quality Assurance in Education*, 3 (3), pp. 10-21.
12. Kanji, G.K, Abdul Malek bin A. Tambi & Wallace, W. (1999). A comparative study of quality practices in higher education institutions in the US and Malaysia. *Total quality management*, 10(3), pp. 357-371.
13. Kuh, G. & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *Review of Higher Education*, 24(3), pp. 309-332.
14. Kumar, S., Johnson, M. & Hardemon, T. (2013). Dissertations at a distance: Students' perceptions of online mentoring in a doctoral program. *International Journal of E-Learning and Distance Education*, 27(1).
15. Mukhtar, U., Anwar, S., Ahmed, U. & Baloch, M. A. (2015). Factors effecting the service quality of public and private sector universities comparatively: an empirical investigation. *Arts, Science & Commerce*, pp. 132-142.
16. Narasimhan, K. (2001), Improving the climate of teaching sessions: the use of evaluations by students and instructors. *Quality in Higher Education*, 7(3), pp. 53-65.
17. Nasser, R., Khoury, B. & Abouchedid, K. (2008). University students' knowledge of services and programs in relation to satisfaction. *Quality Assurance in Education*, 16(1), pp. 80-97.
18. Navarro, M. M., Iglesias, M. P. & Torres, P. R. (2005). A new management element for universities: satisfaction with the offered courses. *International Journal of Educational Management*, 19(6), pp. 505-526.
19. OECD. (2008). Improving School Leadership Project. Paris
20. Oldfield, B.M. and Baron, S. (2000). Student perception of service quality in a UK university business and management faculty. *Quality Assurance in Education*, 8(2), pp. 85-95.
21. Petruzzellis, L., D'Uggento, A. M. & Romanazzi, S. (2006). Student satisfaction and quality of service in Italian universities. *Managing Service Quality*, pp. 349-364.
22. Saif, N. I. (2014). The Effect of Service Quality on Student Satisfaction: A Field Study for Health Services Administration Students. *International Journal of Humanities and Social Science*, pp. 172-181.
23. Scott, S. V. (1999). The academic as a service provider: is the customer always right? *Journal of Higher Education Policy and Management*, 21(2), pp. 193-202.
24. Sojkin, B., Bartkowiak, P. & Skuza, A. (2012). Determinants of higher education choices and student satisfaction: the case of Poland. *Higher Education*, 63 (5), pp. 565-81.
25. Sweeney, J. & Ingram, D. (2001). A comparison of traditional and web-based tutorials in marketing education: An exploratory study. *Journal of Marketing Education*, 23(1), pp.55-62.
26. Teo, C.L. (2001). Realities of private institution. *New Strait time*, 4.
27. Terenzini, P. T. and Pascarella, E. T. (1980). Toward the validation of Tinto's model of college student attrition: A review of recent studies. *Research in Higher Education*, 12(3), 271-282.
28. Thomas, E.H. & Galambos, N. (2004). What satisfies students? Mining student-opinion data with regression and decision tree analysis. *Research in Higher Education*, 45 (3), pp. 251-269.
29. Weerasinghe, S., Lalitha, R. and Fernando, S. (2017). Students satisfaction in higher education literature review. *American Journal of Educational Research*, 5(5), pp. 533-539.
30. William, J. (2002). The student satisfaction approach: student feedback and its potential role in quality assessment and enhancement. 24th EAIR Forum, Prague, 8-11 September.
31. Yusoff, M., McLeay, F. & Woodruffe-Burto, H. (2015). Dimensions driving business student satisfaction in higher education. *Quality Assurance in Education*, pp. 86-104.

FURTHER DIFFERENTIATING FACTORS OF GAMERS' HEXAD PLAYER TYPES

Flora Poecze

*FH Burgenland, Austria
1719001127@fh-burgenland.at*

Ante Roncevic

*University North, Croatia
ante.roncevic@unin.hr*

Sanja Zlatic

*University North, Croatia
sanja.zlatic@unin.hr*

ABSTRACT

The contemporary economic weight of online gaming and present approaches of gamified system-personalization attract focused academic interest, to which the present paper aims to contribute with further insights in terms of the Hexad player type scale components. Previous study results regarding their relationship with gender and age will be discussed. Furthermore, participants' gaming behavior in terms of time spent with gaming-related activities, such as multiplayer gaming, solo gaming, communication with other gamers in public/private chats or forums, watching uploaded let's play's/gaming-related videos/previously recorded live streams, and reading gaming-related news, posts, discussions etc., will be explored. The paper uses evaluation techniques, such as Cronbach's Alpha, Kendall's tau-b, one-way ANOVA, Kruskal-Wallis H tests, Jonckheere-Terpstra tests, and interprets effect sizes with partial eta squared (η^2). Significant differences between the Hexad player types and operationalized age groups were found exclusively in the case of »Player« type. Independent samples t-test results showed no significant differences between user types and gender. There were, however, significant differences and observable, significant, positive, monotonic trends between player types and time spent with multiplayer gaming, as well as communication with other gamers in public/private chats or forums, and likewise in the case of time spent with reading gaming-related news, posts, discussions. Our results indicate the necessity of further investigation regarding differentiating factors in player types for the further optimization of gamified systems and offer insights for actors of the gaming industry in tackling obstacles in application and game development.

Keywords: Gamification, Gaming, Hexad, Player type

1. INTRODUCTION

Gamification, which is the addition of game elements to improve individual motivation and performance in tasks in non-game contexts (Deterding, Dixon, Khaled, & Nacke, 2011), has received a growing research interest in the past decade. The aim of gamification is to invoke "gameful" experiences in users, thereby enhancing behavioral outcomes with the help of motivational affordances. (Johnson et al., 2016) The face validity of gamification with various effect measures and a broad scope of applicational areas has been established in recent studies (Hamari, Koivisto, & Sarsa, 2014), while educational (Barata, Gama, Jorge, & Gonçalves, 2017) health and wellness (Johnson et al., 2016) contexts are among the most popular research areas. A recent, pressing theoretical argument in this research area was the question, whether individuals react the same way to the conducted game elements and are to be handled as a homogenous group, which leads to gamified application design with a "one-size-fits-all"

approach (Klock, Gasparini, Pimenta, & De Oliveira, 2015), or perceive and respond to them differently, which was concluded in various studies (e.g., Hamari & Tuunanen, 2014). Further verification of the latter findings was the conclusion in recent papers that found significant differences in gamification effects among their sampled participants. Consequently, several studies argue that the varying individual preferences, which impact individual performance in gamified applications, are the reasons why those systems designed with a “one-size-fits-all” approach vary in terms of their effectiveness (Nacke & Deterding, 2017). Based on the contemporary scientific agreement in terms of diverse individual preferences and perceptions, which determine the effectiveness of gamified applications through performance and motivations, academic focus started to explore possible user classifications in terms of player types, aiming to implement them to gamified applications and tailor the issue of heterogeneity in terms of individual perceptions and preferences (Tondello, Orji, & Nacke, 2017). The present study sets its focus on a specific player type classification, namely the Gamification User Types Hexad framework (Marczewski, 2015), exploring its characteristics, relationship with demographic attributes, such as gender and age and expand existing scientific knowledge through analyzing its possible differences with active and passive gaming-related behaviors. Therefore, it aims to contribute to the research area of human-computer interaction (HCI) and the scientific field of gamification and gameful design.

2. LITERATURE REVIEW

To tackle the problem of individual motivation enhancement, one of the most recognized motivational theories in gamification literature is the Self-Determination Theory (SDT) (Deci & Ryan, 2012), which sets its focus at “the investigation of people’s inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes” (Ryan & Deci, 2000, p. 68). The individual need for satisfaction is a significant determinant of gaming motivation and enjoyment; in other words, video games “are fun.” (Przybylski, Rigby, & Ryan, 2010) According to Ryan and Deci (2000), behaviors that are sought for individual, inherent satisfactions are termed as actions that are intrinsically motivated; the authors note that such motivations can be described with spontaneous interest, a desire for challenge or curiosity. On the other hand, extrinsic motivation, according to SDT, manifests itself in activities aiming to attain a specific outcome (e.g., students who are aware of the value of their chosen, future career are extrinsically motivated to do their homework). Moreover, the authors conclude that the critical factor in the process of motivation is individual perception and needs for the satisfaction of autonomy, competence, and relatedness. (Ryan & Deci, 2000) Based on this psychological theory, gamification research aims to define common attributes of individuals, such as learning style, personality traits or player type and found scientific evidence that individual personality traits and player type play a moderating role in motivation for task performance (Orji, Vassileva, & Mandryk, 2014). These findings led researchers to the conclusion that the construction of player typologies to predict individual player styles provide more accurate indications for application development than personality trait classification models, such as the Big Five model (Hamari & Tuunanen, 2014; Tondello et al., 2016). One of the first player type taxonomies was Bartle’s model designed for Multi-User Dungeons (MUDs) (Bartle, 1996). Several other player type taxonomies followed Bartle’s typology (Bateman & Boon, 2005; Nacke, Bateman, & Mandryk, 2011; Yee, 2006), however, as Tondello and colleagues (2017) remark, these models ask respondents to evaluate their experiences when they are playing games, therefore, their findings cannot be implemented to gamified applications. (Tondello, Mora, & Nacke, 2017) However, the Gamification User Types Hexad Framework, proposed by Marczewski (2015) was developed to evaluate game element preferences of individuals in

gamified applications and defined six player types, which are summarized in the following table (Table 1). (Marczewski, 2015)

Table 1: Hexad player types, user motivations, and characteristics
 (Tondello et al., 2016, pp. 231–232)

Player type	motivation	characteristics
Philanthropists	purpose	"They are altruistic and willing to give without expecting reward."
Socializers	relatedness	"They want to interact with others and create social connections."
Free Spirits	"autonomy, meaning freedom to express themselves and act without external control."	"They like to create and explore within the system."
Achievers	competence	"They seek to progress within a system by completing tasks or prove themselves by tackling difficult challenges."
Players	extrinsic rewards	"They will do whatever to earn a reward within a system, independently of the type of the activity."
Disruptors	triggering of change	"They tend to disrupt the system either directly or through others to force negative or positive changes. They like to test the system's boundaries and try to push further."

Tondello and colleagues developed a 24-item questionnaire (Tondello et al., 2016) for the measurement of the proposed player types, which they recently validated in three studies presented in 2019 (Tondello, Mora, Marczewski, & Nacke, 2019). The authors expected partial overlapping between user types based on underlying individual motivations. Furthermore, they found that significant correlations between user types differ from each other in their samples (Tondello et al., 2019). Based on these inconsistencies, the first research question of the present paper is the following:

- *RQ1: What kind of pairwise relationships are present among the analyzed player types?*

Furthermore, the 2019 study of Tondello and colleagues found significant differences in player types on the basis of gender and age; therefore, the present paper addresses the following two hypotheses:

- *H1: There are significant differences in player types in terms of gender.*
- *H2: There are significant differences in player types in terms of age.*

Additionally, the frequency of active and passive gaming-related behaviors, such as multiplayer and solo gaming, communication with other gamers, spectating recurrence and reading gaming-related content will be analyzed to answer the second research question of the study:

- *RQ2: What is the relationship between the frequency of different active and passive gaming-related activities and player types?*

3. METHODOLOGY

The present paper aimed to investigate the personal characteristics of gamers residing in the United States. An online questionnaire was set up in SoSci Survey (Leiner, 2019) and integrated to Amazon Mechanical Turk (mTurk), where a locational restriction was applied to receive exclusively US workers. mTurk was selected based on recent studies (Thomas & Clifford, 2017) that argue that the mTurk population provides representative samples based on the respondent criteria set up for the research goals. The sampling timeframe was between the 3rd and 5th of August 2019 and resulted in N = 351 valid responses. The paper specifically aimed to find those workers that are involved or have knowledge in terms of contemporary games and set a filter, where respondents needed to mark those games from five game titles that exist.

Only those responses were considered, where all three games were ticked that are present on the market. Additionally, a geo filter was applied to accept exclusively those participants who are residing in the United States. Active and passive gaming-related activities were measured on 9-point Likert scales ranging from “less than monthly” to “more than 6 hours a day”. Each player type was measured with 7-point Likert scale statements constructed by Tondello and colleagues (2016), wherein each construct included four measurement items. The internal consistency of player types was evaluated with Cronbach’s Alpha (Cronbach, 1951), followed by their mean-centered construct computation. Bivariate correlation coefficients were analyzed among the constructed player types through the employment of Kendall’s τ (Kendall, 1945), based on the consideration that the user type scores were non-parametric. Independent samples t-tests were performed in player types in terms of gender to detect possible significant differences to evaluate the second hypothesis of the paper. For the evaluation of H3, Levene’s Tests were performed on player types to evaluate the homogeneity of variances. (Fox & Weisberg, 2019) Additionally, Shapiro-Wilk tests were analyzed to assess the distributional characteristics of player types. (Field, 2018) Based on the results of these two tests, the nonparametric Kruskal Wallis H test was determined to be used for the analysis of variance. (Kruskal & Wallis, 1952) Effect sizes were calculated with eta squared (Levine & Hullett, 2002) and additionally, Jonckheere-Terpstra tests were used to evaluate, whether the possible significant effects were ordered (Jonckheere, 1954), using $N = 1000$ permutations for the reference distribution. Results evaluation was performed in R v. 3.5.2, using packages, such as stats, FSA (Ogle, Wheeler, & Dinno, 2019), sjstats (Lüdtke, 2019), clinfun (Seshan, 2018) and PMCMRplus (Pohlert, 2018).

4. RESULTS

The present paper evaluated the answers of $N = 351$ gamers; $N = 208$ male participants (59.4%) and $N = 142$ female ones (40.5%); one participant did not want to disclose his/her gender. Therefore, it can be concluded that neither genders were considerably overrepresented in the sample. The highest ratio of participants stemmed from the age group of 25-29 years ($N = 93$, 26.5%), followed by 20-24 years old respondents ($N = 79$, 22.5%) and 30-34 years old ones ($N = 60$, 17.1%). California was the state of residence for the highest ratio of participants ($N = 30$); as the following figure highlights, sampled participants resided in the vast majority of the US states. (Figure 1) Additionally, participant answers to their highest education resulted in a considerable frequency of those with Bachelor degree ($N = 135$, 37.3%), followed by those with vocational secondary certification ($N = 34$, 9.7%), those who finished school with no qualifications ($N = 34$) and those who are still in school ($N = 33$, 9.4%). 76.4% of the sampled respondents were employed ($N = 268$, 76.4%). After the mean-centered construct generation in terms of player types, their internal consistency was analyzed and compared to two publications of Tondello and colleagues, represented in Table 2. There are considerable differences in terms of the alpha values; however, these can be accounted for the distinct sampling characteristics. The 2016 study of Tondello and colleagues evaluated $N = 133$ undergraduate respondents from the University of Waterloo, from whom $N = 40$ took part in the follow-up survey, whereas the first study of the 2019 paper by Tondello and colleagues recruited participants by e-mail in academic and non-academic environments, social networks, game events (Barcelona World Games) and Learning Management Systems from Universitat Oberta de Catalunya, Universidad de La Laguna, and University of Waterloo, resulting in $N = 360$ Spanish speaking, and $N = 196$ English speaking participants stemming from 46 different countries. The second study of this paper, on the other hand, deployed the constructed survey on the public website of Gamified UK and recruited respondents on social media, resulting in $N = 1073$ English speaking, and further $N = 255$ Spanish speaking participants.

Figure 1: Age group and gender distribution (left) and frequency of participants residing in different US states (right). (Authors' representation in Tableau 2019.3.0)

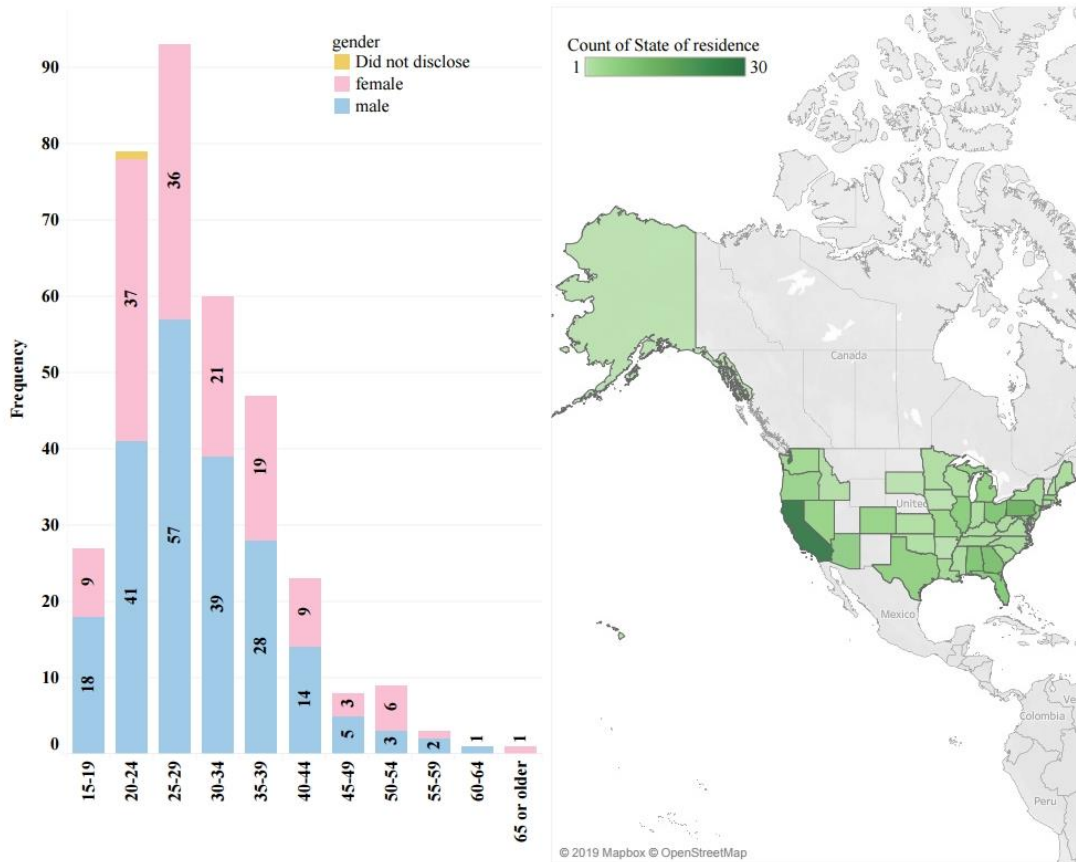


Table 2: Internal scale reliability (Cronbach's α) of the present study in comparison with Tondello and colleagues 2016, 2019 (Tondello et al., 2019, 2016)

Construct	α	Tondello et al. 2016	Tondello et al. 2019, 1 st study (en)	Tondello et al. 2019, 1 st study (sp)	Tondello et al. 2019, 2 nd study (en)	Tondello et al. 2019, 2 nd study (sp)
Philanthropist	.826	.893	.748	.814	.774	.774
Socializer	.867	.838	.825	.826	.828	.820
Free spirit	.735	.723	.629	.727	.660	.543
Achiever	.746	.759	.730	.808	.616	.594
Player	.775	.738	.843	.874	.716	.758
Disruptor	.691	.698	.788	.746	.699	.640

Bivariate correlation coefficients (Kendall's τ) between the analyzed Hexad user types with their significance values are represented in the following table (Table 3). In the study of Tondello and colleagues (2016), medium-strength correlations were found between Philanthropist and Socializer, Free Spirit, and Achiever. In the present study, Philanthropist and Player presented a medium-strength correlation as well ($\tau = .325$, $p < .001$), which is considerably stronger than the results of Tondello and colleagues (2016) and Tondello and colleagues (2019). In terms of the user type "Socializer," the present study found medium-strength correlation with Player ($\tau = .457$, $p < .001$), in line with Tondello and colleagues (2016) and the second study of Tondello and colleagues (2019). Further medium-strength correlations were found in the cases of Free Spirit ($\tau = .384$, $p < .001$) and Achiever ($\tau = .368$, $p < .001$), which were not present in neither of the studies in comparison. "Free Spirit" displayed such medium-strength coefficients with Achiever ($\tau = .513$, $p < .001$) and Player ($\tau = .455$, $p < .001$), which results are in agreement with Tondello and colleagues (2016), however, this was not the

case with Disruptor ($\tau = .178, p < .001$), which in the present study did not reach the threshold of $\tau > 0.200$, although this relationship was present in the 2016 and 2019 studies of Tondello and colleagues. "Achiever" displayed a mid-strength coefficient with Player ($\tau = .500, p < .001$) in the present paper, which harmonizes with the results of Tondello and colleagues (2016), although this relationship was relatively weaker in the paper of Tondello and colleagues (2019). There was no relationship detectable between Players and Disruptors in neither study of Tondello and colleagues, and the respective result of the present paper did not find a significant relationship between the two constructs either ($\tau = .058, p = .127$).

*Table 3: Bivariate correlation coefficients (Kendall's τ) and significance between Hexad user types. * $p < 0.05$. ** $p < 0.01$.*

User Type	Philanthropist	Socializer	Free Spirit	Achiever	Player
Socializer	.542**				
Free spirit	.519**	.384**			
Achiever	.508**	.368**	.513**		
Player	.457**	.397**	.455**	.500**	
Disruptor	.048	.118**	.178**	.086*	.058

The following table (Table 4) summarizes the results of independent samples t-tests of different player types in terms of gender. Although the studies of Tondello and colleagues (2019) found significant gender differences in numerous player types (e.g., Socializers, Disruptors in the first study of the respective paper, whereas Philanthropists, Socializers, and Disruptors in the second study), the present analysis did not detect such significant differences.

Table 4: Independent samples t-test between player types and gender

User types	t	df	p	mean/diff.	95% CI of mean diff.	
					lower	upper
Philanthropist	1.011	348	.313	.12002	-.11338	.35343
Socializer	.989	348	.323	.14784	-.14610	.44177
Free Spirit	.929	348	.353	.10487	-.11713	.32688
Achiever	-.781	348	.435	-.08891	-.31280	.13498
Player	-.618	348	.537	-.07137	-.29847	.15573
Disruptor	-1.328	348	.185	-.184	-.45649	.08850

Homogeneity of variances was violated in the case of Achiever ($p = .001$) and Disruptor ($p = .044$), represented in the following table (Table 5). Furthermore, the conducted Shapiro Wilk tests for normality exhibited that the analyzed player types significantly differ from the normal distribution. Based on these results, the following analyses will use the nonparametric analysis of variance, namely Kruskal-Wallis H.

Table 5: Results of homogeneity of variance and test of normal distribution

	Levene Statistic	p	Shapiro Wilk p-value
Philanthropist	1.587	.128	< .001
Socializer	.937	.486	< .001
Free Spirit	1.175	.314	< .001
Achiever	3.515	.001	< .001
Player	1.574	.131	< .001
Disruptor	2.016	.044	.021

The evaluation of possible significant differences and monotonic relationships of different player types in terms of different age groups are presented in the following table (Table 6). There were significant differences in participant scores of the "Player" user type in different age groups ($p = .005$), detected by the respective Kruskal-Wallis H test, which result

harmonizes with the findings of Tondello and colleagues (2019). Furthermore, Disruptors are in a significant, increasing monotonic trend with the age of participants ($p = .044$), which is also in line with the respective result of Tondello and colleagues (2019). However, the scores of Philanthropists, Socializers and Players did not differ significantly in the present paper, nor did they display a significant, increasing monotonic relationship with age, opposing previous findings of Tondello and colleagues (2019).

Table 6: F-values, eta squared effect sizes (η^2), Kruskal-Wallis H, and Jonckheere-Terpstra test results in terms of user types in different age groups

User types	F	η^2	p (Kruskal-Wallis H)	p (Jonckheere-Terpstra)
Philanthropist	1.133	.032	.358	.838
Socializer	1.425	.040	.195	.612
Free Spirit	1.218	.035	.368	.790
Achiever	1.534	.043	.323	.602
Player	2.671	.073	.005	.376
Disruptor	.779	.022	.591	.044

The analysis of player types in terms of different active and passive gaming-related behaviors concluded that there were significant differences in all player types with the exception of "Disruptors," whereas all player types displayed a significant, positive, monotonic relationship with the frequency of multiplayer gaming of participants. Although solo gaming intensity displayed such monotonic relationship with Philanthropists, Free Spirits and Achievers as well, player type scores did not differ significantly based on the magnitude of solo gaming. On the other hand, player types did show significant differences on the basis of communication intensity with other gamers in the cases of Philanthropists, Socializers, Achievers and Disruptors and significant, positive, monotonic relationships were present between the communication intensity and player type scores in all cases. The frequency of reading gaming related news, posts, discussions showed such monotonic relationships with Socializers, Players, and Disruptors, furthermore, in the cases of Philanthropists and Disruptors, participant scores differed significantly in terms of reading intensity. The frequency of spectating behavior did not show such significant, monotonic relationships with none of the analyzed player types and individual scores of these constructs did not differ significantly based on spectating intensity.

Table following on the next page

Table 7: F-values, eta squared effect sizes (η^2), Kruskal-Wallis H, and Jonckheere-Terpstra test results of user types in terms of different gaming-related activities

Gaming-related activity	User types	F	η^2	p (Kruskal-Wallis H)	p (Jonckheere-Terpstra)
Multiplayer gaming	Philanthropist	4.236	.090	< .001	.002
	Socializer	9.630	.184	< .001	.002
	Free Spirit	2.575	.057	.007	.018
	Achiever	3.309	.072	.003	.004
	Player	5.259	.110	< .001	.002
	Disruptor	1.038	.024	.541	.040
Solo gaming	Philanthropist	1.833	.041	.914	.008
	Socializer	.447	.010	.167	.172
	Free Spirit	1.512	.034	.203	.018
	Achiever	1.524	.034	.559	.010
	Player	1.123	.026	.312	.126
	Disruptor	1.112	.025	.238	.796
Communication with other gamers in public/private chats or forums	Philanthropist	3.335	.072	< .001	.002
	Socializer	6.281	.128	< .001	.002
	Free Spirit	1.837	.069	.059	.006
	Achiever	2.274	.051	.031	.018
	Player	2.133	.048	.068	.006
	Disruptor	2.705	.060	.007	.026
Spectating (let's plays, gaming-related videos, previously recorded live streams etc.)	Philanthropist	.176	.004	.958	.870
	Socializer	1.437	.033	.316	.100
	Free Spirit	.402	.009	.890	.700
	Achiever	.206	.005	.951	.558
	Player	.619	.014	.684	.530
	Disruptor	1.167	.027	.166	.206
Reading gaming-related news, posts, discussions, etc.	Philanthropist	2.522	.056	.006	.256
	Socializer	1.840	.041	.110	.042
	Free Spirit	1.087	.025	.347	.242
	Achiever	1.494	.034	.140	.058
	Player	2.000	.045	.057	.040
	Disruptor	2.090	.047	.027	.044

5. CONCLUSION

The present study conducted an online survey with gamers residing in the US and evaluated N = 351 responses, exploring current findings regarding the Gamification User Types Hexad Framework in terms of internal consistency, bivariate correlations, and their relationships with demographic attributes, such as gender and age. Furthermore, active and passive gaming-related behaviors were evaluated in conjunction with the Hexad scale as well. The first research question (RQ1) aimed to explore the bivariate correlations of player types with each other and concluded that they partially harmonize existing findings of Tondello and colleagues (Tondello et al., 2019, 2016), however, not in all cases. Thereby the statement of Tondello and colleagues (2019) regarding inconsistencies in terms of significant correlations is conclusive to the present study as well. The first hypothesis of the present paper stated that there are significant differences in player types in terms of gender, based on previous findings. (Tondello et al., 2019) However, the analysis did not find such differences; therefore, H1 is rejected. H2, on the other hand, is accepted, as a result of individual scores on the "Player" user type differing significantly in terms of age; however, the present paper did not find such results in terms of other user types of the Hexad taxonomy. The analysis of the second research question (RQ2) provided curious results: the intensity of multiplayer gaming and communication with other gamers showed a significant, monotonic relationship with all user types, whereas the individual scores on these constructs differed significantly on the bases of these behavioral intensities in almost all cases.

The study aimed to reach gamers residing in the United States and applied filters for both criteria. However, it restricted its sampling scope to Amazon Mechanical Turk exclusively. Broadening the sampling area for social media platforms and/or other places of recruitment can thereby possibly extend the present findings. Moreover, sampling expansion to other countries and the potentiality of cross-country comparisons can explore possible cultural commonalities and/or differences. The present paper aimed to contribute to HCI research in the area of gamification by replicating existing findings while expanding the scope of explorations to differentiating factors in terms of the intensity of passive and active gaming-related behaviors. Further studies can potentially deepen our contemporary understanding in terms of relation possibilities regarding the here discussed gaming-related behavioral attributes, demographic characteristics, and Hexad player types to provide further knowledge to “the maturing of gamification research” (Nacke & Deterding, 2017).

LITERATURE:

1. Barata, G., Gama, S., Jorge, J., & Gonçalves, D. (2017). Studying student differentiation in gamified education: A long-term study. *Computers in Human Behavior*, 71, 550–585. <https://doi.org/10.1016/j.chb.2016.08.049>
2. Bartle, R. (1996). Hearts, clubs, diamonds, spades: Players who suit MUDs. *Journal of MUD Research*, 1(1).
3. Bateman, C., & Boon, R. (2005). *21st Century Game Design*. Boston: Charles River Media.
4. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
5. Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford Handbook of Human Motivation* (pp. 85–107). Oxford University Press Inc.
6. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining “gamification.” *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011*, 9–15. <https://doi.org/10.1145/2181037.2181040>
7. Field, A. (2018). *Discovering Statistics using IBM SPSS Statistics* (5th ed.). London, UK: SAGE Publications Ltd.
8. Fox, J. D., & Weisberg, H. S. (2019). *An R Companion to Applied Regression* (3rd ed.). Sage Publication Ltd.
9. Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification. In *2014 47th Hawaii International Conference on System Sciences* (Vol. January, pp. 3025–3034). IEEE. <https://doi.org/10.1109/HICSS.2014.377>
10. Hamari, J., & Tuunanen, J. (2014). Player Types: A Meta-synthesis. *Transactions of the Digital Games Research Association*, 1(2), 29–53. <https://doi.org/10.26503/todigra.v1i2.13>
11. Johnson, D., Deterding, S., Kuhn, K.-A., Staneva, A., Stoyanov, S., & Hides, L. (2016). Gamification for health and wellbeing: A systematic review of the literature. *Internet Interventions*, 6, 89–106. <https://doi.org/10.1016/j.invent.2016.10.002>
12. Jonckheere, A. R. (1954). A Distribution-Free k-Sample Test Against Ordered Alternatives. *Biometrika*, 41(1/2), 133. <https://doi.org/10.2307/2333011>
13. Kendall, M. G. (1945). The treatment of ties in ranking problems. *Biometrika*, 33(3), 239–251. <https://doi.org/10.1093/biomet/33.3.239>
14. Klock, A. C. T., Gasparini, I., Pimenta, M. S., & De Oliveira, J. P. M. (2015). “Everybody is playing the game, but nobody’s rules are the same”: Towards adaptation of gamification based on users’ characteristics. *Bulletin of the Technical Committee on Learning Technology*, 17(4), 22–25.

15. Kruskal, W. H., & Wallis, W. A. (1952). Use of Ranks in One-Criterion Variance Analysis. *Journal of the American Statistical Association*, 47(260), 583–621. <https://doi.org/10.1080/01621459.1952.10483441>
16. Leiner, D. J. (2019). SoSci Survey. Retrieved from <https://www.soscisurvey.de>
17. Levine, T. R., & Hullett, C. R. (2002). Eta Squared, Partial Eta Squared, and Misreporting of Effect Size in Communication Research. *Human Communication Research*, 28(4), 612–625. <https://doi.org/10.1093/hcr/28.4.612>
18. Lüdtke, D. (2019). sjstats: Collection of Convenient Functions for Common Statistical Computations: R package version 0.17.6. Retrieved from <https://cran.r-project.org/package=sjstats>
19. Marczewski, A. (2015). *Even Ninja Monkeys Like to Play: Gamification, Game Thinking and Motivational Design*. CreateSpace Independent Publishing Platform.
20. Nacke, L. E., Bateman, C., & Mandryk, R. L. (2011). BrainHex: Preliminary Results from a Neurobiological Gamer Typology Survey. In *Proceedings of the 10th International Conference on Entertainment Computing - ICEC 2011* (pp. 288–293). https://doi.org/10.1007/978-3-642-24500-8_31
21. Nacke, L. E., & Deterding, S. (2017). The maturing of gamification research. *Computers in Human Behavior*, 71, 450–454. <https://doi.org/10.1016/j.chb.2016.11.062>
22. Ogle, D., Wheeler, P., & Dinno, A. (2019). FSA: Simple Fisheries Stock Assessment Methods: R package version 0.8.23. Retrieved from <https://cran.r-project.org/package=FSA>
23. Orji, R., Vassileva, J., & Mandryk, R. L. (2014). Modeling the efficacy of persuasive strategies for different gamer types in serious games for health. *User Modeling and User-Adapted Interaction*, 24(5), 453–498. <https://doi.org/10.1007/s11257-014-9149-8>
24. Pohlert, T. (2018). PMCMRplus: Calculate Pairwise Multiple Comparisons of Mean Rank Sums Extended: R package version 1.4.1. Retrieved from <https://cran.r-project.org/package=PMCMRplus>
25. Przybylski, A. K., Rigby, C. S., & Ryan, R. M. (2010). A Motivational Model of Video Game Engagement. *Review of General Psychology*, 14(2), 154–166. <https://doi.org/10.1037/a0019440>
26. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
27. Seshan, V. E. (2018). clinfun: Clinical Trial Design and Data Analysis Functions: R package version 1.0.15. Retrieved from <https://cran.r-project.org/package=clinfun>
28. Thomas, K. A., & Clifford, S. (2017). Validity and Mechanical Turk: An assessment of exclusion methods and interactive experiments. *Computers in Human Behavior*, 77, 184–197. <https://doi.org/10.1016/j.chb.2017.08.038>
29. Tondello, G. F., Mora, A., Marczewski, A., & Nacke, L. E. (2019). Empirical validation of the Gamification User Types Hexad scale in English and Spanish. *International Journal of Human-Computer Studies*, 127, 95–111. <https://doi.org/10.1016/j.ijhcs.2018.10.002>
30. Tondello, G. F., Mora, A., & Nacke, L. E. (2017). Elements of Gameful Design Emerging from User Preferences. In *Proceedings of the Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '17* (pp. 129–142). New York, New York, USA: ACM Press. <https://doi.org/10.1145/3116595.3116627>
31. Tondello, G. F., Orji, R., & Nacke, L. E. (2017). Recommender Systems for Personalized Gamification. In *Adjunct Publication of the 25th Conference on User Modeling, Adaptation and Personalization - UMAP '17* (pp. 425–430). New York, New York, USA: ACM Press. <https://doi.org/10.1145/3099023.3099114>

32. Tondello, G. F., Wehbe, R. R., Diamond, L., Busch, M., Marczewski, A., & Nacke, L. E. (2016). The Gamification User Types Hexad Scale. In *Proceedings of the 2016 Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '16* (pp. 229–243). New York, New York, USA: ACM Press. <https://doi.org/10.1145/2967934.2968082>
33. Yee, N. (2006). Motivations for Play in Online Games. *CyberPsychology & Behavior*, 9(6), 772–775. <https://doi.org/10.1089/cpb.2006.9.772>

GENDER AND SCHOOL TEXTBOOKS: FIRST YEAR BACCALAUREATE FRENCH SYLLABUS

Sadik Maliki

*Faculty of letters and Humanities, Ain Chock,
Hassan II University, Casablanca, Morocco
sadikmaliki@yahoo.fr*

Marya Khtira

*University Institute for Scientific Research, Rabat, Morocco
marya.khtira@gmail.com*

ABSTRACT

The present article brings to focus the knowledge conveyed through the very fine teaching processes which can contribute to the socialization of a series of representations on men and women. In fact, the textbooks used in the first year in high school represent the data of our analysis and give rise to reflections on gender social mechanisms existing in the Moroccan society as a whole. Throughout this work, we address questions about gender-related representations in the case of French teaching in the first year of high school, starting by an assessment of the syllabus while laying emphasis on the system of norms conveyed, i.e., a system that can come out as sex stereotypes and, ultimately, affect students' behavior in their school, personal and professional life. The analysis also points out to how using the same contents taught as a subject can serve to promote and develop in students positive values and images about gender.

Keywords: *textbooks, gender, representations, values, Moroccan society, norms, French*

1. INTRODUCTION

In 1999, Morocco undertook to reform its educational system through « The National Charter of Education and Training ». Since then, school has been geared toward “active learning, cooperation, discussion and collective efforts”. The concern here is a school that is open on its social, economic and cultural environment. Therefore, redefining values, knowledge and skills has proved to be vital. By values, here, we mean values that help students become part of active life. The main objective of this article is to address the question of gender with regard to the French language textbooks in the first year of high school. In addition to training teachers and introducing them to the new 21st century skills, the reforms undertaken were meant to support teachers' efforts and help them make their students familiar with the values of equity and propose teaching materials with a co-education focus ([1], [2], [3]). In other words, within the co-education model, the assigned textbooks should defend gender equity through non sexist language and images and through contents that transmit ideas and values that promote equity and recognize the capital role women play in society. Our experience as teachers makes it possible for us to assert that the only references of French teaching are limited to pedagogical orientations. Instructions define the 'raw materials' on which each teacher should base themselves before they can conceive the three pedagogical projects of the three textbooks in the syllabus, namely *La Boite à Merveilles* by Ahmed Sefrioui, *Antigone* by Jean Anouilh and *Le dernier jour d'un condamné* (Last Day of a Condemned Man), by Victor Hugo. Such pedagogical orientations shed light on the values to be transmitted and conveyed: citizenship values and universal human rights values (i.e., men's, women's and children's rights). The qualifying course necessary to be able to teach in a Moroccan high school requires that the best pedagogy is that based on values, during and after inspectors' supervision. This value-oriented pedagogy is supposed to establish a set of values of tolerance, peace and solidarity.

Teachers should make sure that both the teaching materials and the way of addressing the students are free of stereotypes, so that boys and girls may have the same development opportunities and freedom of choice ([4]). Today's education, it should be noted, means to educate in equality, regardless of students' sex. It should focus on the identification of stereotypes ascribed to masculine and feminine and the implementation of the measures likely to help abolish them from our language and behavior, so that the assumed gender roles(i.e. the household for women and work outside is for men) are eradicated ([5]), ([6]). In fact, this article will not deal with school text books in the strict sense, for no text book is assigned for the French course in the first school of baccalaureate. The Syllabus of French is based on literary works, which give rise to pedagogical projects, subdivided into sequences. These sequences, in turn, are made up of a number of activities, namely reading, language, oral communication and writing. The only thing that these pedagogical projects have in common lies in the objectives set by pedagogical orientations, which are sometimes technical competences and skills or values found at the beginning of every sequence inside each pedagogical project. For example, in sequence 5 of the book 'La boîte à merveilles', the value to be conveyed is the value of the father in a family. Thus, the choice of the text to be examined, the corpus of linguistic activities, discussions during oral communication and the topic of writing are carried out based on this value. Therefore, the problem we are addressing is as follows: what is the position of women in this frame of values to be transmitted to learners? How can men's and women's representations in the three works foster sexism and gender inequalities in young high school learners? In order to shed more light on this issue, it was necessary to investigate how school can be a socialization milieu where not only school values (i.e., love for learning, respect of institution, effort, merit and competition) but also social, cultural and civic values are initiated ([7]). In fact, according to this research work, learners' reaction to the content of the courses taught differs from one environment to another. School, it should be remembered, represents a large laboratory where we can observe learners' behavior vis-à-vis the values taught. In addition, we sometimes notice acts of rejection and resistance which can be analyzed as expressions of religious and cultural independence and uniqueness of a given audience. Our analytical work takes the pedagogical projects for the teaching of French at the first year baccalaureate as a case study. The cultural values conveyed via the assigned books fall prey to the difficulty to reconcile and bridge two different semantic worlds or universes. For example, we can think of violence against women as a sign of non respect for the universal values or as quite common and frequent practices in the socio-cultural environment in which some of our students have grown. Some ambiguities arise during the teaching process, especially for teachers who have just started their career; however, these ambiguities and difficulties disappear little by little as teachers acquire some experience and start a step back from the transmitted content and become less emotionally involved. The reflection is organized in the form of observation, assessment and deduction. First of all, a review of the different representations of women and men in the three works is conducted before highlighting the possible consequences on students' unconscious. Before questioning the impact of culture on the perception of these stereotypes, it is important to define the notion of « stereotypes », especially those that literature transmits to young students. The pedagogical orientations for the teaching of French combine in order to encourage teachers to consider literary works as authors' particular worlds, where everything takes shape as the reading and analysis proceed. These worlds talk to readers and invite them to identify with them, approve or disapprove of them. It is equally important to note that several works on the teaching of literature and on sociology have made it clear that literature is a milieu where the construction and/or deconstruction of socially shared stereotypes take place. Narration, rhetoric and images are perceived differently, and the different perceptions are closely related to previous knowledge or schemata which, in turn, are based on the interpretation and judgment of messages ([8]).

Gender discrimination depends on the repetitions encouraging young people's socialization process. Thus, criticizing stereotypes in school textbooks emanates from the idea that literature sometimes tends to develop in learners' pre-established representations, fixed images and predefined frameworks and schemata, by means of which readers give labels, categorize individuals and ideas, seek short-cuts, in a bid to filter or infiltrate the surrounding reality in all its specificities and details ([9]). Therefore, the first remark one can make with regard to the three works is that there is no female author. Indeed, throughout the three years of high school, there is no woman author in the French syllabus, which is anomalous. Is it normal that high school students are exposed to a type of literature produced exclusively by men? The question that poses itself is: is this an intentional choice? Why are Moroccan students introduced to Simone De Beauvoir, for example, only in a particular context (A Master's program)? Why is 90% of the syllabus made of classical literature? Why don't we introduce high school students to contemporary literature or to youth literature? How can we explain the fact that the only representation of woman in all works is that of submissive woman, woman as an object, subordinate woman, etc? It is simple to say that this was not intentional and that the choice of the pedagogical officers of the ministry of education was impacted by the process of socialization through which they went during their primary, secondary and higher education and even their professional life. However, the situation is much more serious, as ([10]) has made it clear. Such a choice may also have been made by women. These are ideas that have been around in our minds for such a long time that they now impregnate our collective unconscious. The reality of this French syllabus ensures that our female students are confined to the admiration of male authors, which, in itself, is a traditional domination mechanism. Thus, instead of using a syllabus geared towards the learning of respectful and egalitarian relational models, the absence of women make young students think that men produce more and better literary works. In fact, the question "why there isn't a literary work written by a woman in the syllabus?" has often been asked. As a matter of fact, the socializing function imparted to the teaching of literature in Moroccan high schools has not been taken into consideration. Today, the bodies in charge of pedagogical decision making do not still understand that school textbooks or literary works represent effective tools to explain the world and build the ideal-type, through arousing children's and teenagers' curiosity to make them call all prejudices and misconceptions into question. Besides, women's representations in these works are predominantly demeaning and degrading images of women. In the present article, we try to analyze these representations rather than condemn gender stereotypes, for the concern here is literary writing. Any literary text, it should be clear, is an ideological, social, cultural and psychological investment on the part of the author. It is not up to us to call into question the choice of characters, their features and properties and their roles. However, male and female representations make it possible to analyze gender without encroaching upon the author's own sphere. In fact, it is the choice of the literary works that we are questioning and not the content per se. In other words, we could have had at least one literary work that conveys values of gender equality, values of the important role of women in society, a literary work where women are presented as warriors, heroine or other, but this is not the case. By going through the literary works under study, we have identified the gender-related representations which appear through the different features of characters.

2. LA BOITE A MERVEILLE BY AHMED SEFRIQUI

Taking the context into account, this work is an autobiography written by a Moroccan writer in order to describe Morocco under French colonization in the 1920s. The protagonist was only 7 and lived in the old Medina of the city of Fes. Unlike the other works, where male characters are predominant, "La Boite à Merveille" is a novel that is rich in female characters. However, it is an almost misleading appearance.

We are admittedly in front of a significant number of women, but these women represent a marginalized and subordinate category subjected to another category that, although smaller in number, is more powerful and more authoritative (i.e., the male sphere). These women are both neighbors and relatives, while others live in conflict, competition and rivalry. They are all housewives and their main activity is taking care of their kids and doing the housework while their husbands work outside the house. We have here a public/private division, where indoors work is for women and outdoors work is for men. Besides the division of social roles between men and women, the author stresses the features of female characters that are related essentially to the cultural and religious dimension of the novel. The common behavior that is proper to women is the superstitious practices. Not only are they illiterate and socially and professionally limited, but they also do things that the young boy, Mohammed, criticized and thought of as absurd and irrational. The author, here, conveys a negative image of female Moroccan society during the 1920s. The place where these practices take place and where the young boy lived with his parents, (Dar chouafa, the home of the fortune teller) is responsible for this. While fathers go to work, mothers admire the fortune teller; they act as spectators and witnesses for this fortune teller, whom they respect out of fear and who gets her authority by making others believe she is in contact with another world, the hereafter, the world of ghosts and jinni. Here again, the observations are striking: in order for a woman to command respect at that time, she had to be extraordinary and had to have supernatural powers. This very fact is due to the belief that a group of people are believed to possess a spiritual power whereby they can expel the evil forces by performing certain rituals, which, in turn, can be explained by peoples "desperate search for aid from the unknown" ([11]). Furthermore, visiting mausoleums and sanctuaries was women's main activity; this activity is presented as purely and exclusively a female activity. Given their social position, women are presented as weak and fragile beings. Women in the « la boîte à merveilles » do not have enough moral freedom and material independence. They think they are victims of ill fate, evil eye and jealousy and are often in search of what they lack in sanctuaries. Sidi el arafi, Sidi boughaleb, and many other saints represent the regular loophole and refuge of these largely frustrated women. In fact, such locations are meeting and therapy places, where women expose their social reality and where they think they can get healing and solace for all their social miseries: « once in front of the catafalque, each of them exposed her miseries, hit with her palm the wood of the catafalque, moaned, begged and inveighed against their enemies » ([12]). The code of how space is used by men and women is also well described in the novel; mixing was forbidden. Men should inform of their moving from one room to another in order to give women time to hide or cover themselves: Driss, Fatma's husband says: « Is there anyone; can I pass? ». Thus, only when she is accompanied by her children or husband can a woman move or go out; the places she is allowed to go to are the souks (market places), mausoleums and the moor bath. The woman should be present at home to welcome her man and give him a report of all that happened during the day. Polygamy does not pass unnoticed. It is largely addressed in the novel and puts women in a situation of competition and rivalry for only one man. The age difference between a man and his second wife is always big. They all share the same roof with one man and a lot of children. This is nothing short of the idea of "Harem". Finally, the male hero's worse enemy is but a little girl who is the same age as him called Zineb. A situation of rivalry and competition, or even of hatred, gives further evidence to the opponent position adopted by the author vis-à-vis femininity since he was 7 years of age. He fears the idea of Zineb being appreciated better than him, and dislikes her way of playing and of behaving. He criticizes women not only physically, but morally as well. He is impatient to enter the world of men instead of wasting his time in a world of women that he hates. When one speaks about polygamy to teenagers, who find and recognize each character in their entourage, it is as if one depicts this practice as legitimate. In fact, the staging of such an unequal gender system is in contradiction with the political and

ideological will of the educational charter, namely the promotion of gender mix, co-education and equality. The reason is that, besides this staging of traditional women, there no other accessible literary work likely to call these practices into question, a work which provides a portrait of modern, open, cultivated and independent Moroccan women. When teenagers are exposed to the issue of polygamy, they find and recognize each of the characters in their surroundings. This, in fact, looks as though this practice were made legitimate. The same thing holds true for the practice of visiting mausoleums, fortunetellers and sorceries. This is where the important and crucial role of the teacher lies. In other words, teachers ceaselessly keep reminding their students of the context and of the fact that things have changed and women are now developed, educated and independent.

3. ANTIGONE BY JEAN ANOUILH

The classic distribution (i.e., men at work and women at home) is also prevalent in "Antigone" by Jean Anouilh although the context is different from that of "la boîte à merveilles". This Greek tragedy makes readers roam in ancient myths, where the king is a man and can in no case be a woman. It is the king that decides on the fate of the two brothers, Étéocle and Polynice, fought each other so as to gain access to the throne. The main female characters are Antigone and Ismène. They are the princesses of Thèbe, which implies a role to play and a specific type of behavior to adopt: obey the king, get ready for the big marriage day, keep quiet and, above all, spruce themselves up. By calling this traditional scheme or pattern into question, Antigone is considered as the rebel who rejects and opposes the laws defining femininity in order to be faithful to herself and to her own convictions, i.e., a woman against male power. Antigone: « understand; always understand; for me, I don't want to understand. » ([13]), scene 11, second part). « You all make me feel disgusted with your happiness! With your life that you have to like at all costs... As for me, I want everything and immediately; and I want it in full; otherwise, I refuse! I don't want to be humble and make do with just a little piece if I were quite wise » ([13]), scene 11, part 11). Therefore, in this case study, we are faced with a mythical heroin, far from the stereotypes on the slim, beautiful, well combed and well dressed heroin. A young woman who would have liked to be a boy to have her own say; she refuses her being a woman, of whom the main role is to stir up men's desires. Throughout this mythological work, Antigone is the symbol of a large number of teenagers, readers and receptors who find themselves in a dilemma: either to accept the codes of conduct and behavior that society assigns to women (i.e., how to dress, walk, talk and eat) in order to ensure a smooth transition from childhood to adolescence and correspond to the ideal-type defined by society, or to revolt against these laws, which impregnate our minds and which we consider as the results of nature. Antigone experiences a permanent feeling of dissatisfaction in her female body, a body that she hates for constantly having to play the role of a submissive woman face to her fiancé, Hémon, her uncle, Créon, and Thèbe her kingdom, etc. She refuses to bow and she states it loud and clear, as is shown from the following: « Me, I did not say yes; what is it that you think this can do me, your policy, necessity, your poor stories? Me, I can still say no to all that I don't like and I am my own and only judge ». Concurrently with this very complex life and strong character personality emerges her sister's conformist portrait: the woman, the female who obeys, spruce herself up and does not interfere in men's affairs. When students were exposed to this, they showed different reactions. The first category hailed and applauded the little Antigone as a symbol of female resistance against male domination and oppression as well as societal marginalization. The second category considered that this disobedience was treason and betrayal vis-à-vis family, identity and society and that people should not seek to distinguish themselves from others. For the latter, women should keep up with the mainstream in order to avoid getting into trouble, especially when facing a strong antagonist. Here again, and through Antigone, we are face to a more reinforced, traditional female sex pattern, for Antigone ends up paying dearly

when she was buried alive by her uncle. The fact is that men fight each other for power, associate power and authority with male sex, while women spend their time in private environments, whether at the fortune teller's home as in "la Boite à Merveille" or in Thèbe's palace in the case of Ismène and Antigone. Men occupy larger and more diversified territories. In Antigone, besides the fatal character of the work that students fail to assimilate, students are given further evidence that when a woman tries to cross the borders and encroach upon men's territory, she is doomed to be ill-treated, oppressed and blocked.

4. THE LAST DAY OF A CONDEMNED BY VICTOR HUGO

In this piece of work, the hero is a man who is sentenced to death. Jail is a 100% male world and so are the court, the judges and the lawyers. Women are hardly mentioned, except the girl and the woman that the author uses as an argument against capital punishment since their dependence on the condemned is such that they run the risk of being thrown into delinquency and poverty after his death. Once more, women are described as weak beings that need a man to support them and provide for their daily needs. ([14])

5. CONCLUSION

In short, It can be asserted that gender inequality is still prevalent in Moroccan society and Moroccan school textbooks despite the tremendous efforts made ([15], ([16])); the works assigned in the syllabus are far from being adequate to meet the ambitious objectives of the national education charter, namely equality of girls and boys, citizenship and civic and cultural values advancement training. There is absolutely no balance between the three works. Men and women's representations show men rule, dominate regardless of the era, circumstances and context. Most characters are men and in case they are women, it is simple for the purpose of emphasizing female submissiveness and subordination. In fact, our school textbooks and the literary works we assign our students give further significant evidence of the undeniable contradiction between the choice of the teaching material and the desire to fight against gender inequality and promote co-education that the political and public opinion in Morocco display.

LITERATURE:

1. Mbangui, L. (2008): Are co-ed schools the key to gender equality?
<https://www.shoutoutuk.org/2014/06/11/are-co-ed-schools-the-key-to-gender-equality-by-luisa-mbangui/>
2. Kastrup, V. & Kleindienst-Cachay, C. (2014): Reflective co-education' or male-oriented physical education? Teachers' views about activities in co-educational PE classes at German secondary schools. <https://doi.org/10.1080/13573322.2014.984673>.
3. Evans, A. (2014): Co-education and the erosion of gender stereotypes in the Zambian Copper belt. Pages 75-90 <https://doi.org/10.1080/13552074.2014.889346>
4. Ivinson, G. and Murphy, P. (2007) *Rethinking Single-sex teaching: Gender, school subjects and learning*, Berkshire, Open University Press McGraw Hill.
5. Harris, L. (2012): Morocco Gender Roles and the Rhetoric of Change.
<https://www.moroccoworldnews.com/2012/02/25694/morocco-gender-roles-and-the-rhetoric-of-change/>
6. Al Amrani, M. (2012): Gender Roles in Morocco: Is It the Decline of Patriarchy and the Rise of Matriarchy? <https://www.moroccoworldnews.com/2012/01/22310/gender-roles-in-morocco-is-it-the-decline-of-patriarchy-and-the-rise-of-matriarchy/>
7. Solere - Qeval, Sylvie (Dir.) (1999) : Les valeurs au risque de l'école. Lille : Presses Universitaires du Septentrion, pp. 171 - 182. Houghton Mifflin/Riverside Press.

8. Maliki,S., Housni, H. and Biad T. (2019): The Impact of Cultural Value Systems on Cross-Cultural Communication Success or Failure. International Journal of Innovation and Research in Educational Sciences. Volume 6, Issue 3, ISSN 2349-5219
9. Maliki,S., Lamkhanter, F. and Housni, H. (2017): The Relevance of Culture to The reading Comprehension Process: The Case of Moroccan Students Reading EFL Texts. Book of proceedings of the 26th Scientific Conference on Economic and Social Development "Building Resilient Society"- Zagreb, Croatia
10. Cahen, F. 2017) : féministe à la lettre », <http://www.lejdd.fr/societe/education/francoise-cahen-feministe-a-la-lettre-3314822>
11. Johnson, E., Sickels, E. and Sayers, F. (1970): Anthology of Children's Literature. Fourth Edition.
12. Sefrioui, A. (1954): *La Boite à Merveilles*, Edition « Librairie des Ecoles »,
13. Anouilh, J. (1974): Antigone, Table ronde. Théâtre, Littérature.
14. Hugo, V. (2012): Le dernier jour d'un condamné, Librio.
15. Alami, A. (2014): Gender Inequality in Morocco Continues, Despite Amendments to Family Law. <https://www.nytimes.com/2014/03/17/world/africa/gender-inequality-in-morocco-continues-despite-amendments-to-family-law.html>
16. Perezniето, P. & Taylor, G. (2014): A review of approaches and methods to measure economic empowerment of women and girls. Pages 233-251.
<https://doi.org/10.1080/13552074.2014.920976>

DEVELOPMENT OF INTERNATIONAL TRADE IN SERVICES AND ISSUES OF STATISTICAL MONITORING AND RECORDING

Zrinka Lackovic Vincek

*University of Zagreb,
Faculty of Organization and Informatics, Croatia
zlackovi@foi.hr*

Vlatka Bilas

*University of Zagreb,
Faculty of Economics and Business, Croatia
bilas.vlatka@gmail.com*

Ivana Dvorski Lackovic

*University of Zagreb,
Faculty of Organization and Informatics, Croatia
idvorski@foi.hr*

ABSTRACT

The aim of this paper is to present the development of international trade in services and to highlight the problems of statistical monitoring and recording of services at the international level, but also in the Republic of Croatia. The paper proves that trade in services is the fastest growing component of international exchange in the last twenty years. The growth of world exports of services was achieved for several reasons: growth of income of the world's population, strong growth of foreign direct investment in services, liberalization of international trade in services, technical progress, privatization processes, unification of international trade law, convertibility of more currencies and increase in the number of countries in the world. However, the real share of services and their importance in the economy is far greater than that shown in official statistics. At the international level, statistical monitoring of trade in services has been largely incomplete for numerous causes. First and foremost, the problem is the separation of services from goods, and thus incomplete national statistics on services. Then, the data on the international exchange of services by service sector is insufficiently disaggregated. In addition, part of the services related to international trade is often included in the value of exports of goods, which is the case with services provided in conjunction with goods being exported. Most often, these are goods that are exported directly by the manufacturer, and the services that accompany these goods are most often related to the training of workers to work on imported equipment and the transport directly performed by the manufacturer. Such input is included in the value of exports of goods and increases it, while the value of exports of the service thus provided is not recorded.

Keywords: *European Union, international trade, Republic of Croatia, services, statistical monitoring*

1. INTRODUCTION

From a material point of view services are difficult to define and describe. They relate to activities that are mostly intangible, which address specific problems of service users that pay for those activities. Separate monitoring of services is more recent, because they have not been given the necessary attention for many years. Due to the abundance and diversity of services, one of the initial challenges for both theorists and practitioners was to define services. There are numerous, more or less similar definitions of services, but there is no single definition. Also, none of the consequent definitions of services is without flaws.

One of the most commonly cited definitions of services is that of Kotler, Armstrong, and Brown (1991, 603): "Any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be related to a tangible, physical product". In the last two decades, services trade has grown faster than trade of goods and today they make up 2/3 of the world gross domestic product. At the international level, statistical monitoring of trade in services has been largely incomplete for numerous reasons. First and foremost, the problem is the separation of services from goods, and thus incomplete national statistics on services. Then, the data on the international exchange of services by service sector is insufficiently disaggregated. In addition, part of the services related to international trade is often included in the value of exports of goods, which is the case with services provided in conjunction with the goods being exported. The paper is structured as follows: after introductory considerations, the second chapter presents an overview of the development of trade in services at the international level, while the third chapter analyzes the development of trade in services in the European Union. The fourth part of the paper is devoted to identifying the issues of statistical monitoring and recording of services at the international level, but also in the Republic of Croatia. The conclusion at the end of the paper summarizes all relevant results and insights from the research part of the paper.

2. DEVELOPMENT OF INTERNATIONAL TRADE IN SERVICES

After World War II, the intensive growth and development of service industries began, which resulted in the transformation of developed market economies, such as the United Kingdom, France, Italy, Canada, the USA and others, into service economies. Cowel (1984) outlines three fundamental trends in service development. The first trend refers to the increased need for employment in the service industries, which has led to the growth of the service industries themselves. The second trend was related to the growth of demand for different types of services intended for business entities, and the third trend included an increase in the demand for services intended for the end user. The latter trend was driven by economic progress, an increase in the wealth of society as a whole, and an increase in the budget of the individual household, a change in consumer habits and lifestyles, an increase in leisure time, an extension of life expectancy, and an overall increased complexity of life. Bell (1999) concludes that in the second half of the 20th century, developed western countries became post-industrial societies, characterized by a shift in the economic sector from a manufacturing economy to a service economy, as more types of services evolve, and an increase in research and government services is particularly important, which, he concludes, leads to a new intellectual elite. In addition, there has been a change in occupational structure and type of work, where professional and service occupations now prevail. Based on Bell's main points, Castells (2005), by analyzing the G-7 countries, proves that economic activity is shifting from goods to services and that employment in the service sector is predominant. According to Payne (1993), numerous demographic, social, economic and political-legislative changes in the last five decades have influenced the extremely dynamic development of services. The internationalization of the service companies business has been steadily expanding since 1986, when the Uruguay Round of WTO negotiations started reducing previously valid restrictions and barriers to international trade in services. International trade in services has, over the last thirty years, a period in which services-related statistics has been more closely monitored, increased with greater dynamics than the trade in goods. Faster growth in international trade in services relative to international trade in goods can be seen when comparing the data relating to 1980 when the value of world exports of goods was USD 2.050 billion and the value of world exports of services USD 395 billion to that of 2018, when the value of world exports of goods was USD 19.131 billion and world exports of services USD 5.845 billion. The growth of world exports of services was achieved for several reasons: growth of income of the world population, pronounced growth of foreign

direct investment (FDI) in services, liberalization of international trade in services, technical progress, privatization process, unification of international trade law, convertibility of more currencies and increase in the number of countries in the world. However, it is important to emphasize that data on world exports of services do not fully reflect the importance and growth of the role of services in international trade, as shown by data on world gross domestic product. According to UNCTAD (2015), world trade in services has been growing at a rate of 10.7% annually since 2001, compared to a slower growth rate of 6.6% between 1990 and 1999. Globally, between the third quarter of 2008 and the second quarter of 2009, trade in goods experienced the sharpest decline since the 1929 crisis. This decline was very serious, highly synchronized among countries and concentrated mainly in the category of durable goods (Baldwin, 2009). Both imports and exports have fallen unexpectedly by more than 30%, or four times more than GDP (Freund, 2009). A surprising fact in these times of economic turmoil was that trade in services barely responded to the crisis. The most important service sectors continued to grow and only the transport sector recorded negative values, as evidenced by Borchert and Mattoo (2010) and Francois and Woerz (2009). While a great deal of research has sought to understand the causes of the "major trade collapse" (Baldwin, 2009) for the commodity trade (such as, for example, Bernard et al., 2009; Amiti and Weinstein, 2011; Lacovone and Zavacka, 2009; Behrens et al., 2013 ; Bricongne et al., 2012; Eaton et al., 2011), the resilience to the crisis in the trade in services is an under-researched area. Borchert and Mattoo (2010) were the first to prove, using US data on trade in services, that trade in services did not decline during the 2008-2009 crisis because their demand is less cyclical and less reliant on external capital. Similar conclusions were drawn by Fan (2013) on the example of China. Countries in Western Europe, the US, China, India, Japan and Singapore accounted for over 53% of exports of services in 2017.

3. DEVELOPMENT OF TRADE IN SERVICES IN THE EUROPEAN UNION

In the European Union, following the adoption of the Services Directive in 2006 by the European Parliament and the Council, a much-needed modernization happened in various service sectors. Member States of the European Union have adopted more than a thousand measures to remove barriers to businesses and professionals in providing their services. However, in cross-border business, companies and professionals still face many difficulties. The problems are differences and sometimes inconsistencies in the regulations governing the service sectors and the activities of certain service sectors in the European Union, unnecessary regulatory barriers to service provision, and a lack of clarity and predictability in certain key service sectors for those who wish to provide services in other EU Member States. The Services Directive also prohibits a number of regulations and requires Member States to assess whether other regulations are justified and proportionate. The Professional Qualifications Directive (2013) seeks to facilitate the mobility of professionals across the European Union, provide a legislative framework for facilitating the mutual recognition of professional qualifications and regulate the process of evaluating regulated activities at national level between Member States and the Commission. Based on the International Trade Center data, it can be concluded that the European Union is the world's largest exporter of services, with an average annual growth rate of 3.6% in the period 2004-2017. It is followed by the USA, China, Japan, India and Singapore. The United Kingdom is the largest exporter of services in the observed period 2004-2017 (€ 1,749.1 billion), followed by Germany (€ 1,502.6 billion), France (€ 1,138.4 billion), Spain (€ 814.6 million) and the Netherlands (€ 761 million), while the lowest exports of services were recorded in Latvia (€ 23.4 million), Malta (€ 23.9 million) and Lithuania (€ 27.5 million). During this period, the Republic of Croatia achieved EUR 78.7 million in exports of services, which is higher than the exports of services from Bulgaria, Cyprus, Romania, Slovakia,

Slovenia, Estonia, Latvia and Lithuania, that is, to the new EU12¹ member states. On average, EU28 Member States recorded EUR 393.6 million in exports over the observed period, old EU15 Member States EUR 658.0 million, and new EU13 Member States EUR 63.2 million in exports. Importantly, since 2009, exports of services have increased in all EU Member States as well as in the Republic of Croatia. Considering the share of exports of services of EU Member States in GDP, it can be concluded that the largest share of exports of services in GDP is realized in Luxembourg (184.6% in 2017), and the smallest share in Italy (5.7% in 2017). The share of exports of services of the Republic of Croatia in GDP in 2017 is 27.3%, which means it is at the level of the shares of Estonia (25.6%) and Belgium (24.3%), and higher than the average share of the new EU12 Member States (12.5%). The average share of exports of services in the GDP of EU28 member states is 13.6% and of the EU15 (old Member States) 12.9%. In almost all countries shown, since the beginning of the observed period, the share of services exports in GDP has increased, including in the years most affected by the global economic crisis (2008 and 2009). Concerning trade in services of the Republic of Croatia, Wertheimer-Baletić (1999) and Akrap (1996) state in their research that the service sector in the Republic of Croatia grew in the time of socialism and became a leading sector in the three-sector division. Matković (2003) conducted a thorough analysis of changes in the structure of employment in the Republic of Croatia and noted a decrease in employment in the primary and secondary sectors and growth in the service sector. Jovančević (1997) proved on the example of highly developed countries that the service sector accounts for between 50% and 74% of gross domestic product in 1995, compared with shares of 44% to 68% in 1985. Analyzing the increase in the share of services in the world's economy, Jovančević points out that even after World War II, the dynamic development of the world economies shows that with economic development, the dominant sector becomes the service sector, both in terms of employment and contribution to the GDP. The author advocates that the service potentials need to be better and more fully utilized, which, in her opinion, is a condition for a more dynamic development of the Croatian economy. According to the data of the Croatian National Bank, the balance of trade in services of the Republic of Croatia has been in surplus since the mid-1970s (the total volume of exported services exceeds the total volume of imported services), while, on the other hand, the balance of trade in goods has been in deficit continuously since 1989 (with the exception of the war years, from 1991 to 1994). Consequently, rising services exchange revenues are financing the trade balance deficit. Another indicator pointing to the importance of services in the Croatian economy is the value of Croatia's export of services (according to the Croatian National Bank, EUR 13.4 billion in 2017 and EUR 14.5 billion in 2018). In 2018, exports of services accounted for 54.2% of total exports of the Republic of Croatia. Nevertheless, exports of services are not treated as drivers of growth and development. Following the accession of the Republic of Croatia to the European Union, there is still a greater increase in imports of goods than the exports of goods, while, on the other hand, imports of services fall until 2014, after which they begin to grow and exports of services increase throughout the observed period. It is important to point out that, according to International Trade Center data, in 2012, the Republic of Croatia ranked 18th (EUR 6.5 billion) in foreign trade in services, in 2014 it ranked 20th (EUR 7.3 billion) and in 2017 it ranked 18th (EUR 9.3 billion) compared to other countries in the world. In addition to the growth of services exports, there is also an increase in goods exports, which, following Croatia's accession to the European Union, is dynamic, encompasses an increasing range of products and is mainly focused on the EU market (Buturac, Mikulić and Palić, 2019). Due to the economic recovery of Croatia's most important export markets and the growth of export orientation of the domestic economy after

¹ The new EU member states are transition countries that became full EU member states in May 2004: Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia and Slovenia. The new EU member states also include Bulgaria and Romania, which joined the EU in January 2007.

the fall of export of goods in 2009, in the period from 2010 to 2018, export of goods is growing again. However, despite these positive trends in recent years, Croatia's export structure is technologically lagging behind the leading new EU Member States.

4. PROBLEMS OF STATISTICAL MONITORING AND RECORDING OF SERVICES AT THE INTERNATIONAL LEVEL

The General Agreement on Trade in Services (GATS), represents the first step and attempt to systematize international trade in services into a multilateral framework of rules and guidelines for market access. The actual share of services and their importance in the economy are far greater than those shown in official statistics. It can be argued freely that the level of accuracy of statistics accompanying services worldwide is lower than the level of accuracy of statistics achieved for the material products sector, since many services cannot be easily classified and systematized. The Croatian Bureau of Statistics determines the methodology for statistical application of the National Classification of Activities 2007 – (fr. nomenclature statistique des activités économiques dans la Communauté européenne - NACE; hrv. Nacionalna klasifikacija djelatnosti 2007 - NKD 2007). The NKD was produced at the end of 1994 based on the statistical classification of the economic activities of the European Union which ensures comparability of statistical data of the Republic of Croatia at European and world level. As a result of a major revision, a new NACE Rev. 2 classification was created, which entered into force on 19 January 2007 and became applicable from 1 January 2008 in all Member States of the European Union. Accordingly, the Croatian Bureau of Statistics has produced a new version of the NACE called the National Classification of Activities 2007 – NKD 2007, which is fully and structurally consistent with the NACE Rev. 2 classification, which ensures quality international comparability of statistics. Service activities range from code F to code S of NKD 2007. In addition to the previously explained classification of services, there are several other applicable ways to classify and scope services. The World Trade Organization (WTO), the United Nations Conference on Trade and Development (UNCTAD), as well as the Organization for Economic Cooperation and Development (OECD) have their classifications. The WTO includes a large group of indivisible and heterogeneous products and activities in the trade in services, such as: transportation, telecommunications, information and communication services, construction, financial services, insurance, hospitality, health and education, management, tourism, recreation and sports (WTO, 2016). The OECD includes the following services in the service sector: trade and catering, transportation, finance and insurance, business services, social and personal, government services (OECD, 2010). The heterogeneity of services is due to the involvement of the human factor, and depends on who, when and where provides and uses it. With the increase in the level of intensity of service, the heterogeneity of the service becomes more prominent. The main source of data on trade in services is the Balance of Payments (BOP), which is a systematic list of the value of economic transactions of residents of a country with the abroad. With the entry into force of GATS, interest in detailed, relevant and internationally comparable statistics on trade in services has increased. In 2002, the United Nations Statistical Commission (UNSC) adopted the first manual on statistics on international trade in services called Manual on Statistic of International Trade in Services (MSITS), which was revised in 2010 (MSITS 2010). Based on internationally agreed standards, MSITS provides guidance and recommendations on how to use and develop sources for measuring international trade in services. MSITS establishes two foundations:

1. Balance of Payments Statistics - aligned with the sixth edition of the International Monetary Fund (IMF) Balance of Payments Manual (BPM6) and contains concise data on country-to-world transactions, as part of the current account balance. BPM6 balance of payments statistics provide an overview of trade in services between residents and non-residents (within the current account balance).

Furthermore, while balance of payments statistics does not allow comprehensive measurement of services provided through GATS's third service delivery modality (provider performs services directly in another Member State - market presence), it supports the measurement of additional indicators, for example, FDI statistics may be helpful under the third modality of service delivery.

2. MSITS 2010 extends the statistical definition of international trade in services by providing recommendations for measuring the services provided by foreign affiliates, as part of a new framework of Foreign Affiliates Trade Statistics (FATS), which foresees the composition of a set of indicators to describe the operations of foreign affiliates (turnover, exports and imports, employment, number of companies, etc.), with a particular but not exclusive focus on services. In contrast to the BPM6 classification, EBOPS 2010 (Extended Balance of Payments Services) primarily provides product classification. There are 12 main service categories identified in the BMP6 classification, while EBOPS 2010 consists of a more detailed view of these categories, by sub-clauses. One of the main recommendations of MSITS 2010 is that countries collect statistics on international trade in services by partner country, at least at the level of total trade in services and the 12 main categories of BMP6 classification of services, and as a long-term goal at an even more detailed level, in accordance with the EBOPS 2010 classification. Countries are encouraged to collect these statistics from at least their main partner countries.

Prior to 1995, with the exception of travel and transport services, services within the balance of payments statistics were grouped together under the category "other goods, services and revenues". In recent years, the quality and quantity of statistical monitoring of international trade in services has been significantly improved. Due to its detailed presentation in the BPM6 methodology, there is now a set of statistics for main service sectors for a number of countries. For example, in most main service sectors according to the BPM6 methodology, the number of countries involved has more than doubled since 1997 and in some cases even more than tripled. Eurostat has issued two regulations, requiring EU Member States to provide more detailed information on trade in services, using the MSITS² classification as a benchmark. One of these regulations, adopted in June 2004, is the Extended Balance of Payments Services classification - EBOPS, and it covers balance of payments statistics - trade in services and FDI. The EBOPS classification thus becomes mandatory for the Member States of the European Union. The other regulation is Foreign Affiliates Trade Statistics - FATS, adopted in June 2007 and is also mandatory for EU Member States. FATS statistically measures the commercial presence of foreign service providers through their branches in foreign markets and is thus closely linked to foreign direct investment statistics, which is covered by GATS's third service delivery modality. FATS supplements the balance of payments, since it provides information only on transactions between residents and non-residents. As can be seen from Table 1, Eurostat, OECD, IMF, UNCTAD and the UN are currently collecting and disseminating balance of payments data by type of service for their Member States (Eurostat is also responsible for information on EU candidate countries).

Table following on the next page

² MSITS classification is approved by the UN Statistical Commission and consistent with international standards for trade in services. More specifically, it is compatible with the following classifications: System of National Accounts, 2008 (2008 SNA), ISIC, Rev. 4. and CPC, Version 2.

Table 1: Summary of Balance of Payments for Trade in Services, according to International Organizations (the authors)

Publication	Country coverage	Classification by type of service	Classification by partner country
Balance of Payments Statistics Database (book and CD) – available on ITCs Trade Map	IMF member countries	BPM5 and EBOPS classifications	No
Eurostat Database (online and CD)	EU Member States, total EU, euro area, EU candidate countries	EBOPS classification	Yes, more than 200 partner countries.
OECD Statistics on International Trade in Services Volume 1 Detailed Tables by Service Category and Volume 2 Detailed Tables by Partner Country (book, online and CD)	OECD member countries, Hong Kong, China and Russia	EBOPS classification	Yes, more than 200 partner countries.
UNCTAD Handbook of Statistics (book, online and DVD)	Approximately 200 countries.	BPM5 main items classification	No
UN Service Trade database (online)	Approximately 200 countries.	EBOPS classification	Yes, more than 200 partner countries.
WTO's International Trade Statistics (book, online and CD)	All countries, regions and total for the world	Summary data and analysis	Summary data and analysis

Parallel to the trade in services in the balance of payment, FATS is still at an early stage of development. However, their collection and dissemination is of increasing importance to Eurostat, the OECD and UNCTAD, driven by the growth of national activity in the area. In case some countries still do not collect FATS, FDI statistics can be a useful indicator of commercial presence.

5. CONCLUSION

As services are becoming increasingly important in the final product and in manufacturing companies, today they play a dominant role in the economies of many countries, making them the basis for gaining and maintaining competitive advantage. In addition, an efficient service sector is considered crucial for trade and economic growth. Trade in services is the fastest growing component of international exchange in the last twenty years, with an average annual growth rate of more than 10%. The growth of world exports of services was achieved for several reasons: growth of income of the world population, pronounced growth of foreign direct investment in services, liberalization of international trade in services, technical progress, privatization process, unification of international trade law, convertibility of more currencies and an increase in the number of countries in the world. Considering the importance of the service sector for developed economies, it is not surprising that the liberalization of trade in services has been one of the key factors in the past and in the trade negotiations of today. In conclusion, it should be pointed out that the real share of services and their importance in the economy is far greater than that shown in official statistics. Therefore, international and regional organizations work together to coordinate data collection, improve data consistency, avoid duplication of effort, and reduce countries' reporting burden.

Continuous growth of employment in service companies, decline in industrial production, strengthening of international competition, technological progress, as well as numerous and continuous economic changes indicate the intensive development and growth of service industries in the future, which is why it is expected that considerable attention will need to be paid to monitoring and recording issues and the development of generally accepted reliable approaches and instruments.

LITERATURE:

1. Akrap, A. (1996) *Determinante regionalnih promjena ekonomski aktivnog stanovništva Republike Hrvatske* (doctoral dissertation). Zagreb: Faculty of economics and business.
2. Amiti, M. i Weinstein, D. E. (2011) Exports and Financial Shocks, *Quarterly Journal of Economics*, 126 (4), p. 1841-1877.
3. Baldwin, R. (2009) *The Great Trade Collapse: Causes, Consequences and Prospects*. London: CEPR.
4. Behrens, K. i suradnici (2013) Trade crisis? What trade crisis?, *Review of economics and statistics*, 95 (2), p. 702-709.
5. Bell, D. (1999) *The axial age of technology foreword: the coming of the postindustrial society*. Basil Book: New York.
6. Bernard, A. B. i suradnici (2009) The Margins of US Trade, *American Economic Review*, 99 (2), p. 487-493.
7. Borchert, I. i Mattoo, A. (2010) The crisis-resilience of services trade, *The Service Industries Journal*, 30 (13), p. 2115-2136.
8. Bricongne, J. C. i suradnici (2012) Firms and the global crisis: French exports in the turmoil, *Journal of international Economics*, 87 (1), p. 134-146.
9. Buturac, G., Mikulić, D., Palić, P. (2019) Sources of export growth and development of manufacturing industry: empirical evidence from Croatia, *Ekonomika istraživanja*, 32 (1), p. 101-127.
10. Castells, M. (2000) *Uspon umreženog društva*. Zagreb: Golden marketing.
11. Cowell, D. W. (1984) *The Marketing of Services*. London: Heinemann.
12. Direktiva o stručnim kvalifikacijama (2013) *Direktiva 2013/55/EU Europskog parlamenta i Vijeća od 20. studenoga 2013. o izmjeni Direktive 2005/36/EZ o priznavanju stručnih kvalifikacija*.
13. Državni zavod za statistiku (2007) *Nacionalna klasifikacija djelatnosti 2007. – NKD 2007*. Retrieved 10.08.2019 from http://www.dzs.hr/Hrv/important/Nomen/NKD_2007/NKD%202007_struktura%20s%20o_bjasnjenjima.pdf.
14. Eaton, J. i suradnici (2011) *Trade and the global recession* (No. w16666). National Bureau of Economic Research.
15. Eurostat (2019) *International trade in services*. Retrieved 08.08.2019 from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_trade_in_services.
16. Fan, Y. (2013) The Global Financial Crisis and China's Trade in Services: Impacts and Trade Policy Responses, *China's Trade, Exchange Rate and Industrial Policy Structure*, 2, p. 171.
17. Francois, J. i Woerz, J. (2009) 10. Follow the bouncing ball—trade and the great recession redux. U: Baldwin, R., ur., *The great trade collapse: Causes, consequences and prospects*. London: CPER.
18. Freund, C. (2009) The Trade Response to Global Downturns: Historical Evidence, *World Bank Policy Research Working Paper Series 5015*.

19. Hrvatska narodna banka (2019) *Razmjena usluga s inozemstvom*. Zagreb: Hrvatska narodna banka.
20. International Trade Center (2018) *List of exports for the services*. Retrieved 11.08.2019 from http://www.trademap.org/Country_SelService_TS.aspx.
21. Jovančević, R. (1997) Porast značenja usluga u svjetskom gospodarstvu, *Tourism and hospitality management*, 3 (1), p. 53-66.
22. Kotler, P., Armstrong, G. i Brown, L. G. (1991) *Principles of Marketing: Company Case & Video Commentaries*. Prentice-Hall International Editions, Englewood Cliffs.
23. Lacovone, L. i Zavacka, V. (2009) Banking crises and exports: Lessons from the past, *World Bank Policy Research Working Paper Series*, 5016.
24. Matković, T. (2003) Restrukturiranje rada? Transformacija strukture zaposlenosti, *Revija za socijalnu politiku*, 10 (2), p. 161-184.
25. OECD (2010) *Manual on statistic of international trade in services 2010, (MSITS 2010)*. United Nations: Department of Economic and Social Affairs.
26. Payne, A. (1993) The Essence in the Services Marketing, *Prentice Hall International* (UK) Ltd., p. 2-6.
27. United Nations Conference on Trade and Development (2018) *Goods and Services: Exports and Imports of Goods and Services, annual*. Retrieved 15.08.2019 from <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=89795>.
28. United Nations Conference on Trade and Development (2015) *Goods and Services: Exports and Imports of Goods and Services, annual*. Retrieved 15.08.2019 from <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=25116>.
29. Wertheimer-Baletić, A. (1999) *Stanovništvo i razvoj*. Zagreb: MATE.
30. World Trade Organization (2016) *Services trade*. Retrieved 12.08.2019 from https://www.wto.org/english/tratop_e/serv_e/serv_e.htm.

A DIGITAL PLATFORM TO ENHANCE PUBLIC MANAGEMENT BY DELIVERING FINANCIAL AWARENESS TO LOCAL COMMUNITIES: THE TACLARO PROJECT

Amelia Ferreira da Silva

*CEOS.PP, Polytechnic of Porto/ISCAP, Portugal
acfs@iscap.ipp.pt*

Sandrina Teixeira

*CEOS.PP, Polytechnic of Porto/ISCAP, Portugal
sandrina@iscap.ipp.pt*

Maria Jose Angelico Goncalves

*CEOS.PP, Polytechnic of Porto/ISCAP, Portugal
mjose@iscap.ipp.pt*

Telma Maia

*Valongo Council, Portugal
telma.maia@cm-valongo.pt*

Humberto Ribeiro

*GOVCOPP, ESTGA, University of Aveiro, Portugal
hnr@ua.pt*

ABSTRACT

The digital transformation offers a wide range of opportunities for political representatives to reshape the way they interact with the public. Local governments have shown great creativity in the way they use information and communication technologies (ICT) to communicate with local citizens. This paper presents a project under development in a Portuguese municipality, called TAClaro. This project aims to decode and “untangle” the financial information that Portuguese municipalities provide to their citizens, making it intelligible and accessible to all, regardless of their degree of financial literacy. It is an action research-based project. It created, tested and validated a concept of proof, in an iterative process that is described in detail in this paper. This project improves the concept of accountability and demonstrates the potential of ICT as an instrument for training and dissemination of financial information to lay on citizens.
Keywords: *Accountability, Financial Literacy, Citizens, Municipalities, Research-action methodology, Information and Communication Technologies (ICT)*

1. INTRODUCTION

This work presents a project whose objectives are: (i) To promote transparency in Local Public Administration: (ii) To inform citizens about municipal management (iii) To promote community participation in Local Public Administration: (iv) To increase financial literacy. This project is based on the assumption that in general, the citizen is willing to “listen”, i.e. is available to be informed and to ask for clarification on issues of public interest. But it is also based on the idea that the citizen will only be able to hear the messages communicated to him in accessible language. Now much of the process of accountability of municipalities to the community is described through economic and financial terminology that is unintelligible to laypersons. Ordinary citizens find it difficult to understand the messages addressed to them and end up losing interest. This project seeks to counteract this reality by creating simplified structure content on complex topics. i.e. decoding the information.

From the very beginning, the multidisciplinary nature of the project was perceived by the parties involved and, consequently, a multidisciplinary team with different skills and knowledge was created from the outset, which was responsible for designing and implementing a project that would achieve the set objectives. In this work we will present the project according to the following structure:

- Justification of the conceptual framework adopted.
- Justification of the choice of action research methodology.
- Presentation of the first phase of the project, already completed.
- Discussion of the work plan of the second phase of the project still in progress.
- Presentation of the final considerations.

2. CONCEPTUAL STRUCTURE OF THE PROJECT

Before moving on to the fieldwork the Researchers Team (El) started on defining the conceptual framework that would be applied in the development of the project. Since it was a project where multidisciplinary knowledge crossed, it was necessary to define the field of interaction of this knowledge. The concepts of accountability and transparency go far beyond economic and financial accountability. In fact, accountability is a plural concept that can have different meanings depending on the actors, context and purposes. As stated by Mulgan (2000, p.555), the scope and meaning of accountability have been broadened in several directions well beyond its initial core calling someone to explain its actions. The term has become a kind of fashion in public discourse and therefore defining accountability is “complex and contradictory” (Menezes, 2015). According to Schedler (1999, p. 14) the concept of accountability has two basic dimensions: on the one hand we have the dimension of responsibility, which consists of the obligation of public representatives to inform and explain what they are doing and, on the other hand, supervision, which consists on the capacity of control agents to audit and impose sanctions on public representatives who have violated their obligations. This perspective contrasts with other more diffuse, open, abstract and broad definitions of accountability, which, according to Bovens (2007), are abundant in academic literature. This author considers that in, the context of public administration, the concept of accountability refers to a “social relationship” in which a public representative has the obligation to explain and justify his conduct to the citizen. Tasan-Kok et al (2010) represent this relationship through figure 2 presented below.

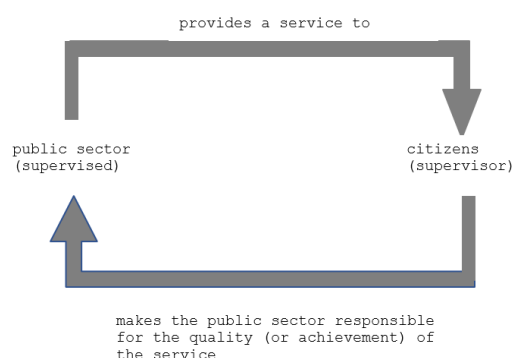


Figure 1: Relationship between the public sector and citizens (Adapted from Tasan-Kok et al, 2019, p.2)

An important aspect of this relationship is the assumption of a proactive, interested and informed citizen. In fact, democratic accountability has its origin deeply linked to history and is based on the basic principle that ultimately, power belongs to the people.

However, while the essence of accountability is firmly based on the principles of democracy, the details of what is needed to demonstrate accountability have evolved and continue to evolve as the nature and scope of government and the needs of people change. Nowadays, in democratic societies, accountability is a fundamental pillar of the relationship between political power and the citizen. Across the globe, there are evidences that modern societies with mature democracies develop political socio-cultural and economic-financial environments that promote and facilitate accountability. However, without intelligible information the citizens are prevented from actively participating in this relationship. In this context, the way in which the public authorities communicate with the citizen is decisive in the formation of public opinion and in the citizen's involvement with public issues of general interest. Therefore, it is important to distinguish communication of public interest from communication that is driven by commercial and market interests (Koçouski, 2012; Kunsch, 2012). Public communication is a concept under construction (Brandão, 2007) that should involve the citizen and encourage his participation through a flow of communications between the state and society. Public communication can also be seen as a process in social relations, as the sharing of information can influence ways of thinking, acting and feeling, leading to a collective consciousness, which can be translated into actions of participation and citizenship. On the other hand, the information and communication technologies (ICT) explosion has allowed a rapid and global diffusion of ideas and practices in the public sector, allowing the public to demand higher standards of ethics, transparency and accountability. These prerequisites for good governance and sustainable development not only contribute to a better response by public bodies, but also play a crucial role in preventing the emergence of systemic corruption (Chadwick and May, 2003). In the digital age, the uniqueness of public communication has at its disposal new means to provide content and produce communication. According to Kunsch (2011), ICTs emerged and developed to foster communication, relationship and participation of citizens in issues of collective interest, which has contributed to the change of citizen's behaviours in the face of charging for the services provided by public institutions, as well as the stimulation of public transparency. In fact, the evolution of information technologies has allowed and favoured the creation of more and better communication channels through which political power can be "accountable" to the citizen. But whatever channel or tools are used, it is crucial that the citizen is involved, otherwise the tools would be merely technocratic and would not really benefit the citizen (Arnold and Garcia, 2011). Since this is a two-way relationship, in order for the culture of accountability to become effective, it is important not only that politicians assume this responsibility, but also that citizens react stimulate and demand this accountability. Hence the importance of capturing their perspective on the accountability processes in which the citizen is an active part. Figure 3 presents the concept of accountability as the crossroads of the various knowledge involved in TACIaro and identifies the contextual forces that interfere in the operationalization of the concept.

Figure following on the next page

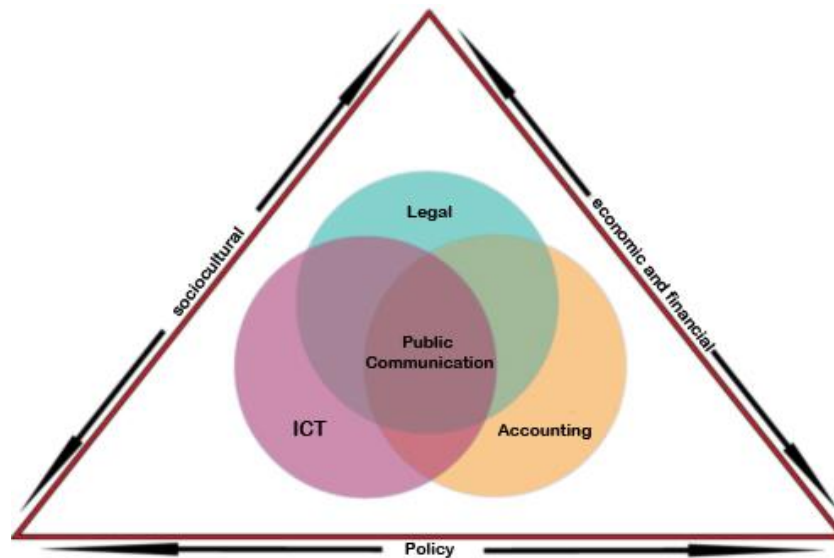


Figure 2: Conceptual scheme of TAClaro project

The proposed scheme fits accountability practices into a dynamic communication flow between political power and the citizen. This communication process is generally conditioned by the political-legal, socio-cultural and economic-financial context. Together and interactively, these dimensions will dictate “what to communicate”, “why to communicate” and “how to communicate”. Citizenship has two complementary dimensions: while citizenship presupposes a status that embodies a set of rights, on the other hand, citizenship presupposes a behavioural attitude that is embodied in the involvement and political participation of citizens in public life. Modern societies have already relatively stabilised and ensured the first dimension, i.e. citizens' rights are already widely recognised. However, only in the most developed societies do we find a regular and consistent expression of the effective practice of this citizenship. For example, the right to vote is recognised in all democratic societies but the exercise of this right remains a challenge in many modern societies. Although there are no studies to relate, on a causal basis, the development of societies with citizenship practices, there is nevertheless strong evidence of the association between these variables. With this in mind, both international bodies and national entities have made a great effort to promote good accountability practices in public administration. The use of information and communication technologies in Public Administration is a key element for the development of closer ties with citizens and socio-economic actors. In the fields of e-government and transparency, ICT has been widely used to provide services, communication, information and records. However, the construction of citizenship depends on the real and effective involvement of citizens in the process of government and accountability of management. And, in this field, ICT is still poorly used. Currently, local public bodies already offer a wide range of online services, as well as a wide range of information on the cultural, social, economic and political life of the municipality. With regard to information on how, where and with what results public resource have been applied, the information currently made available is essentially technical and highly inaccessible to ordinary citizens. This linguistic closure of accountability runs counter to the concept of accountability. It is therefore incomprehensible that a society that invests so many resources in the production of information and accountability mechanism on the management of public resources should invest so little in getting this information to the citizens in a way that is intelligible to them. There is now a set of tools and resources, in particular in the field of ICT and creativity that can be used to empower citizens and consequently involve them in the management of public resources.

3. METHODOLOGY - OBJECTIVES AND EXPECTED RESULTS

Date	Subject	Participants	Place and Duration
24. Feb. 2015	Discussion on the scope of the project and the skills required	Presidency of ISCAP 2 Vice-President of ISCAP President of CMV Alderman of CMV IC - Researcher in Accounting I MC - Researcher in Marketing and Communication	ISCAP; 4hours
12. Mar. 2015	Definition of the Research Team	IC - Researcher in Accounting IMC - Researcher in Marketing and Communication ISI-Researcher in SI	ISCAP; 3hours
13. May. 2015	Interdisciplinary approach of the project. Definition of functions by scientific area. Proposal decision for financing the project.	President of CMV CMV Accountant 3 representatives of CMV's IT consulting company IC - Researcher in Accounting IMC - Researcher in Marketing and Communication	ISCAP; 4 hours
27. May. 2015	Presentation and discussion of a first project proposal proposed by the research team. It was defined that only audited data would be used and that the integration of the information systems would be for the second phase of the project Definition of the working process and responsibilities of each party.	Research Team (IC; IMC; ISI) CMV Accountant 2 representatives of CMV's IT consulting company	CMV; 2hours
21. Sep. 2015	Contacting of the project in terms of schedule and financing of expenses. Brainstorming for design designation definition and acronym	President of ISCAP President of CMV Research team (IC; IMC; ISI) CMV Accountant	ISCAP; 2 hours

Table 1: Meetings required in preliminary phase of the project

In February 2015 ISCAP, a business school of the Polytechnic do Porto, was challenged by the Mayor of Valongo to develop a project on financial transparency, applied to the municipality of Valongo. The first two meetings were attended, in addition to the institutional leaders, by a researcher in the area of accounting (IC) and a researcher in the area of marketing and communication (IMC). However, after an open discussion about the purpose of the project and the eventual differentiating factors in relation to other similar initiatives, it was clearly perceived that the scope of the project required the collaboration of a researcher in the area of reformation systems, besides the involvement of professionals with experience in these same areas - accounting. Information systems, design and communication – who, simultaneously knew the institutional reality in which the project would be applied. The multiplicity of profiles, competences and areas of knowledge were assumed, from the outset as a necessary condition, although not sufficient, for the achievement of the project's objectives. This entire process took about six months, as shown in Table 1 which describes the meetings required in this preliminary phase of the project. It took two meetings to define the working team and two others to clarify the role of the various actors and the working processes. Finally, a meeting was held with the entire research team and the heads of both institutions to contract the first phase of the project, namely in terms of schedule and financing of expenses. At this meeting, a brainstorming was carried out around the project's key ideas in order to define its acronym which resulted in the

designation of TACIaro – Transparency, Accountability and Communication in Local Authorities. On the CMV side, there was a certain focus on a communication instrument that would pass on to the local citizen values of transparency and responsibility on the part of the executive. However, on the part of the researchers, the claim went a little further. It would not be enough simply to create an effective communication tool, with a specific message, in a specific context. The researchers intended to create a more structural accountability model, based on the crossing of multidisciplinary scientific knowledge, and test the effectiveness of the model in responding to a specific problem of today's society - active local citizenship. Thus, the initial project riled to the area of financial transparency, gave way to a larger project with a triple objective:

- develop and implement a citizen-centred accountability model
- To create didactic digital contents that involve the citizen in local management
- testing the effectiveness of the model in terms of citizen involvement with local government

TACIaro is not a neutral project, on the contrary, it is a project that intentionally seeks to induce behaviours of greater citizen involvement with their local community and promote a culture of greater democratic awareness and greater political maturity. In this context, the interventionist approach, in particular the action research methodology, appeared to be the most appropriate. For, if on the one hand it was intended the application of theoretical knowledge and concepts the identification and resolution of practical problems, on the other hand, it was intended the definition and implementation of an action plan that would change behaviours. In addition, since this is a long-term project that seeks structural behaviour changes, there was a need to test the effectiveness of the implemented solutions at each moment thus feeding the process of creation and extension of knowledge and its new application and test as shown in the figure below.

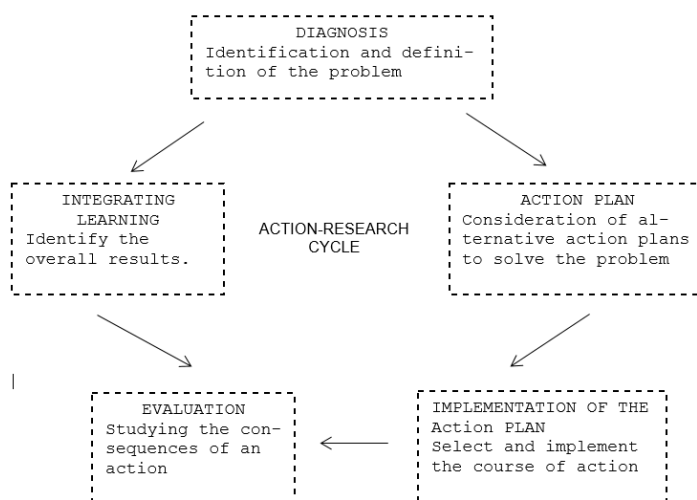


Figure 3: Action-research cycle (adapted from Susman and Evered, 1978)

According to Burnes (2004), Kurt Leavitt is considered the intellectual father of applied behavioural science, action research and planned change in organizations and society, particularly with the work developed in the 1940s in the field of psychology and sociology. As for Bargal and Bar (1992, p. 14), this approach assumes:

- A recursive data collection process to determine objectives, actions to implement targets and evaluation of action:
- Feedback of research results to researchers:

- Cooperation between researchers and professionals:
- Research based on the laws of the social life of the group and the principles of group decision-making:
- Consideration of the values, objectives and power structures of change agents and the "client":
- Use of research to create knowledge and/or solve problems.

Action research differs from consultancy in terms of methodological procedures, but also, and above all, because all research is based on a conceptual structure that guides the resolution of a problem and is enriched with the results obtained (Gummesson, 2000.)

3.1. First phase of the project

After defining the conceptual framework of the project, and in line with the action research methodology, it was defined by the Research Team that the first phase of the project would have the following objectives:

- Define the most appropriate instruments to stimulate the involvement of local citizens with municipal management
- Define the most didactic and interesting contents to stimulate the involvement of local citizens with municipal management
- Develop the prototype of a digital platform in order to be able to provide proof of concept and generate knowledge to be integrated in the development of the second phase of the project

Considering the social, cultural and political environment of the project the choice of digital communication tools was already a priority. Indeed, in Portugal, the Municipalities and Parish Councils are responsible for the administration of the e-government site, sharing a set of services that manage the territory and its needs and the relationship with the communities that live there. The need to establish a relationship of proximity between information and the citizen is now widely recognized, and the local authority is responsible for developing this effort. Technology thus plays an important role. On the one hand, local e-government allows for an increase in the effectiveness and efficiency of local authorities operations, allowing greater integration and internal enhancement of the information and local knowledge that it generates and aggregates, and on the other hand, it manages the costs associated with its operation, response times and productivity increases. In this context local e-government is responsible not only for ensuring the availability and dissemination of information, but also for promoting greater transparency both in political decision-making and in its operations. However, in society there are still inequalities in the ability of citizens to exercise citizenship to the full. One of the biggest challenges of local public administration is to mitigate these inequalities by promoting local e-government solutions accessible to all citizens, thus making society more inclusive irrespective of level of education, age or standard of living. Currently the economic and financial information provided by the local Public Administration is very technical, which makes it difficult to read and, consequently, the ability of citizens to assess and hold accountable (politically) the public agents involved. Thus, the individual has to acquire skills that enable them to use technology (know how to do) and process information (know how to recognise and classify) and identify critical information (know how to choose and select). Seeking to respond to this challenge, in the first phase of the project, a digital platform was created where digital content was hosted that decodes the economic and financial language and encourages local citizens to find out "Where their taxes are going and what result have been achieved". The development process of the first phase of the project is represented in figure 4.

In order to gain inspiration to differentiate the project the Team began by identifying projects with a similar purpose. Two initiatives have been identified at this stage:

- Torrelodones. A de. (n.d.). How and on what does the City Council of Torrelodones spend?
- @TABridge (2017). Using Technology in Transparency and Accountability Organisations.

These initiatives generally have the same objective as TACIaro. but follow a more technical approach. Only a citizen with a good level of digital skills and with above-average financial expertise are able to collect and interpret the information available on these platforms. This has reinforced the idea that the differentiation of the TACIaro is to a large extent linked to the following factors:

- Less information and more selective information:
- More creative and attractive content
- Use of language resources that are simpler and closer to the citizen:
- Involvement of citizens in the development of content.

Between 15 and 19 June 2015, the Researchers participated as observers in the public debate sessions on the accounts of the Municipality organised in the form of a transparency Week. The sessions took place in the 4 parishes of the municipality of Valongo, with an average duration of 3 hours. During the sessions, informal records were made, in paper and digital format, of perceptions, behaviours and interests of the citizens. At the same time, a survey was applied to the participants, which sought to identify the motivations of the citizens to participate in this type of municipal accountability initiatives. Over the course of approximately 4 months, between September and December 2015 unstructured interviews were conducted with people internal to the organization namely the Chairman of the CMV, Councillor, Chief Financial Officer, and external experts, namely Researchers from the Public Accounting area. At the same time, around 8 working meetings were held with the IT Technicians, with the CMV Financial Services and with the Company that manages the information system. Throughout this period, numerous documentary sources were consulted, namely: Balance Sheet, Profit and Loss Accountancy: Budget, Analytical Accounting Plan: Budget Execution Maps: Social Balance Sheet: Subsidies/benefits/Subsidies: Declaration of multiannual commitments: Declaration of payments and receipts in arrears: Legal Certification of accounts: Map of subsidiaries: Maps of current accounts: Treasury operations: Situation of contracts/administrative contracts: Internal control rules: Working Funds: Local Economy Support Plan. The data collected and processed in this exploratory phase made it possible to structure the prototype of the platform and the type of content to be developed. In addition, it has become clear that citizens are essentially concerned about: (i) issues directly affecting them: (ii) public decisions taken by local government (iii) budget execution. This preliminary analysis showed that despite the fact that citizens have a reductive view of the concept of public interest the use of simple and visual language content, designed with clear principles, can contribute to reinforce the interest of the citizen in issues of transparency and accountability of local public administration. In other words, developing a model for effective and transparent communication in local public administration implies a pedagogical approach, based on the following principles: knowing the target audience well: testing assumptions about how to be clear and concise: developing simple language (image and word): testing style, semantics, terminology and semiotics: combining verbal communication with visual communication. Thus, after several working meetings, it was decided that the contents of the TACIaro platform would be framed in four dimensions:

- Budget Management: Presentation of economic and financial concepts on the budget management of the municipality:
- Policy Options: Presentation of the various policy options followed by the municipality

- Know how much it cost the detailed cost of concrete initiatives and services provided to citizens using management accounting:
- CM in figures: the evolution of the economic and financial situation of the municipality and dissemination of operational indicators.

The project was publicly announced in February 2018 as part of a conference on the Accounting Standards System for Public Administration, which was attended by academic and political personalities of national reference, namely Joao Carvalho and Teodora Cardoso, in Matosinhos. In May 2016, the project was presented and discussed at the I International Public Accounting Congress in Setubal (Teixeira et al., 2018). At this stage, a study on the accessibility of the websites of the municipalities of the NUT II and another study on the analysis of the practices of digital dissemination of economic and financial information of Portuguese municipalities was started. Both studies were merely exploratory and aimed to identify the good practices to follow and the bad practices to avoid in terms of accessibility (Angelico et al. 2017; Teixeira et al. 2018) and transparency (Silva et al., 2018). In parallel, during March 2018 and October 2017, textual and infographic content was developed: a library of images and illustrations; cartoons, videos and news. The development of this content required a continuous and very close work between the Researchers and Professionals Team. This was a period of constant dialogue, with progress and setbacks, revisions, testing, collection of opinions and systematic improvement of content. This platform was placed on open access on 23 November 2017, in a public presentation and dissemination session of the TACIaro platform. From November 2017 to September 2018, the project was made public and data were collected to support the testing and validation of the prototype (Silva et al., 2018). Initially, it was crucial to capture the perception of the recipients in four dimensions: accuracy and relevance of the information: understanding, learning capacity and operability, attractiveness of the interface: and navigation. This work was done through the collection of informal opinions as part of the project's dissemination initiatives, namely:

- September 2017: Organisation of the TACIaro stand - Transparency. Responsibility and Communication in Local Public Administration, as part of Expoval 2017. Valongo. Portugal.
- October 2017: Lecture Presentation of the TACIaro Project. European Week of Local Democracy, auditorium of the municipal museum of Valongo. Portugal.
- October 2017: Lecture Presentation of the TACIaro Project, at Expoval. Valongo. Portugal.
- November 2017: Workshop III Short Course on Local Citizenship, with the communication "Promoting transparency of municipal finances", auditorium of the municipal museum of Valongo. Portugal.
- December 2017: Lecture *E-government, Transparency, Accountability and Communication in Local Public Administration. Master in Computer Engineering. University of Vigo. Spain.
- September 2018: 2nd Edition of the Atlantic Business Summit. 2018. ESKA. Valadares. Portugal.
- June 2018: International Management and Business Conference. ISAG. Porto. Portugal.
- September 2018: International meeting with a group of researchers from the University of Corunha, experts in Financial Literacy, A Coruña, Spain.

To complement the information collected in these dissemination sessions, a trial was conducted with the pilot platform next to a convenience sample. In addition, we used an analytical tool to analyse the traffic of visitors to the pilot platform. The results were very favourable. In fact the respondents very positively evaluated the experience they had in consulting the platform. However, this evaluation is conditioned by the sample selection bias.

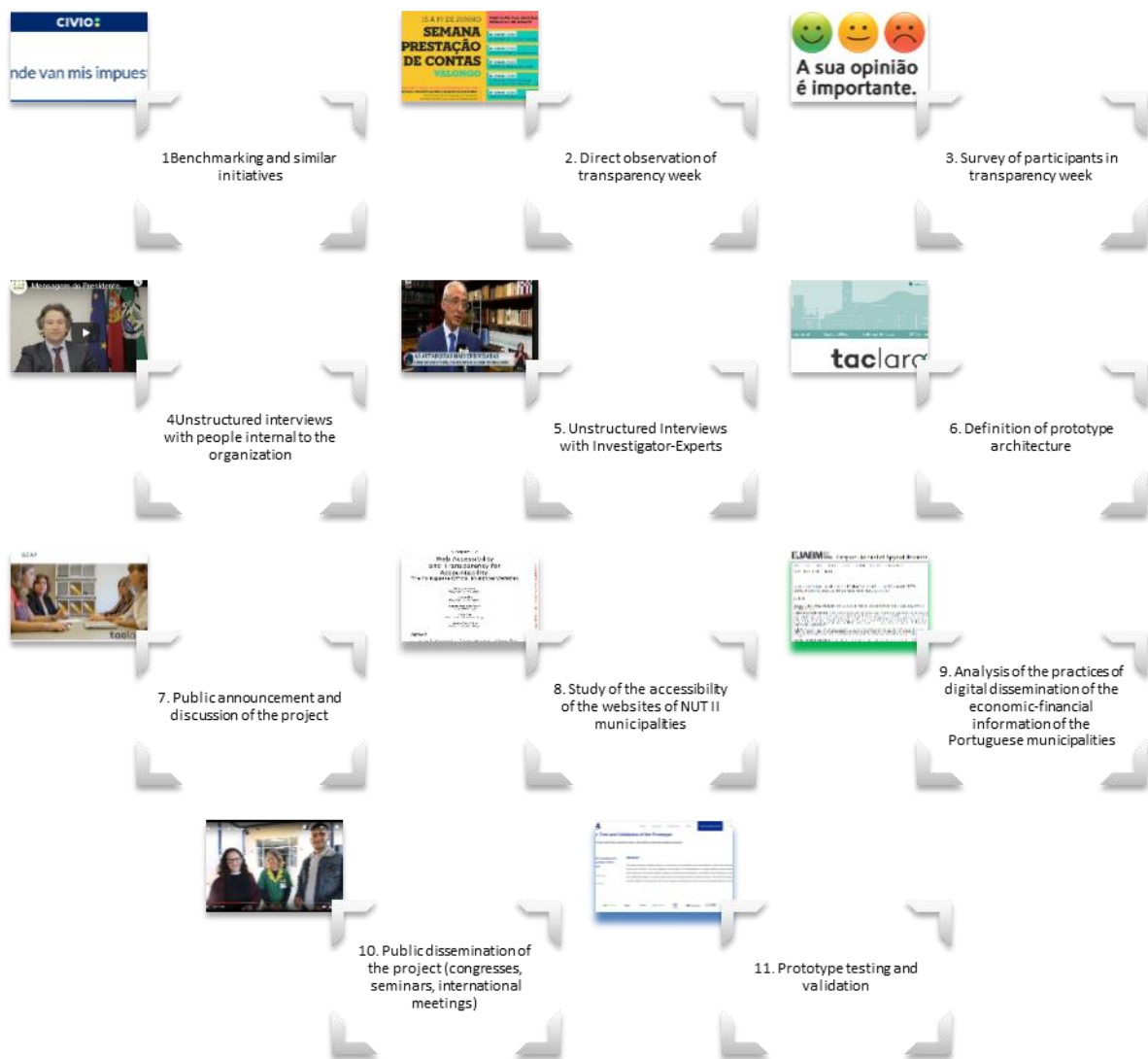


Figure 4: First phase of the TAClaro project

3.2. Second phase of the project

The pilot project consisted of the development of a TAClaro digital platform, in which information is presented in a simplified and creative way. The digital platform was, from the outset, assumed as a primary output that would drive the achievement of the project's objectives. Thus, several initiatives were developed in order to define the contents to be made available on the platform and the communication style to be adopted, as described above. Currently, the project is starting its second phase. The aim of this second phase is to create digital content that encourages citizen participation and involvement in local public management in order to build the foundations of an active participatory and demanding local citizenship culture.

At this stage, the following activities are planned:

1. Integration of the TAClaro platform with the CAN information system, in order to automate the updating of quantitative information:
2. Extension of the “CMV in numbers” category to the areas of sport social support and culture:
3. Evaluation of the gap between the real cost of services provided to the citizen and the “perceived cost” by the citizenry:
4. Evaluation of the level of information/disinformation on the CMVs budget management

5. Identification of new issues to be addressed:
6. Development of 30 new thematic articles supported by illustrations, in the categories of budget management, "policy options" and "know how much it costs":
7. Production of 10 thematic videos with the participation of citizens:
8. Creation of a sequence of 50 cartoons on issues of local public life:
9. Creation of a digital game on local citizenship in four dimensions of municipal reality: historical-cultural, economic-financial social-demographic political-legal.
10. Creation of an interactive digital book on local citizenship in four dimensions of municipal reality: historical-cultural, economic-financial: social-demographic: political-legal.
11. Creation of a digital game on local citizenship in four dimensions of municipal reality: historical-cultural, economic-financial, social-demographic, political-legal.
12. Creation of 10 thematic puzzles about attractions and singularities of the Municipality.
13. Production of a play by theatre.

At the moment, activity 1, activity 2 and activity 3 are in progress. Activity 1 is being developed with the collaboration of the consulting company that manages CANS information system, together with the technical team from the Accounting and Information Technology area. This activity is particularly important for the category "CMV in numbers. Simultaneously, the graphic design will be enriched with dynamic and user-friendly graphics. This is an activity of great technical complexity because the publicly available data do not have the level of detail necessary for this category and, consequently, the platform will have to be fed with CMV internal data. In general, this data is structured according to the needs of internal users, which is why several adaptations will be necessary to make the data extraction automatic. This activity will have a duration of one year, will be applied to the 2018 data and will be tested with the 2019 data. Activity 2 is in progress. At the moment data relating to the area of sport are being processed. CMV has already implemented a Management Accounting model that allows calculating the cost of each sport infrastructure. At the same time, there are reliable data on the use of this infrastructure. This data will be analysed and processed in order to inform the citizen about the cost of the sports services provided to him, such as "how much does it cost to go to the pool?" Activity 3 is in an exploratory phase. At this moment there is a list of 100 questions about the costs of the services provided directly to the user and about the CMV budget. As an example we present in table 2, some examples of the potential questions that are on this list:

Pre-school education + 1st cycle

How much does a school meal cost (or on average per month)?
 How much does the support in school material/books cost per school year?
 How much do the activities of animation and support to the family cost (month)?
 ...

Sports

How much does it cost, on average, to maintain and operate a pool (month or year)?
 How much does it cost, on average, to maintain and operate a pavilion (month or year)?
 How much does it cost, on average, to maintain and operate a stadium (month or year)?
 How much is a swimming lesson for the city?
 How much does an hour of hydro gymnastics cost the city?
 How much does an hour's use of a pavilion cost the city?

Table 2: Examples of the potential questions

Activity 4, like the previous activity, is in an exploratory phase. A list of 50 questions on the CMVs budget management has already been drawn up. Some examples of these questions are given in Table 3.

<p>Expenditure/ Revenue generic and transversal to the population</p> <p>Value of the budget of the municipality in the year 2018?</p> <p>Amount of public lighting paid by the Municipality, in the year 2018?</p> <p>Amount of waste collection and treatment paid by the Municipality in the year 2018?</p> <p>Amount of the repair and maintenance of the roads and streets of the municipality, in the year 2018?</p> <p>Value of the maintenance of the gardens and green spaces of the municipality, in the year 2018?</p> <p>What is the amount collected by the Municipality in taxes directly charged to the citizens, in 2018?</p> <p style="padding-left: 40px;">In Municipal Property Tax (IMI) Charged to homeowners in the Municipality</p> <p style="padding-left: 40px;">In Single Circulation Tax (IUC) Charged to citizens who have a car</p> <p style="padding-left: 40px;">In Municipal Property Transfer Tax (IMT) Charged on the purchase/sale of properties</p> <p style="padding-left: 40px;">Tax on the profit of companies based in the Municipality of Sao Paulo</p>

Table 3: Some examples of questions

The data collection for activity 3 and activity 4 will be done jointly. This sampling shall be carried out according to sampling techniques that ensure the representativeness of the sample. Activity 5 presupposes the accomplishment of several complementary tasks. Semi-structured interviews are currently being scheduled with various representatives of the democratic life of the municipality, namely: Presidents of each of the 4 parish councils: a political representative of each of the parties represented in the Municipal Assembly: representatives of the various civic and cultural associations of Valongo. In addition, a panel of experts will be consulted in order to generate consensus on what information is of interest to local citizens and what type of information stimulates an active local citizenship culture. The data collected in this activity will be treated in an integrated manner with the data obtained in activity 3 and 4. This step is very important because the definition of the themes to be addressed will condition the potential interest and involvement of the citizen. The remaining activities presuppose the involvement of professionals in the area of illustration, design, video editing and theatre producers and, consequently, can only be developed when the project has an assured source of funding. Possible support programmes are currently being examined. In each of the activities that make up this phase a work will be done to systematize procedures in the form of a Manual of Good Practices in Transparency. Accountably and Communication in Local Public Administration. This handbook will be an essential tool for the third phase of the project as it will enable the concept to be applied in another context in the future and thus the structure of the proposed model to be tested and validated.

4. CONCLUSIONS

TAClaro is an innovative project to transfer knowledge from academia to the local community, which seeks to decode and simplify the financial information that Portuguese municipalities make available to their citizens, making this information intelligible and accessible to all. There is currently a lack of interest, mistrust and distance from political life among citizens. Proof of this is the high rate of abstention in elections and low participation of citizens in political life.

The law already provides for the mandatory availability of a set of economic and financial documents: however, these documents reach only a small number of citizens, and not everyone who accesses this information can understand it because, in addition to this information being difficult to access, it uses a very technical language. The proposed solution consists of decoding the technical language and making it easily accessible. With this project we hope to contribute to:

- Increase public financial literacy in the wider community by explaining some associated concepts:
- Inform citizens about local municipal management, promoting their participation and involvement:
- Promote transparency in local government:
- Promote active, conscious responsible and demanding local citizenship.

The first phase of the project already concluded, consisted basically of the creation, testing and validation of the prototype of the TACIaro - Valongo digital platform.

The second phase of the project aims to develop and apply a model of Transparency, Accountability and Communication in Local Public Administration in the Municipality of Valongo and create a manual to support the application of the model in other municipal contexts. The third phase of the project will be dissemination and transfer of the model to other local realities and testing and validation of the structure of the proposed model. The entire research process has been developed in a continuous cycle of exchange of scientific and professional knowledge with a focus on solving problems and finding answers to concrete questions. At no time was any hierarchy of knowledge felt, but rather a highly productive complementarily and interactivity. It is not yet possible to ensure that the methodology adopted will produce new theoretical contributions, there are always issues related with (vid. e.g. Benhing and Law, 2000). Only at the end of the third stage will any conclusion at that level be possible. However, the work developed already allows us to conclude that the action-research methodology can be very effective in solving social problems and, consequently, is an excellent bridge between theory and practice in the world, thus reducing the distance between the world of academia and reality. In addition, this work enriches the concept of accountability and demonstrates the potential of IT as an instrument for the dissemination of financial information to lay on citizens.

ACKNOWLEDGEMENT: *This work was financially supported by the research unit on Governance, Competitiveness and Public Policy (UID/CPO/04058/2019), funded by national funds through FCT - Fundação para a Ciência e a Tecnologia.*



LITERATURE:

1. Angelico, M. J., Silva, A., Teixeira, S. F., Maia, T. & Silva, A. M. (2017). Web Accessibility and Transparency for Accountability: The Portuguese Official Municipal Websites. In Research Paradigms and Contemporary Perspectives on Human-Technology Interaction (pp. 140-166). IGI Global.

2. Arnold, A. K. & Garcia, H. (2011). Generating Genuine Demand for Accountability through Communication: Trainer's Guide.
3. Bargal, D. & Bar, H. (1992). A Lewinian approach to intergroup workshops for Arab-Palestinian and Jewish youth. *Journal of Social Issues*, 48(2), 139-154.
4. Benhing, O. & Law, K. (2000). Translating questionnaires and other research instruments: problems and solutions. Thousand Oaks, Sage Publications.
5. Bovens, M. (2007). Public Accountability. In Ewan Ferlie, Laurence E. Lynn Jr., & Christopher Pollitt (Ed.), *The Oxford Handbook of Public Management*.
6. Brandão, E. P. (2007). Conceito de comunicação pública. Duarte, Jorge, 1-33.
7. Burnes, B. (2004). Kurt Lewin and the planned approach to change: a re-appraisal. *Journal of Management studies*, 41(6), 977-1002.
8. Chadwick, A. & May, C. (2003). Interaction between States and Citizens in the Age of the Internet: "e-Government" in the United States, Britain, and the European Union. *Governance*, 16(2), 271-300.
9. Gummesson, E. (2000). *Qualitative methods in management research*. Sage.
10. Koçouski, M. (2012). Comunicação pública: construindo um conceito. Comunicação pública: interlocuções, interlocutores e perspectivas. São Paulo: ECA/USP, 71-96.
11. Kunsch, M. M. K. (2011). Comunicação pública, sociedade e cidadania. São Caetano do Sul: Difusão Editora, 485-509.
12. Menezes, C. A. (2015). The Accountability of Public Museums in Portugal. Doctoral dissertation, Federation University Australia.
13. Mulgan, R. (2000). 'Accountability': an ever expanding concept?. *Public administration*, 78(3), 555-573.
14. Schedler, A. (1999). Conceptualizing accountability. The self-restraining state: Power and accountability in new democracies, 14.
15. Silva, A.; Angélico, M. J.; Ferreira da Silva, A.; Teixeira, S.; Maia, T.. (2018). TAClaro: Test and validation of the prototype. 33rd IBIMA Conference
16. Susman, G.I. and Evered, R.D. (1978), An assessment of the scientific merits of action research, *Administrative Science Quarterly*, 23 (4), 582-603.
17. Tasan-Kok, T., van den Hurk, M., Özogul, S., & Bittencourt, S. (2019). Changing public accountability mechanisms in the governance of Dutch urban regeneration. *European Planning Studies*, 1-22.
18. Teixeira, S., Silva, A., Angélico, M. J., Silva, A. M., & Maia, T. (2018). A transparência na Administração Pública Local: Análise dos Websites da NUT2. *European Journal of Applied Business and Management*, 4(4).
19. Torreloones, A. de. (n.d.). Presupuestos de Torreloones. Retrieved July 2, 2016, from <https://presupuestos.torreloones.es/es/>.
20. @TABridge (2017). Using Technology in Transparency and Accountability Organisations. (2017, March 15). Retrieved July 2, 2017, from <http://www.transparency-initiative.org/uncategorized/595/fundamentals-for-using-technology-in-transparency-and-accountability-organisations/>.

IMPLEMENTATION OF BUSINESS PROCESS REENGINEERING METHODS TO ENTERPRISES - OMICRON D.O.O. AND KUŠTELEGA D.O.O.

Anica Hunjet

*University North, Varaždin, Croatia
anica.hunjet@unin.hr*

Andreja Borscak

*University North, Varaždin, Croatia
anborscak@unin.hr*

Lea Kustelega

*University North, Varaždin, Croatia
lekustelega@unin.hr*

ABSTRACT

Contemporary and fast-growing market imposes business in terms of strong competition. Ways businesses can compete in these conditions are an adjustment and continuous improvements. In the center point of this paper are business process reengineering methods in two small business companies. Even since the Second World War, Deming and Ishikawa have noticed the space for the growth of business success in Japan (mostly in the car industry), to bring improvement in the production. Business management is complex and demanding work with its own goal – maximising the profit. To enable this it is necessary to minimize the expenses (decrease the duration of a business process in a business function, eliminate waste, decrease write-offs, implement the newest technologies and similar) to optimize the results. Considering that the inadmissible error in doing business is one-single view (from your perspective), businesses need to take into consideration the parameter which is the key indicator of their success - buyer's satisfaction. By implementing some of the methods of reengineering, in this paper is presented progress on the examples of companies Omicron d.o.o. and Kuštelega d.o.o. which were able to create competition on the market by revivification of a part of the processes.
Keywords: business processes, competition, improvement, reengineering

1. INTRODUCTION

Many enterprises meet with the lack of optimal solutions in their management: disorganization, lack of planning, uncoordinated processes, costs which could have been avoided by a better allocation, risky investments, buyers dissatisfaction and similar. If there is awareness in the mind of the entrepreneur and there is sufficient knowledge to notice the progress and expansion of the market, there is a need for "implying order" in the enterprise and organizational structure. By realizing that there are many lacks and the possibilities of improvement, a modern entrepreneur can notice the opportunity for continuous improvement. The main idea of this paper is based exactly on this thought, therefore, the research of business processes and the possibilities of their improvement in two businesses had to follow. The introduction explains the purpose of the paper, author's idea and main goal. It is followed by a theoretical approach to basic terms and methods of business improvement. The methods of reengineering are implemented on two businesses, and the schematic and tabular approach to business processes is displayed. With concrete examples, the reader has been brought closer and explained with the importance of knowledge, technology application and recognition of the need to turn to the market and competition of the enterprise.

The last part, conclusion, synthesizes and summarizes the results of implementing business process reengineering to enterprises and gives an explanation of the research results.

2. DEFINITION OF THE BASIC TERMS

This part of the paper is the overview and theoretical base of terms, based on which the main course of the paper is: an organizational business structure, organizational unit, business function and business process. These are the main terms explained to better understand the doctrine of the paper theme. An organizational structure is important for the enterprise as the anatomy is for the human or some other living organism, so with this thought the organization is called also "the anatomy of organization", precisely business anatomy by various authors. (Sikavica, Novak, 1999, p. 139) The organizational structure the result of the parsing and task grouping process, starting at the workplace up to the organizational units on the highest level. In small and medium-sized enterprises, work coverage of a single organizational unit is bigger than in large enterprises because of fewer working places. A function can be defined as a gathering of connected activities which contribute to performing of enterprise final tasks and its success. The terms business function and organizational unit is frequently not distinguished. A business function is an activity made from a line of mutually connected and harmonized businesses, establishing a part of the total enterprise tasks and an organizational unit, is a social-economical group of employees who overtake a realization of a certain task, precisely a business process. The main business functions are divided to owner management and management handling and executive business functions are divided to development function, human resource function, marketing function, purchase function, production function, finance function, accounting function, administrative function, and control function (http://www.unizd.hr/portals/4/nastavni_mat/2_godina/menadzment/menadzment_12.pdf – retrieved 20.03.2019). A business process a structured, analytical cross-functional set of activities which demands constant improvement. These are activities with clearly established start and end, during which, in permanent intervals more or less value for consumers is established. (Bosilj Vukšić, Hernaus, Kovačić, 2008, p. 17) Business process is a line of actions, functions or changes that bring the results to a company. Every business has its specific business processes, but also sub-processes. For the enterprise to manage business processes in the very beginning it must detect the processes that slow down the business the most. After that, optimization of business processes is very important for which, besides wide business knowledge, especially useful is the technology. One of the answers on how to manage business processes would lie on the technology which speeds up processes. Every company always needs to question its business processes and seek to better alternatives and connect processes and people with technology. It is important to overlook and recognize the three most important elements - people, processes, and technology (<https://www.evision.hr/hr/Novosti/Stranice/zasto-razumjeti-poslovne-procese-upravljati-procesima.aspx> - retrieved 20.03.2019). Business process managing combines managing approach with suitable technology intending to improve enterprise performances. Business process managing is a systematic approach of improving business based on shaping, measurement, analysis, improvement and managing processes. Business process managing relies on the business approach of managing changes due to improving business processes with the final goal of establishing business goals by which the changes comprehend the whole life cycle of the process: from process defining and modeling to execution, analysis and its optimization. (Bosilj Vukšić, Hernaus, Kovačić, 2008, p. 22) Business processes are a nervous system of every company and it is extremely important to manage it (Mršić, 2017, p. 8). Business Process Reengineering is thoroughly over-thinking and radical redesigning of business processes to accomplish sensory improvements of costs, quality, service and speed, the modern critical success measurements. (Bosilj Vukšić, Hernaus, Kovačić, 2008, p. 33) According to the literature, reengineering is impossible to identify with the terms

of restructuring, reorganization or working place suspension. It represents a new beginning and according to the new models, current processes are done - the new work organization is accepted and the ones that have been valued until now are being dismissed. Reengineering is also called the invention of new approaches to process structure. Reengineering can improve a business process by using modern methods:

1. Kaizen (improvement, changes to better) defines philosophy or directing to the constant improvement of business processes manufacturing and management (Kanji, Asher, 1996) and it is acceptable and applicable in a great number of sectors. The base of Kaizen is that its use achieves the constant and continuous improvements of business success with a common acting of knowledge and experience of all the employees and it is categorized as a "unique life philosophy, according to which every aspect of a life should be constantly improved" (Šiško Kuliš, Grubišić, 2010)
2. Lean is a manufacturing philosophy which, when implemented, shortens the time from buyer's order to delivery of the final product, eliminating all the sources of wasting, precisely losses in the manufacturing process. The basic principle of Lean manufacturing is to manufacture exactly what the buyer wants, that is quality and quantity is directly dictated by the market. (Grubišić, Pipunić, 2014, p. 546)
3. Just in time (JIT) is a philosophy of manufacturing developed in Toyota, Japan (Nori, Radford, 1995) and it is formed by a philosophy and a set of manufacturing methods. Although without a unique definition, JIT emphasizes the reduction of surpluses, complete quality control and loyalty to the buyer (Everett, Ebert, 1992). The main JIT goal is identification and elimination as many errors or surpluses as possible and throughout the improvement of the manufacturing process within the company. (Grubišić, Pipunić, 2014, p. 546)
4. Kaikaku is a term which in Japanese sets radical changes of activities to remove all the waste and creates higher value and it is often called Kaizen breakthrough (<http://www.businessdictionary.com/definition/kaikaku.html> – retrieved 27.03.2019).
5. Jidoka is defined as automation with human intelligence. It implies to devices which exclude a machine if there is an error on a working area. Jidoka's goal is to increase product quality and decrease costs (Kaniški, 2017, p. 27)
6. Value Stream Mapping, VSM is a way of mapping all activities in a business process and material and informational flow, starting at the raw material, all the way to delivering the final product to the consumer (<http://212.39.115.48:98/joomla/index.php/mapiranje-toka-vrijednosti> – retrieved 21.05.2019).
7. Total Productive Maintenance, TPM implies to the program of continuity improvements in all company fields. The main goal is to find the waste to make zero errors, zero deadlocks, zero quality waste and zero injuries. It is focused on manufacturing. TPM is a program of constant improvement of drives and machines. (Kaniški, 2017, p. 31)
8. Brainstorming is a method of finding creative ways for certain problems. It runs when participants concentrate on a problem and then try to come up with as many radical solutions as possible. Ideas should intentionally be extremely wide and unusual, and speed is an important feature, dynamics is one of the main characteristics of brainstorming (<https://burza.com.hr/portal/sto-je-brainstorming/1407> – retrieved 03.04.2019). Teams present motive strength when doing business in any organization. To advance any process it is inevitable to include a team of experts with different professions. For high team efficiency it is inevitable that they are motivated, trained, with a clear goal, creative and innovative, and that it has enough resources to work. (Kaniški, 2017, p. 32)

3. ABOUT OMICRON D.O.O. ENTERPRISE

Omicron d.o.o. is a small enterprise founded in 2008 and ever since 2013 the main activity is mediation in consumer crediting (provision of services). Omicron has Ministry of Finance licence which is given on a limit of 3 years and runs with the leading banks on the Croatian banking market. Although it is a small enterprise, the business functions which are run are owner management, sales function, development function, marketing function, administrative function, control function. The enterprise gives services of financial consulting and mediation in consumer loans and searches the best solution for the realization of loans on the Croatian bank area for a potential client. Within the last two years, Croatian National Bank has allowed distribution of so-called online loans which can be activated and realized through the Internet in a few minutes, so the company doesn't deal only with direct competitors, mediators, but also indirect competitors are influencing the possibility of doing business and staying on the market. Enterprise mission is to professionally, most quality, expert and in the shortest time, process an inquiry for credit. Enterprise is diversified from others on the market thanks to its highly-educated employees who receive clients inquiries and process them in a single day. The most important is service quality and customer's satisfaction and with continuous education, employees completely reach their potential and with it, the competition on the extremely demanding market is reached. Enterprises vision is to become a leading agency for finance consulting in Republic of Croatia, with the possibility of expanding their field of work - education about financial literacy, interactive workshops, analysis, and projection movement in consumers crediting, consulting center.

Goals:

1. Remain on the highly competitive and diversified market, subject to constant changes
2. Increase the number of quality clients, aggressive marketing, employment, profit increased
3. Reduction of inquiry processing for 50%

Achievment method: Business process reengineering

Business success indicators are divided in to two basic groups: the ones measuring effectiveness and the ones measuring efficiency. Effective means "doing things rightly" and efficiently means "doing the right thing". Simply said, "effective management reduces expenses, while efficient management increases profit by increasing manufacturing" (Grubišić, Pipunić, 2014, p. 548).

4. BUSINESS PROCESS OF SALES FUNCTION IN THE ENTERPRISE

Table 1: Business process of sales function (Borščak, 2019)

BUSINESS PROCESS
1. Receiving inquiries from clients
2. Processing subjects in a paper form
3. Examination of the whole client's financial situation and mandatory consulting with the director
4. Waiting HROK (the Croatian Registry of Credit Obligations) reports on the demand
5. Sending inquiries to banks
6. Evaluation of subject transience
7. Return call to the client: OFFER/ REJECTION
8. Accepting offer and signing contract about solicitation
9. Sending documents to the client
10. Evident in the registry of current clients (or rejected ones)
11. Support in gathering documents
12. Receiving original documents
13. Sending subjects to be entered in a bank
14. Complement/ sending for an approving
15. Realization

Table 1 displays the business processes of the sales function. A part of the displayed processes is thrown out in the continuity of this research and a part is modified to gain quality and quantity improvement.

5. BUSINESS PROCESS REENGINEERING - THEORETICAL EXPLANATION

When talking about reengineering, it is extremely important to carefully and thoroughly plan, with the previous reviewing and establishing the need to change the ways of doing business from scratch. The business process analysis needs to be carried out to determine whether there is a need for a complete reengineering or a systematical implementation of making the process better. The short definition of reengineering is “starting from scratch” and it doesn’t mean to experiment with the existing or bring the changes which leave the basic structures intact. Reengineering presumes to leave deeply based procedures and give a fresh view of the business to create a product or service or create value for a client. There is a question:” how would an enterprise look like if it was reconstructed with the current knowledge and technology?” Business reengineering means the rejection of old systems and a new beginning. (Hammer, Champy, 2001) The phases of reengineering are: project starting, understanding process, shaping new processes and transferring to new solutions.

6. PROCESS OF INTRODUCING REENGINEERING TO BUSINESS PROCESSES OF THE ENTERPRISE

6.1. Problem

Omicron enterprise has a year and a half before, met with high expenses of misdirected marketing money, too long to process credit inquiry, the market game of high competition and continuous changes of almost all conditions in a consumer’s crediting. A part of the factors could be directly influenced, considering that these are the factors within the company, but external factors required some adjustment. The state of enterprise wasn’t promising and financial reports confirmed it. The problem didn’t happen over the night, but it had been neglected from month to month until the condition was alarming. Completely new structure of competitors (online lenders with aggressive marketing) entered the market almost over the night, and overtook almost 50% business opportunities from the Omicron enterprise, although their the main activity wasn’t even similar to theirs. In cooperation with the professionals, director of the enterprise brings a radical decision – bussiness processss reengineering of marketing and sales functions. this paper will be explained how the sales function processes have changed. In continuation, it will be displayed how the processes looked like before reengineering and what has changed by using tables.

6.2. Introduction of reengineering to business processes of sales function

Reengineering of the sales function in the enterprise is carried out through the four phases. First, there is a need for starting the project and the suggestions for its implementation were carried out. The vision of reengineering purpose had to be in harmony with the enterprise vision and goals. The phases by which this step was implemented: starting (in what way as simple as possible and it the shortest period process an inquiry, conclude a “service sale”, and sign contracts), planning (thinking about potential tools which would optimize the processes: technology, human potential, new knowledge), performance (implementation of new processes), supervision (developing and improving new processes) and closure-up (an optimal solution). Understanding the processes is the second phase by which the employees had to master new processes, leave old habits, and take advantage of the introduced processes. The figuration of new processes was conducted considering whether the goal was to find an improvement or to shorten the inquiry processing time for 50%. Whether the new processes are better than the last ones, this should be examined before shifting to new processes and

implementing projects. During three months, processes were examined and improved (except for processing, some more effective software solutions have occurred) and the last phase of business processes reengineering followed. After three months of continuous improvements and visible results the transfer to the new solutions occurs - old processes were transformed and reshaped into new ones, followed-up with detailed finishing. Today, every process, subprocess and activity is being followed up to optimize the optimal (because there is always room for progress) and there is conscious about the market and ruthlessness in case errors happen.

Table 2: Business processes reengineering (Borščak, 2019)

BUSINESS PROCESS REENGINEERING	
BEFORE	NOW
/	Preparative work: Introducing program support (software)* and making a new webpage**
1. Receiving client's inquiries	2. Receiving inquiries in an electronic shape (via the contact form on the internet page)
3. Processing subjects in a paper form	4. Entering clients in the program
5. Questioning the whole client's financial situation and mandatory consultation to the director	6. Employees call and questioning about client's financial situation (additional information)
7. Waiting for HROK to send reports on the request	8. /
9. Sending inquiries to banks.	10. The new principle of the credit capacity, intern workshops, education in the banks, introducing the program for employers questionnaire - 95% accuracy in assessment
11. Evaluation of subject approval	12. /
13. Returning the call to the client: OFFER/REJECTION	14. Sending offer
15. Accepting the offer and signing the mediation contract	16. Accepting the offer and signing the mediation contract
17. Sending documents to the client	18. Sending documents to the client
19. Evidencing into the register of liquid clients (or rejected ones)	20. Click on the change of client's status in the program* (liquid, rejected)
21. Support in gathering documents	22. Support in gathering documents
23. Receiving original documents	24. Receiving original documents
25. Sending the subject into a bank for the entry	26. Sending the subject into a bank for the entry
27. Supplement/ Sending for an approval	28. Supplement/ Sending for an approval
29. Realization	30. Realization
Final work: Archiving the subject (in a paper form) - PROBLEM: the amount of documents, time limitation, loss of data	Final work: Archiving the subject (in an e-form), contacting the client once in six months offering them better conditions on the market, help, and support according to the requirement.

* *program support has greatly decreased and made the data processing time easier.*

** *webpage - an assistant tool for marketing and inquiry processing*

6.3. Outcome

By the business process reengineering method of the sales function, which is most closely related to the marketing function, a dual effect was achieved:

1. Parallel with the sales process using reengineering method, the process of marketing function was radically redesigned
2. Software support and a new website design is a touch point and a springboard to launch both functions.

6.3.1. Explanation of table 2 and description of business processes

By receiving inquiries via e-form, the time of conversation to clients has decreased for 60% (from 15 minutes to approx. 6 minutes), because an employee finds out all the important features of the client's financial situation and enters the request to the program. When calling, they only ask about additional information. Earlier on, client's financial report was requested, and today Omicron's employees are so well educated that they could exclusively with their skills and knowledge find out all information and on their own give an evaluation of the subject (with high percentage of accuracy), because the employees were also slowed down by the process, as well. With the new processes, the request is processed in the shortest, so a client receives an offer extremely fast and the competition is unable to react. According to the evaluation of effects provided by the new processes based on six-month analysis, compared to previous data (on a specimen of 100 clients), 87% success was calculated in a client accepting an offer and by using a survey questionnaire 99% of client's contentment with the provided service was established. „Client returnee“ - people who had already once given a request for a credit through the credit agency Omicron are numbered in 32% (out of the total client number who's loans were carried out after the reengineering introducing). The increment in net profit following the previous period is almost 27%. Data say that the whole change paid off and that the enterprise management very successful today and with the best results in history and it continues to grow and keeps a close eye on the competition.

7. ABOUT KUŠTELEGA D.O.O. ENTERPRISE

Kuštelega d.o.o. is a dental laboratory founded in 1995 as a craft business and ever since November 01, 2018, it changes its legal shape to a limited company. The lab headquarters is Ivanec, and the enterprise has successful cooperation with twenty dentists in Varaždin county. Dental products are here made: from metal-ceramic and zirconia bridges, bridges on implants, crowns, dentures to combined work. The enterprise follows the newest technologies and trends, and it is fully equipped. Over the last few years it shows great attention to the implementation of digital technology to business processes, keeping top results. Enterprise KUŠTELEGA d.o.o. mission is to enable and make quality, esthetic pleasant and functional prosthetic supplement which is in harmony with the newest achievements of modern dental prosthetics and to fulfill demands adjusted to individual patient needs in cooperation with dental medicine doctors (business partners) with experience, knowledge and employees professionalism. Enterprise vision is by investing in knowledge and new technologies and with the professional relationship to all partners become a leading dental laboratory in the region and wider, known for its quality and expertise in making dental prosthetic supplements. It aspires to create innovative trends in doing business in the segments of the dental profession with the emphasize on the professional approach to work standards.

Goals:

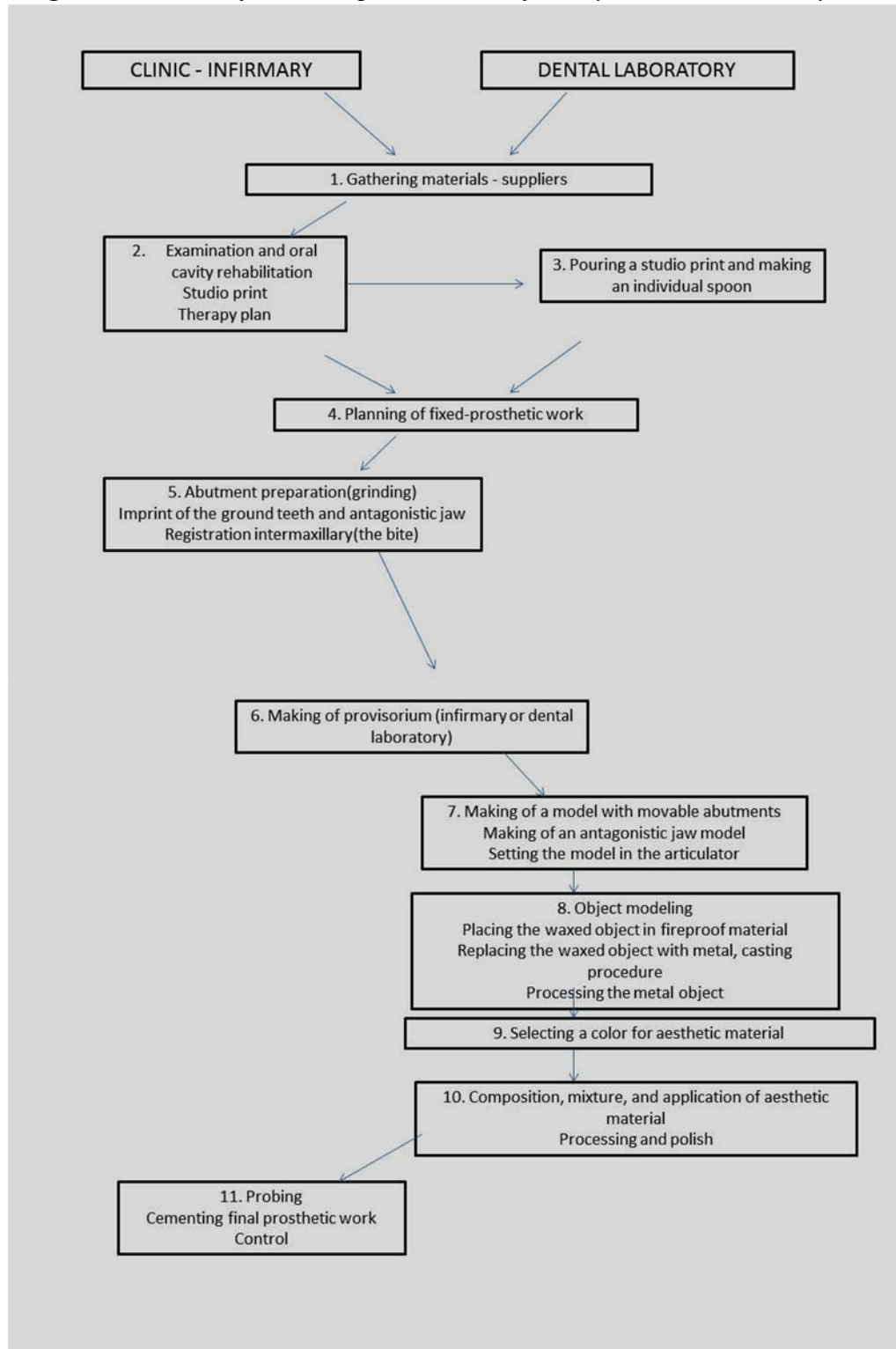
1. Stay in top of innovative trends in dental business segments
2. Invest in knowledge and new technologies, especially digital technology

Achievment method: introducing methods of lean business process improvement as a structural method of reengineering

8. SCHEME OF BUSINESS PROCESS IN INFIRMARY - DENTAL LABORATORY

Figure following on the next page

Figure 1: Scheme of business processes in infirmary - dental laboratory



(Author's work by the source: Solar, 2003, p. 3-5)

Figure 1 shows the scheme of business processes of an infirmary-dental laboratory, to easier understand a part of business processes that are going on only in a dental laboratory. Infirmary processes, viz. ordination, depend on business processes in a dental laboratory, and vice versa. By using this scheme, the purchase, manufacturing and control function are shown and the focus in business is on the manufacturing function and description of their business processes.

Certain business processes are common such as planning of fixed-prosthetic work, and some of them are performed only by an infirmary or dental laboratory, depending on an arrangement, such as making of a provisorium. The scheme displays overall of fixed-prosthetic work in which the steps of making fixed-prosthetic work, e.g. bridges, crowns and all products which are fixed cemented in a patient mouth.

9. BUSINESS PROCESSES OF SALES FUNCTION - FIXED PROSTHETIC

The research in this part of the paper is based on business processes of manufacturing function only in the dental laboratory and they are as follows:

Table 3: Business processes of the sales manufacture (Kuštelega, 2019)

BUSINESS PROCESSES
1. Gathering materials - suppliers
2. Pouring a studio print and making an individual spoon
3. Planning of fixed-prosthetic work
4. Making of a model with movable abutments
5. Making of an antagonistic jaw model
6. Setting the model in the articulator
7. Object modeling
8. Placing the waxed object in fireproof material
9. Replacing the waxed object with metal, casting procedure
10. Processing the metal object
11. Selecting a color for aesthetic material
12. Composition, mixture, and application of aesthetic material
13. Processing and polish
14. Giving the final work to an infirmary

Table 3 shows the manufacturing function, viz. business processes in the manufacturing function in KUŠTELEGA d.o.o. dental laboratory for making of fixed-prosthetic work. On certain business processes displayed in the table, business process reengineering will be introduced with the LEAN method of business process improvements.

10. LEAN METHOD - THEORETICAL EXPLANATION

It is difficult to set a universally definition of "Lean" term. The word "Lean" itself means *thin* when translated, that is less of everything, less operation, fewer investments, less effort. Lean can be set as a systematical approach to whole business with using as many sources as possible, to achieve as better results and systematical process as possible to improve business processes (Žvorc, yr. XXVI, No.2/2013, 695-709). When the Lean method is introduced to a certain enterprise, the result is shorter order processing time from a buyer's order to deliver a final product, with the elimination of losses in business processes. One of the most significant theoreticians who described improvements in manufacturing is Shigeo Shingo. He had a great influence on the development of the Toyota manufacturing system, Lean manufacturing and Kaizen and he is one of the initiators of the statistic method of quality control. The term Lean Manufacturing or lean production was first described in the book "The Machine that Changed the world" (Womack, Jones, 1990), which is a result of an IMVP research work, where authors have for the first time used the Lean term for Toyota's way of manufacturing (Grubišić, Pipunić,

2014, p. 546). At the beginning of the 1980s Japanese car, the industry was led by Toyota and overtook the power in the car industry and a group of MIT scientists started to examine how they work in Toyota. They noticed better results with fewer errors, fewer investors and less time for manufacturing processes. The team leader Jim Womack, Ph.D., called this type of work Lean. Jim Womack and Dan Jones became the founders of the Lean Enterprise Institute and academy which is the global carrier of Lean contemplation (Žvorc, yr. XXVI, No. 2/2013, 695-709). In the center of Lean contemplation is creating value for a customer. The main focus of the Lean enterprise is towards the buyer, continuous changes and process improvement, innovations, noticing problems and their solving, shaping the organizational structure, and work standardization. In the process, Lean checks if really every step is necessary and how well the steps are interconnected and flexible. By the Lean approach, teamwork and project approach are important and quality is secured in advance, viz in the process and design of the product. For the most important features of the Lean method, we can single out process orientation, business process managing, the focus towards buyers, and continuous improvement. Such a manufacturing form eliminates wastage in the whole process and creates processes that require less human effort, less space, less capital, and less time to make a product. Such manufacturing significantly decreases error possibility and production or business deadlocks, compared to the traditional business systems. (Žvorc, yr. XXVI, No. 2/2013, 695-709)

11. INTRODUCTION OF BUSINESS PROCESSES IMPROVEMENT METHOD – LEAN

11.1. Problem

Digital technology has evolved extremely fast in the segment of the dental business over the last few years. In KUŠTELEGA d.o.o. enterprise it's necessary to introduce digital technology and dismiss certain dated manufacturing processes, viz to replace it with digital technology. A change in the existing processes is necessary. By analyzing business processes, unnecessary procedures, processes, and activities were brought to light and the necessity for implementing digital technology appeared. The problems that occurred are related to dated processes that don't go smoothly and without interruptions, too big load on people and machinery, too slow manufacturing process, often malfunctions and dated technology, high expenses and unequal division of responsibility. An enterprise has to coop with the appearance of fast changes and newest technologies in segments of dental business, in finding optimal solutions that will improve the existing technological manufacturing process. By introducing digital technology in enterprise business processes, competitive advantage is trying to be achieved.

11.2. Procedure of introducing digital technology to business processes by Lean method

When talking about term digital technology in dental technique, CAD/CAM technology CAD (Engl. Computer-Aided Design) and CAM (Engl. Computer-Aided Manufacturing) is implied. CAD/CAM technology is a computerized system for digital recording, designing and making of dental substitutes. In CAD/CAM technology we include a scanner for scanning situations, viz. models with movable abutments, agnostic jaw, and occlusion models, viz. Scanning models set in the articulator. After the scanning digital recording is directly transferred to the program and with various tools in the program, a dental supplement is designed. The final design is sent to a 3D printer for printing metals or on a milling cutter for zircons milling. The Lean method will be conducted by introducing digital technology CAD/CAM in business processes.

Table following on the next page

Table 4: Business processes before and after the Lean method (Kuštelega, 2019)

LEAN BUSINESS PROCESSES METHOD	
BEFORE	NOW
1. Gathering material - suppliers	1. Gathering material - suppliers
2. Pouring a studio print and making an individual spoon	2. Pouring a studio print and making an individual spoon
3. Planning of fixed-prosthetic work	3. Planning of fixed-prosthetic work
4. Making of a model with movable abutments	4. Making of a model with movable abutments
5. Making of an antagonistic jaw model	5. Making of an antagonistic jaw model
6. Setting the model in the articulator	6. Setting the model in the articulator
7. Object modeling	7. Scanning and designing in the program (CAD)
8. Placing the waxed object in fireproof material	8. /
9. Replacing the waxed object with metal, casting procedure	9. 3D metal printing or zircon milling (CAM)
10. Processing the metal object	10. Processing the metal object or zircon
11. Selection of color for aesthetic material	11. Selection of color for aesthetic material
12. Composition, mixture, and application of aesthetic material	12. Composition, mixture, and application of aesthetic material
13. Processing and polish	13. Processing and polish
14. Giving the final work to an infirmary	14. Giving the final work to an infirmary

In table 4, it is displayed how the processes appeared before reengineering and what has changed after reengineering, viz. introducing digital technology in the manufacturing business processes (Business processes in KUŠTELEGA d.o.o. enterprise for making of fixed-prosthetic work): Business processes under number 7 and 9 (table 4) were replaced with CAD/CAM technology, while business processes under number 8 (table 4) are completely driven. When introducing digital technology, it was necessary to educate employees and adjust them to newly formed changes. Teamwork is required when reinforcing technology processes.

11.3. Outcome

By introducing digital technology in business processes of KUŠTELEGA d.o.o. enterprise, it can be noticed that business processes have unobstructed flow and bring better results in increasing effectiveness, time consumption, employee satisfaction and most important buyers satisfaction (in this case dentists and patients). Influenced by introduced improvements, the enterprise has achieved set goals.

The results that the company records after reengineering are:

- better process control
- better manufacturing planning
- decrease in costs
- the decrease in the number of business processes
- the decrease in excessive metal processing
- better precision in the making of prosthetic supplements
- saving time from order to delivery of the final product
- less of machines
- less material necessary for the manufacturing

- decrease of unnecessary movements, waiting and wasting time
- visualization of the final look (a patient and dentist can see the final design in a digital shape)
- more efficient use of resources
- improved relationship with dentists and employees
- more flexible manufacturing process
- making the product assortment wider (introducing new material - zircon)
- errors brought to the minimum (when scanning, grounded teeth are displayed on the screen under great zoom, enabling in such way an insight to slightest mistakes and their right-term correction)
- simplifying business processes - giving more responsibility to one person
- enticing employees to learn and adopt new technology
- no delayed or incomplete information between business processes
- no repetition of activities
- increased patient satisfaction

The listed technological investment requires additional financial investments, but longterm, such an investment pays off considering that is brought to the speed of business processes and with it lower labor cost. It is important to emphasize that, according to the analysis of the new process efficiency, compared to older ones, the delivery time from order to delivering the final product decreased by 40% (before the deadline was 10 working days, and today it is 6 working days). Based on the quartal analysis of financial reports, the increment in revenues was 41%, compared to the same time last year. Patient satisfaction with the final product is 99% - informations are obtained from dentists. After implementing the Lean method, KUŠTELEGA d.o.o. enterprise has reached the set goals and recorded top results, viz process understanding, new process shaping, and transition to new solutions. Reengineering is carried out by using the Lean method, which when implemented to an enterprise, decreases the time from buyer's order to delivery of the final product, eliminating all waste in the business process which is achieved in the enterprise by introducing digital technology to business processes.

12. CONCLUSION

Every business process improvement in the enterprise is the key to existence and it starts with recognition (financial indicators, employees and consumer reactions), that the business is not on the course to improvements. To achieve success it is mandatory to continuously question and make the organization (enterprise) better in general. In this paper, the analysis of implementing reengineering methods by phases was conducted in Omicron company, which exclusively sales service and implementation of the Lean method in Kuštelega d.o.o., the dental laboratory and manufacturing enterprise. The methods of improving business processes presented in this paper, by all means are not the only ones that an enterprise can choose to improve their business. Conducted research and their results show that the reengineering method is the radical method, requires investments (in technology, but as well in employees), but it turned up to be the right choice in specific enterprises that faced difficulties on the market.

1. OMICRON d.o.o. enterprise conducted business process reengineering of the sales function and after the conducted phases of reengineering achieved the set goals. According to the evaluation of effects provided by the new processes based on six-month analysis, compared to previous data (on a specimen of 100 clients), 87% success was calculated in a client accepting an offer and by using a survey questionnaire 99% of client's contentment with the provided service was established. „Client returnee“ - people who had already once given a request for a credit through the credit agency Omicron are numbered in 32% (out of the

total client number who's loans were carried out after the reengineering introducing). The increment in net profit following the previous period is almost 27%. Data say that the whole change paid off and that the enterprise management very successful today and with the best results in history and it continues to grow and keeps a close eye on the competition.

2. KUŠTELEGA d.o.o. enterprise introduced the Lean method of improving business processes as a structural method of reengineering. The enterprise had to face fast changes and new technology in the dental business area, and they had to advance the technological manufacturing process. By introducing Lean to business processes, KUŠTELEGA d.o.o. has reached set goals and recorded top results. It is important to emphasize that, according to the analysis of the new process efficiency, compared to older ones, the delivery time from order to delivering the final product decreased by 40% (before the deadline was 10 working days, and today it is 6 working days). Based on the quartal analysis of financial reports, the increment in revenues was 41%, compared to the same time last year. Patient satisfaction with the final product is 99% - informations are obtained from dentists.

The goal of this paper was to research in what ways the improvement methods influenced the results of researched enterprises. The results show that the goal is achieved.

LITERATURE:

1. Bosilj Vukšić, V., Hernaus, T., Kovačić, A., (2008) *Upravljanje poslovnim procesima, organizacijski i informacijski pristup*. Školska knjiga. Zagreb.
2. Everett E. A. Jr, Ebert, R. J.(1992) *Production & operations management*. Prentice Hall. Englewood Cliffs. NJ 07632.
3. Grubišić D., Pipunić A., (2014) *Suvremeni pristupi poboljšanjima poslovnih procesa i poslovna uspješnost*. Pregledni rad. Ekonomski fakultet Split. Split.
4. Hammer M., Champy J., (2001) *Reinženjering tvrtke*. Mate d.o.o. Zagreb.
5. Kaniški, I. (2017) *Reinženjering poslovnih procesa na primjeru tvrtke Aris d.o.o.* Diplomski rad. Sveučilište Sjever. Varaždin.
6. Kanji, G. K., Asher, M., (1996) *100 methods for total quality management*. Sage Publications. London.
7. Mršić, M., (2017) *Organizacija poslovnih procesa u poduzeću Pristan d.o.o.* Završni specijalistički diplomski rad. Sveučilište u Splitu. Split.
8. Nori, H., Radford, R., (1995) *Production and Operations Management*. Total quality and responsiveness. McGraw-Hill. New York.
9. Sikavica, P., Novak, M. (1999) *Poslovna organizacija*. Informator. Zagreb.
10. Solar T., N., (2003) *Laboratorijska fiksna protetika*. Medicinska naklada Zagreb. Zagreb.
11. Šiško Kuliš, M., Grubišić, D., (2010) *Upravljanje kvalitetom*, Sveučilište u Splitu, Ekonomski Fakultet. Split.
12. Žvorc M., *Lean menadžment u neproizvodnoj organizaciji*. Stručni rad. god. XXVI, BR. 2/2013. p. 695-709.
13. Womack, J. P., Jones, D. T., (1990) *The machine that changed the world*. Harper Collins Publisher. New York.
14. Blaće, D., *Zašto je važno razumjeti poslovne procese i upravljati njima?*, Retrieved 20.03.2019 from <https://www.evision.hr/hr/Novosti/Stranice/zasto-razumjeti-poslovne-procese-upravljati-procesima.aspx>
15. Čičin Šain, D., *Poslovne i procesne funkcije u poduzeću*. Retrieved 20.03.2019 from http://www.unizd.hr/portals/4/nastavni_mat/2_godina/menadzment/menadzment_12.pdf
16. Retrieved 27.03.2019 from <http://www.businessdictionary.com/definition/kaikaku.html>
17. *Što je brainstorming?* Retrieved 03.04.2019 from <https://burza.com.hr/portal/sto-je-brainstorming/1407>

POSITION OF PRAGUE ON THE INTERNATIONAL TOURISM MARKET

Jiri Vanicek

University of Economy Prague, Czech Republic
jiri.vanicek@vse.cz; xnemk00@vse.cz

ABSTRACT

There are not many European countries with such a significant share of the capital city on tourism (especially incoming tourism) as the Czech Republic. The number of foreign tourists grows significantly in the Czech Republic, and so does the share of Prague. All marketing campaigns aiming to get foreign tourists beyond Prague ended inefficient. The share of Prague on the number of tourists accommodated in standard accommodation facilities on the total number of tourists in the Czech Republic (CZ) is 62%. Prague is also the only region with a higher number of foreign tourists than Czech tourists (85% of tourists in Prague are foreigners). Prague is therefore struggling with overtourism in some attractive areas and must deal with unsustainable development.

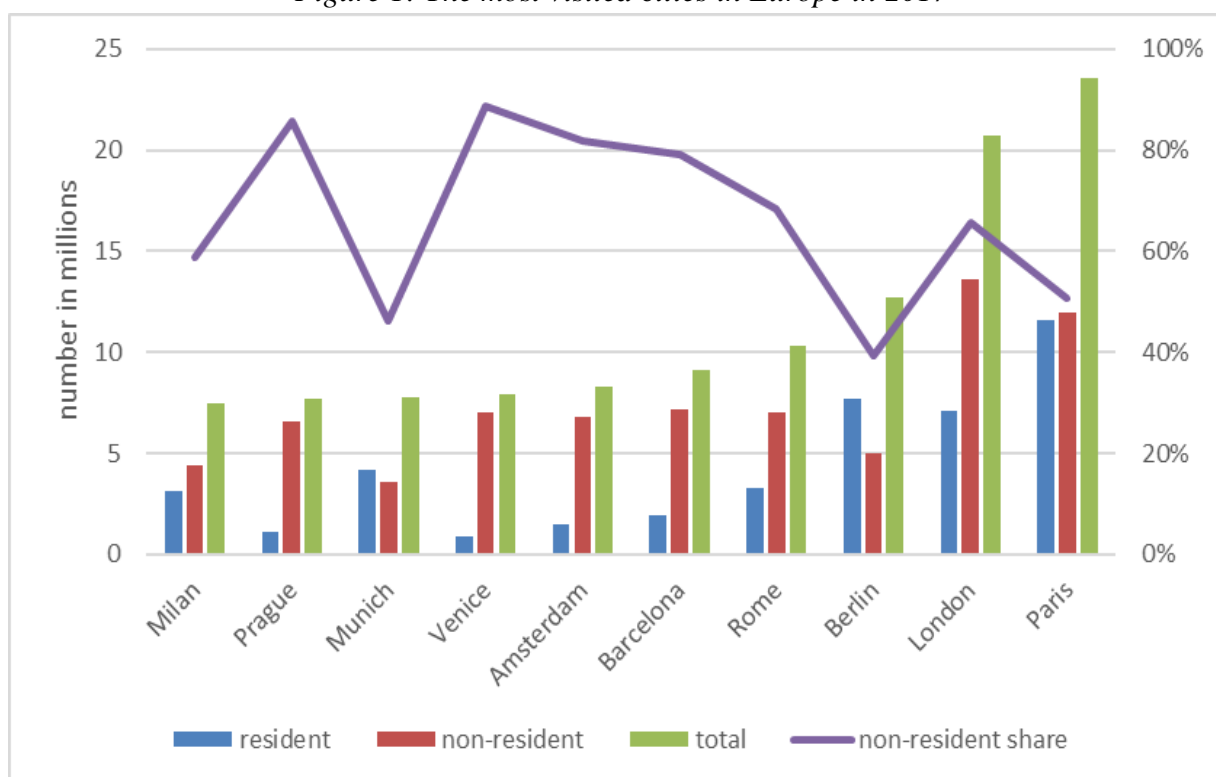
Keywords: *Benchmarking, City tourism, Overtourism, Prague, Urban tourism*

1. INTRODUCTION

The number of tourists has grown for seven years in a row in the Czech Republic (ČSÚ, 2019d). Even though the CzechTourism agency has been working on diversification in communication and spreading of awareness of the beauty of other regions in the Czech Republic, most tourists are still headed to Prague. Some areas (main tourist attractions) are visited by excessive numbers of tourists that reach limits of sustainability. Therefore, it can be perceived as the problem of so-called overtourism, i.e. overload of tourists in small areas/destinations. Authors follow on their own research that compares attendances in Prague and other cities. High concentration of tourists in one area (i.e. overtourism) causes a number of problems – from starting with worse conditions for residents, via increased prices of goods/services and ending with damage to environment and cultural heritage. In order to improve overtourism management, it is necessary to examine in detail its roots and prepare preventative and corrective measures. The article introduces results of primary and secondary research that aims to evaluate the position of Prague in the context of tourism in the Czech Republic and to find possible causes of excessive concentration of tourists in one area/destination. Historical sites and culture have always been the main motivation for traveling and tourism. They are the main motivation for 36% of tourists, more precisely 41% of foreign tourists in the Czech Republic (CzechTourism, 2018 a). It is therefore undeniable that (not only) capital cities are highly attractive – looking from the historical perspective, they have always been the most important, and therefore, the number of places with architectural/historical value is significantly higher as compared to other cities. Smaller European cities obviously cannot compete with their sights. A study of the European Parliament (Peeters et al., 2018) uses the annual number of tourists per 100 inhabitants and per 1 km² for the evaluation of overtourism. Results show clear differences between rural, urban, coastal/islands and heritage/attractions tourism. According to the study, overtourism has impact on the environment (pollution, damage, investment in wrong projects), economy (inflation, economic dependence on tourism, infrastructure costs) and culture (degradation of conditions for residents, conflicts, criminality, loss of identity). Preveden points out in his study that most problems arise from lack of destination planning to prevent overtourism. Most destinations focus on attracting as many tourists as possible, but they do not consider consequences. Preveden therefore offers proactive and reactive measures.

Destinations should proactively align tourism strategy with city development strategy; they should build infrastructure also in low-tourism areas; improve segmentation and target various segments across seasons. Reactive measures work with regulation of capacities of accommodation facilities, active management of sharing economy and restrictions on access to selected areas: entry tickets, dynamic pricing according to the time/season, maximum number of visitors etc. (Preveden et al., 2018). Furthermore, Jordan (Jordan et al., 2018) includes public education, better on-the-ground tourist management, technological solutions or better monitoring in tools for overtourism management. One of the trends of international tourism is dynamic growth of popularity and number of visitors in global and European metropolises in the last years. This fact is illustrated by figure 1. The lowest share of residents is in Venice (11%), Prague (14%) and Amsterdam (18%). Data of the Czech Statistical Office (ČSÚ) for Prague are slightly different, but data from one source were used in order to keep the comparison valid.

Figure 1: The most visited cities in Europe in 2017



Source: TourMIS 2018, ISTAT 2018 – edited by authors

2. URBAN TOURISM IN THE CZECH REPUBLIC

Incoming tourism in the Czech Republic reached the new maximum of number of tourists and overnight stays in 2018. Majority (62%) of foreign tourists went to Prague. The number of tourists in Prague was 7.9 million out of which 6.7 million (85%) were guests from abroad in 2018 (PCT, 2018d). The Top 100 Cities Destination Ranking Euromonitor International ranks Prague to fifth/sixth position among European cities in the number of arrivals in 2012-2017 (PCT, 2018b). Prague took the seventh place among 126 evaluated European cities with total 18 million overnight stays in 2017 (PCT, 2018c). There are eight other cities with over 100,000 inhabitants in the Czech Republic (Brno, Ostrava, Pilsen, Liberec, Olomouc, Ústí nad Labem, Hradec Králové, České Budějovice). They are all country towns. They have important attractions and an interesting offer for visitors; however, their number of tourists is not as high as in the capital city.

Table 1: Comparison of the number of tourists in the most important Czech cities in 2017

	Number of guests in accommodation establishments			Number of overnight stays		
	Czech	Foreigners	Total	Czech	Foreigners	Total
Prague	1,090,000	6,562,000	7,652,000	1,923,000	16,132,000	18,055,000
	14%	86%		11%	89%	
Pilsen	125,000	167,000	292,000	205,000	306,000	511,000
	43%	57%		40%	60%	
Brno	334,000	388,000	722,000	577,000	689,000	1,266,000
	46%	54%		46%	54%	
Karlovy Vary	184,000	321,000	505,000	732,000	1,734,000	2,466,000
	36%	64%		30%	70%	

Source: Czech Statistical Office data for 2017 – edited by authors ČSÚ, 2019a, ČSÚ, 2019d

Data in table 1 clearly prove the dominance of Prague as the most attractive city in the country. The extraordinary position of Prague in incoming tourism in the Czech Republic is given by several factors:

- Prague has exceptional culturally historical conditions: Historical core of the city is globally the biggest urban conservation area with extant authentic buildings from 10th-21st century that captures historical development of the city. The historical core is on the World Heritage List of UNESCO since 1992. The location of the city at a sloping shore of meander of the Vltava river creates a picturesque scene.
- Prague has an image of interesting destination and it has stronger brand than the whole Czech Republic.
- Prague is attractive also thanks to the image of a safe destination.
- Accessibility of Prague is the easiest within the Czech Republic: Václav Havel International Airport is one of the fastest growing airports in its category in Europe – 16,797,006 travellers in 2018 (year-on-year growth of 9%) (PCT, 2018a), international train and bus connections and great accessibility by individual road network.
- Tourism infrastructure (accommodation and restaurants) has high capacity and varied structure.
- A wide range of complimentary services.
- Quality products' offer for visitors, especially for cultural tourism.
- Significant part of tourism in Prague is constituted by business tourism – Prague has quality congress centres – there are over 100 big international congresses and further 4,500 smaller conferences in Prague every year (ČSÚ, 2019c).

Tourists usually use three routes when they visit the historical area in the Prague city centre. The longest is the Royal Route, that goes from the Powder Tower to the Prague Castle (approx. 2.7 km), the second is the route from Strahov Monastery via Prague Castle to Klárov (approx. 2 km) and third route goes via Jewish Quarter starting at the Old Town Square through Maiselova street to the Old New Synagogue (approx. 700 m). Most Prague's visitors start their sightseeing tour of the historical core in the morning (around 9-11 am) at the Prague Castle and then follow through the historical centre for three kilometres to the Old Town Square. Prague's narrow streets therefore must accommodate a crowd of 30-60 thousand people per day in the season. This creates high concentration of visitors in peak hours on a very small area. The number of visitors of individual sights is only an indicative number, since most Prague's visitors look at sights from the exterior. According to the number of sold tickets, the Prague Castle was visited by 2.4 million people, but total number of visitors (passing through the site) is estimated

to eight million – that is 3.3 times more visitors (data for 2017, PCT 2018e). The same number of tourists visit the Old Town Square and Charles Bridge. Similar situation is at the Jewish Quarter – the Jewish Museum has 716 thousand visitors, but the number of people passing through is significantly higher. The problem is therefore not the total number of visitors, but their uneven distribution in time and geographical space. It causes high concentration of people in a limited time on a small area of Prague. Residents are not irritated by the total number of visitors, but they complain on breach of the quiet hours in areas with night clubs and vandalism done by some groups of visitors.

3. RESEARCH RESULTS

In order to prove the unique position of Prague, several factors were compared in the following tables (no. 2-7). The most attractive European destination is London with almost 21 million tourists in 2018. Three more cities were chosen for better comparison (table 2) of data: Paris, Rome and Prague (GEERTS, 2018). Data from Geerts were used in order to provide relevant comparison, since the data of the Czech Statistical Office show different numbers for Prague. The share of the Czech capital city is the highest in the number of foreign tourists. Number of tourists per one inhabitant is comparable with Paris.

Table 2: Comparison of tourism intensity in four European metropolises in 2018

City	Country	Number of tourists in metropolis	Number of tourists in country	Number of inhabitants in metropolis	Share of tourists in metropolis	Number of tourists per 1 inhabitant
		in million	in million	in million	in %	tourist/inhabitant
London	GB	20.8	39.2	8.8	53.0	2.4
Paris	F	16.8	87.0	2.2	19.3	7.6
Rome	I	9.7	42.0	2.9	23.0	3.3
Prague	CZ	9.0	12.8	1.3	70.3	6.9

Source: GEERTS 2018 – edited by authors

Table 3 shows number of tourists in Prague in comparison with the whole country. Czech Statistical Office (ČSÚ, 2019a) monitors number of accommodated tourists in standard accommodation establishments. All data are therefore comparable for all regions of the Czech Republic. Around 37% of all tourists are accommodated in Prague – focused on foreigners it is 63% of tourists. Only 11% of Czech tourists are accommodated in Prague, since domestic tourists find prices in Prague too high and rather visit Prague only for one day or find accommodation outside Prague and commute daily. The share of Prague in year-on-year growth of tourist in the Czech Republic was 55%.

Table 3: Comparison of tourism intensity in Prague and the rest of the Czech Republic in 2018

	Number of tourists in thousands	Foreigners in thousands	Residents in thousands	Year-on-year growth
Prague	7,895	6,674	1,221	12.0%
CZ without Prague	13,380	3,965	9 415	6.2%
Czech Republic total	21,275	10,639	10,636	8.1%
Share of Prague	37.1%	62.7%	11.5%	55%

Source: Czech Statistical Office – edited by authors ČSÚ, 2019a

Table 4 provides data on accommodation capacity in the Czech Republic. The number of hotels and boarding houses in Prague makes almost 9% of the total number in the Czech Republic. Those facilities are usually bigger – the number of rooms constitute one fifth of the total number in the country.

The number of beds is slightly lower, since there are more single rooms in Prague. Nevertheless, Prague has the highest occupancy (67%) compared to the rest of the country (50%) (ČSÚ, 2019 e).

Table 4: Prague's share on accommodation capacity in the Czech Republic in 2018

	Number of Establishments	Number of Rooms	Number of Beds	Use of beds
Czech Republic	9,007	205,324	526,788	49.9%
Prague	787	41,617	90,891	67.0%
Share of Prague	8.7%	20.3%	17.3%	34%

Source: Czech Statistical Office – edited by authors ČSÚ, 2019 b

The structure of accommodation establishments by classification (quality) is also significantly better in Prague than in the rest of the country. Three quarters of all five-star hotels and one third of four-star hotels are in Prague. On the other hand, only every 37th boarding house is in Prague. Specific data is given in table 5.

Table 5: Prague's share on accommodation capacity by classification in 2018

	Hotels *****	Hotels ****	Hotels ***	Boarding Houses	Hotel Garni
Czech Republic	61	653	1,385	3,427	111
Prague	46	218	210	94	34
Share of Prague	75.4%	33.4%	15.2%	2.7%	30.6%

Source: Czech Statistical Office – edited by authors ČSÚ, 2019b

Table 6 shows ten most visited tourist attractions in the Czech Republic. It is obvious, that six out of them are in Prague and that four are ZOOS.

Table 6: Ten most visited tourist attractions in the Czech Republic in 2017 (in thousand)

Tourist attraction	City	Number of visitors (in thousand)
Prague Castle	Prague	2,378
Petřín Cable Car	Prague	2,066
Prague ZOO	Prague	1,446
AquaPalace Prague	Prague	836
Aqualand Moravia	Pasohlávky	721
Petřín Lookout Tower	Prague	714
Pinkas Synagogue	Prague	675
ZOO Zlín-Lešná	Zlín	630
ZOO Dvůr Králové n/Labem	Dvůr Králové nad Labem	525
ZOO Ostrava	Ostrava	507

Source: Czech Statistical Office – edited by authors (CzechTourism 2018 b)

The above-mentioned data show that the situation in Prague is unique and deserves attention of experts. Current tourist/resident ratio and density of tourists are clearly unsustainable.

4. CONSLUSION AND DISCUSION

Despite the effort of destination managements including the CzechTourism agency, the number of tourists in Prague is several times higher than in the rest of the country. Prague is easily accessible for tourists from distant countries, it has reputation of a safe city, it is considered cheap, and thanks to its location in the heart of Europe, it is a good starting point for exploring trips around Europe. Data of the CzechTourism (2018a) agency show, that 31% of foreign tourists arrive in the Czech Republic by airplane and 45% arrive by car. Considering the quality of road infrastructure (ex. highway to Brno, or to Moravia) it is obvious that tourist do not want

7. CzechTourism, 2018a: Domáci a příjezdový cestovní ruch: Prezentace výsledků za 4. čtvrtletí 2017 - 2. čtvrtletí 2018. Retrieved 17.04.2019 from: https://czechtourism.cz/getattachment/Institut-turismu/Marketingovy-vyzkum/Tracking-DCR-PCR/Reporty/Tracking-DCR-PCR-2Q-2018/DCR-a-PCR-4Q-2017,1Q,2Q-2018_GfK_19092018-PREZENTACE.pdf.aspx?ext=.pdf
8. GEERTS, W. 2018. Top 100 City Destinations 2018. Euromonitor International https://vdb.czso.cz/vdbvo2/faces/cs/index.jsf?page=vystup-objekt&z=T&f=TABULKA&skupId=1330&katalog=31743&pvo=CRU03&pvo=CRU03&str=v285&u=v285__VUZEMI_100__3018
9. Jordan et al., 2018: Jordan, P., Pastras, P., & Psarros, M. Managing Tourism Growth in Europe. The ECM Toolbox. Dijon. Search by Countries & Regions. Retrieved 17.04.2019 from: <https://www.ucm.es/data/cont/media/www/pag-107272/2018-Managing%20Tourism%20Growth%20in%20Europe%20The%20ECM%20Toolbox.pdf>
10. PCT [Prague City Tourism], 2018a: Letiště Václava Havla Praha v číslech (2018a), PCT_Prague City Tourism – Statistika a analýzy. Retrieved 23.03.2019 from: <https://www.praguecitytourism.cz/file/edee/statistiky-a-analyzy/letiste/letiste-praha-v-cislech-2018.pdf>
11. PCT [Prague City Tourism], 2018b: Euromonitor International – Top 100 Cities Destination Ranking (2018b), PCT_Prague City Tourism – Statistika a analýzy. Retrieved 23.03.2019 from: <https://www.praguecitytourism.cz/file/edee/statistiky-a-analyzy/praha-v-mezinarodnim-srovnani/euromonitor-international-top-100-cities-destination-ranking.pdf>
12. PCT [Prague City Tourism], 2018c: ECM Benchmarking Report 2017-2018 (2018c), PCT_Prague City Tourism – Statistika a analýzy. Retrieved 23.03.2019 from: <https://www.praguecitytourism.cz/file/edee/statistiky-a-analyzy/praha-v-mezinarodnim-srovnani/the-european-cities-marketing-benchmarking-report-2017-2018-cj.pdf>
13. PCT [Prague City Tourism], 2018d: Praha – Příjezdový cestovní ruch v roce 2017 (2018d), PCT_Prague City Tourism – Statistika a analýzy. Retrieved 23.03.2019 from: https://www.praguecitytourism.cz/file/edee/statistiky-a-analyzy/nejnovejsi-analyzy/a-analyza-2017_internet.pdf
14. PCT [Prague City Tourism], 2018e: Pražské památky a významné akce: Návštěvnost 2017 [online]. Prague City Tourism, 2017. Retrieved 17.04.2019 from: <https://www.praguecitytourism.cz/file/edee/statistiky-a-analyzy/prazske-pamatky/prazske-pamatky-statistika-navstevnosti-2017.pdf>
15. Peeters et al., 2018: Peeters, P., Gössling, S., Klijs, J., Milano, C., Novelli, M., Dijkmans, C., Eijgelaar, E., Hartman, S., Heslinga, J., Isaac, R., Mitas, O., Moretti, S., Nawijn, J., Papp, B. and Postma, A., 2018, *Research for TRAN Committee - Overtourism: impact and possible policy responses*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels. ISBN 978-92-846-4406-3
16. Preveden et al., 2018: Preveden, V., Mirkovic, G., Gratzer, M. & Schenk, O. *Protecting your city from overtourism: European city tourism study 2018*. ROLAND BERGER. Retrieved 01.04.2019 from: https://www.rolandberger.com/publications/publication_pdf/roland_berger_european_city_tourism_2018.pdf
17. TourMIS, 2019: Nights and arrivals in the cities. Retrieved 17.04.2019 from: <http://www.tourmis.info/cgi-bin/tmintro.pl>

EFFECTIVENESS OF MANAGERIAL COMMUNICATION - EMPLOYEES' POINT OF VIEW

Karmen Buljat

VERN' University of Applied Sciences, Croatia
karmenbuljat5@gmail.com

Jadranka Ivankovic

VERN' University of Applied Sciences, Croatia
jadranka.ivankovic@vern.hr

ABSTRACT

Communication is a process of exchanging thoughts, ideas and information between sender and receiver of information. Effective communication is crucial for achieving goals both; private as well as in business life. Managers in an organization are responsible for fulfilment of different tasks and functions simultaneously, and in order to deliver the results they depend on activating all human resources' available in the organization. Even though, it seems so obvious, managers rarely pay appropriate attention to the quality of their internal communication. At the same time, in ICT sector, internal and external communication are gaining on importance, because of their contribution to the effective and efficient fulfilment of customers' needs and raising of customers' satisfaction. Roots of customer satisfaction is now more than ever connected to employees' satisfaction. In order to improve effectiveness of managerial communication employees' perception should be taken into account. The paper presents the results of the quantitative research conducted in 2018. In the survey, 101 respondents from the selected ICT company participated. The results showed that effective managerial communication influence overall employees' satisfaction, build interpersonal relationship and contribute to the creation of effective working environment. It also downsizes frustrations and information overload and enables managers to become more focused on organizational priorities; people development and fulfilment of organizational objectives. Therefore, investment in building managerial skills, especially effective communication can create significant benefits for the organization.

Keywords: *communication, ICT sector, internal communication, management, managerial skills*

1. INTRODUCTION

Buble (2006 and 2006a) points to the complexity of the term management, as well as the difficulties in defining it both semantically and substantially, that's why it is not surprising to have different understandings and definitions of the term management. Some of the definitions are listed below. According to Weihrich and Koontz (1993, p. 4), management is the process of designing and maintaining an environment in which individuals, working together in groups, effectively achieve their chosen goals. In addition to the above definition, the authors have added: 1) managers perform the functions of planning, organizing, staffing, leading and controlling, 2) management can be applied in any type of organization, 3) it applies to managers at all organizational levels, 4) the goal of all managers is the same; create surplus, 5) management deals with productivity, and that assumes efficiency and effectiveness. Kreitner (1989; referenced by Buble 2006a, pp. 3-4) defines management as the process of working with others and helping others to achieve organizational goals in a changing environment with the effective and efficient use of limited resources. Robbins i Coulter (2007, p. 7) simplified definition of management as coordinating and overseeing the work activities of others so that their activities are completed efficiently and effectively.

Similar to it is definition in business dictionary where management is defined as the organization and coordination of the activities of a business in order to achieve defined objectives.¹ According to the Croatian Encyclopedia, management is the activity of planning, organizing, combining, coordinating and controlling activities and organizational resources aimed at achieving organizational goals. It covers a number of interrelated tasks and functions: planning, organizing, managing human resources, leading and controlling. It is the process of leading organizations to achieve the desired results and goals through the effective and efficient use of all organizational resources (human, material, financial and information). Management, as a key activity for success, occurs at all levels of society, from the state and government to individual organizations, in all types of organizations (private, public, for-profit, not-for-profit) and at all organizational levels (lower, middle and highest). An important determinant is focus on achieving goals with the help of other people. It is done through a process of decision-making, influence, communication and coordination. The main goal of management is to achieve the optimal ratio of efficiency and effectiveness of the use of organizational resources, that is, to achieve the goals with the most rational use of resources.²

1.1. Responsibilities of managers

The tasks of managers arise from the management process; he plans and makes decisions, organizes work and businesses, engages and leads people, and controls human, financial, physical, and information resources (Buble, 2006a, p. 6). Fayol, at the beginning of the twentieth century, among first authors mentioned, the basic functions of management; planning, organizing, commanding, coordinating and controlling (Buble, 2006, p. 11). Fifty years later, Drucker³ was described manager's work through five basic operations; setting objectives, organizing, motivating and communicating, measuring and developing people, (including manager himself).⁴ In addition, (1986, p. 33), Drucker emphasized importance of three management tasks as; (equally important but essentially different), which management has to perform to enable the institution in its charge to function and to make its contribution: a) the specific purpose and mission of the institution (whether business enterprise, hospital, or university); b) making work productive and the worker achieving; c) managing social impacts and social responsibilities. At the end of the twentieth century, Champy defines the following list of managerial functions; mobilizing, enabling, defining, measuring, communicating (Buble, 2006, p.11). Robbins and Coulter (2007, p. 9) have emphasized four basic management functions; planning, organizing, leading and controlling. Weihrich and Koontz (1993, pp. 20-23) outlined five fundamental functions of management; planning, organizing, staffing, leading and controlling. In doing so, they emphasize coordination - not as a separate function, but as the very core, the essence of management with the purpose of achieving harmony between individual efforts and achieving the goals of the group. The five management functions are also cited by Buble (2006, 2006a) and Rupčić (2018). It is worth mentioning that management functions in theory are complemented in a logical order from planning, through organizing and staffing, to leading and controlling, and as such, they are present to a greater or lesser extent at all levels and types of managerial positions. However, in a daily routine, they appear simultaneously and intertwine, which further increases the complexity of the managerial job,

¹ Business Dictionary: *Management*. Retrieved (24.08.2019.) from <http://www.businessdictionary.com/definition/management.html>.

² Hrvatska enciklopedija: *Menadžment*. Leksikografski zavod Miroslav Krleža. Retrieved (24.08.2019.) from <http://www.enciklopedija.hr/Natuknica.aspx?ID=40070>.

³ Peter Drucker, among the first, (after Taylor and Fayol), described management as a distinct function and being a manager as a distinct responsibility. Source: British Library: *Business and Management – Peter Drucker*. Retrieved (24.08.2019.) from <https://www.bl.uk/people/peter-drucker>.

⁴ Drucker, P.F. (1974). *Management: tasks, responsibilities, practices*. New York: Harper and Row. Referenced by British Library: *Business and Management – Peter Drucker*. Retrieved (24.08.2019.) from <https://www.bl.uk/people/peter-drucker>.

and requires from managers to master certain knowledge, techniques, methods and skills in order to successfully perform various tasks.

1.2. Managerial skills

Managers face complex challenges and different tasks daily. Successful work requires certain skills. Managers are expected to continuously learn and develop their managerial skills. Skills mean a set of specific abilities that result from knowledge, information, practice and gifts (Buble, 2006, p.17). Weihrich and Koontz (1994, p. 8) placed emphasis on four basic managerial skills: a) technical skills (the ability and knowledge required to perform specific tasks), b) the ability of working with other people (cooperativeness and the ability to work in teams), c) conceptual skills (the ability to see the bigger picture) and d) problem-solving skills. In the same manner Buble, (2006, 2006a), described managerial skills. Robbins and Coulter (2007, pp. 12-13) referred to a Katz conclusion from the research that managers need three essentials skills; technical, human skills and conceptual skills. They also mentioned survey results from American Management Association which suggest the following skills: conceptual, communication, effectiveness and interpersonal skills. Rupčić also lists three basic types of managerial skills according to Katz (Katz, 1974; referenced by Rupčić 2018, p. 11). She suggests an additional list of desirable managerial skills: counselling (mentoring), networking, communication, listening, presentation, and negotiation skills (Rupčić, 2018, p. 17). These additional skills, and the need for their further expansion, derives from the dynamics and requirements of modern business and the great influence of communication technologies on the life of a modern man (Rupčić, 2018, p. 14). Although the importance of conceptual skills for higher levels of management is indisputable, research conducted on a sample of US companies has found that social or interpersonal skills are the biggest reason for managerial failure to achieve goals (Longenecker, Neubert, & Fink, 2007; referenced by Rupčić, 2018, p. 14).

1.3. Managerial effectiveness

Weihrich and Koontz (1993, p. 10) describe an effective manager, as a situational manager who assesses each approach in the given circumstances and selects one that most effectively and efficiently achieves the goals of the individual and the organization. According to Drucker (2004) effective leaders have some things in common; they get the right things done in the right way following eight simple rules: ask what needs to be done, ask what's right for the enterprise, develop action plans, take responsibility for decisions, take responsibility for communicating, focus on opportunities rather than problems, run productive meetings, think and say »We« not »I«. According to Rupčić, (2016, p. 36), productivity depends on a number of factors, and one of the key factors is the availability of appropriate knowledge and skills. First, the skills needed to perform certain tasks are identified. The types and levels of skills required are compared to the skills that employees have. If discrepancy is identified, it is necessary to invest in employee training and education. Another important factor of productivity is the available technological solutions. Labor productivity can be increased by improving capital equipment, i.e. by investing in the process of automation and mechanization. Technology factor also refers to the availability of appropriate software solutions and applications that can contribute to increasing speed and quality of work. Attention should also be paid to other seemingly less significant aspects of the work. According to recent research, employee happiness and satisfaction can increase productivity by 12% up to 50%. Good mood could be the reason that employees even handle the tasks they are reluctant to do faster and better. Drucker (1967; referenced by Drucker, 1992, pp. 50-53) gave an overview of the role of good interpersonal relationships in an organization. For Drucker, good interpersonal relationships start with a focus on work and tasks, not warm feelings and nice words.

The focus of attention should be on contribution, which in itself addresses the basic requirements for effective interpersonal relationships; communication, teamwork, personal development and the development of others.

2. ICT SECTOR

Sector of Information and Communication Technologies (ICT) has become a crucial factor of the competitive power in the knowledge economy, attracting investments and creating innovation. By generating new technologies applicable to a wide range of other sectors it plays a strategic role in the promotion of growth, innovation and competitiveness across European economies. Impact of ICT industries is crucial for increased productivity and efficiency (Eurostat).⁵ Latest technology trends like Edge computing, 5G, AI, IoT, Cloud, Machine-to-Machine learning are emerging and creating new industry challenges such as workforce revolution. Talent Gap has become real issue for organizations in recruiting and retaining skilled staff. With workforce aging into retirement it has become necessary that human resources change the way they hire people and move away from traditional training programs toward more agile, job-specific and future-ready input. Another solution is more technology-focused and it's based on businesses using latest ICT intelligent systems capable of machine learning and artificial intelligence to simplify operations and in a certain way filling up talent gap. Industry will need to face evident shortage of talent with great effort by developing tailored in-house trainings, bringing different skillsets and prioritizing critical thinking. All this can bring resistance from employees that want to avoid incoming disruptive changes emerging in ICT industry. Key success factor will be proactive leadership, flexible management and effective communication to implement necessary processes and maintain employee and customer trust.⁶ The ICT sector is important for Europe⁷ because of its strategic role and the growth and employment potential in the sector itself, but also because opportunities that a dynamic and energetic ICT industry bring to other business sectors, the public sector, and to consumers. In the digital economy, access to the Internet and recruitment of individuals with skills for utilizing technologies are becoming crucial (European Commission, 2015, pp. 7-14).

3. RESEARCH

Research on employees' perceptions of the effectiveness of managerial communication was conducted for the purpose of preparing a final paper (Buljat, 2018). The survey was conducted among employees of a selected organization in the ICT sector from January 2 to January 15, 2018. The starting point of the research was that effective managerial communication contributes to employee satisfaction, loyalty and improves work performance. An organization from the ICT sector operating globally was selected for the study, but only employees from a local subsidiary, which by number of employees belong to a medium-sized organization, participated in the survey.

3.1. Methodology

Quantitative research was conducted using the CAWI Research Method (Computer Aided Web Interviewing). The questionnaire was distributed via Intranet to 200 e-mail addresses of employees in the selected ICT company, in the form of an e-mail invitation to participate and a

⁵ Eurostat. *ICT Sector. Eurostat Metadata. Statistical Presentation*. European Union, Retrieved (28.09.2019.) from https://ec.europa.eu/eurostat/cache/metadata/en/isoc_se_esms.htm.

⁶ Vertiv. *EMEA. News and Insights*. Retrieved (30.09.2019.) from <https://www.vertiv.com/en-emea/about/news-and-insights/articles/blog-posts/how-i-did-my-bit-unintentionally-to-tackle-the-data-centre-skills-crisis/>

⁷ European Commission (2015). *Monitoring the Digital Economy & Society 2016 – 2021*. Retrieved (29.09.2019.) from

<https://ec.europa.eu/eurostat/documents/341889/725524/Monitoring+the+Digital+Economy+%26+Society+2016-2021/7df02d85-698a-4a87-a6b1-7994df7fbeb7>

link to the questionnaire. 101 employees filled in the questionnaire, giving a 50.5% return rate. The questionnaire consisted of 20 questions, with only the most important results below. Of the 101 employees who participated in the survey, 71% were male and 29% were female. By age structure, the majority of respondents, 59%, were aged 30-39 years, 22% of respondents aged 40-49 years, 9% of respondents aged 18 to 29 years, and 10% of respondents aged 50 and more years. According to the educational structure, 91% of respondents have completed higher education, and 9% of respondents have secondary vocational education.

3.2. Research results

In order to make it easier for the respondents to respond and later interpret the results of the questionnaire, questions were classified into four main areas; 1) managerial accessibility and impact on the work environment, 2) managerial competencies, 3) managerial personality and 4) managerial communication. The results of the research on accessibility and managerial communication are outlined below. The availability of managers is an important factor in establishing successful two-way communication, gaining information, and building trust and quality relationships between employees and managers. In large companies, the concept of "open door policy" or the method of open door office is often practiced because this way the manager demonstrates openness and accessibility.

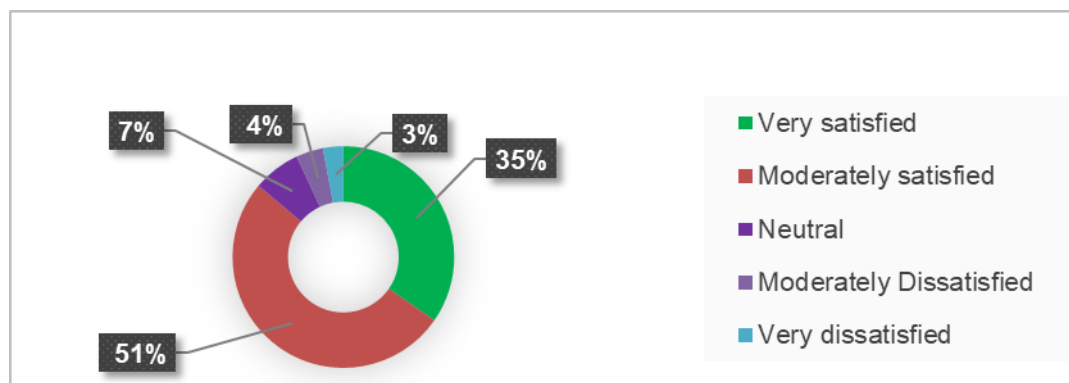


Chart 1: Respondents' satisfaction with the availability of managers (Buljat, 2018, p. 27)

According to the respondents' answers, 86% were satisfied with the availability of managers, 7% were neutral and the remaining 7% were dissatisfied with the availability of managers (Chart 1). Furthermore, one of the important components of effective communication is the creation of a comfortable working environment (Chart 2).

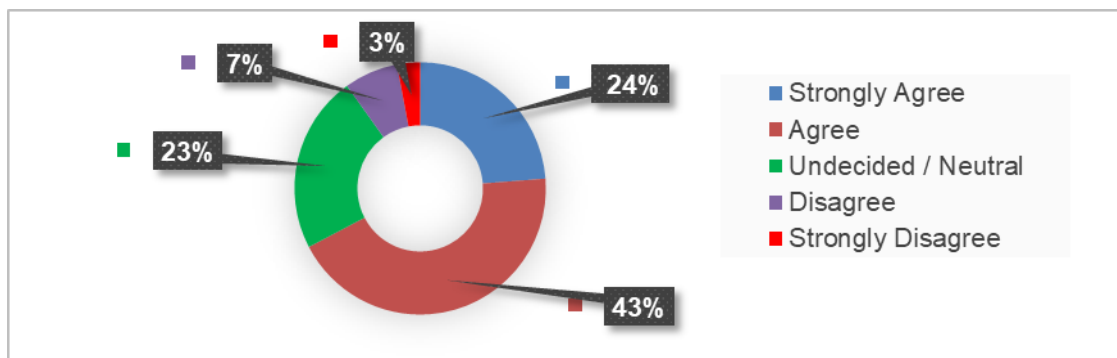
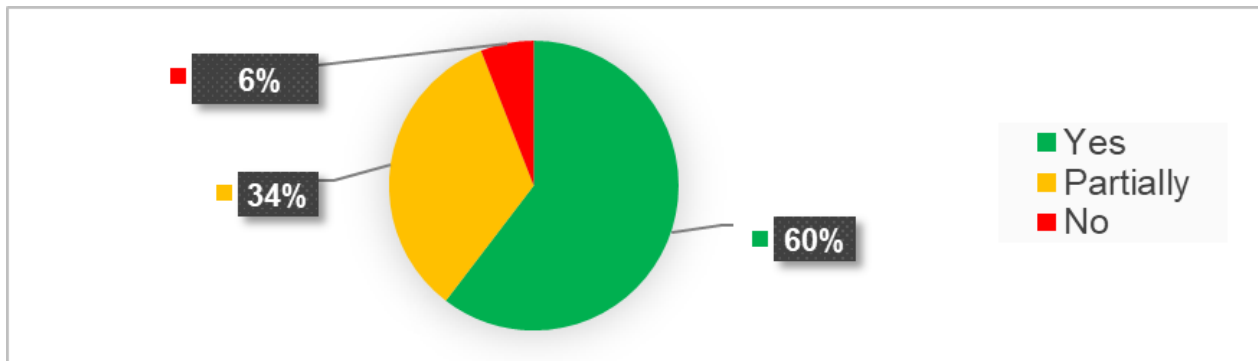


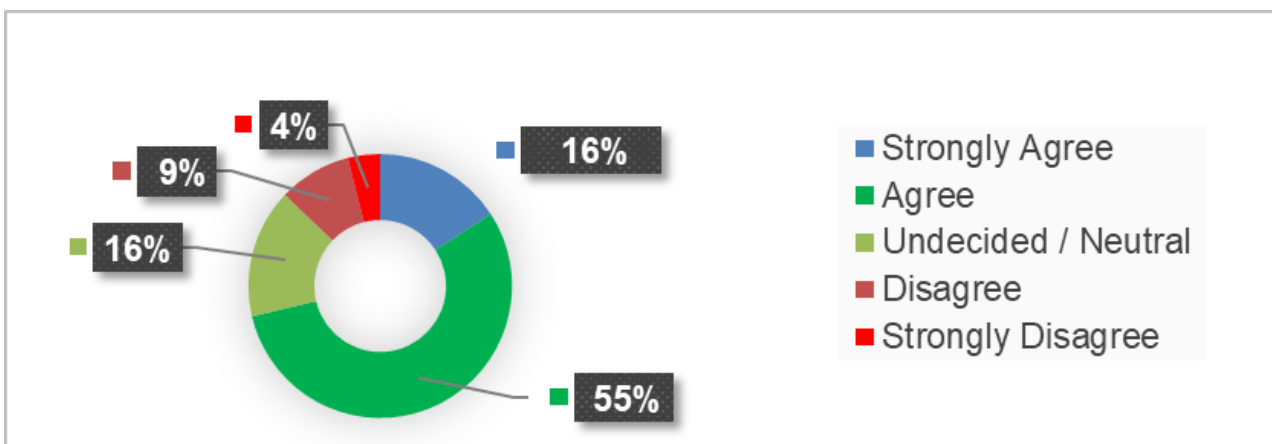
Chart 2: Managers' contribution to creating a comfortable work environment (Buljat, 2018, p. 27)

67% of the respondents believe that their manager has the ability to create a comfortable working environment, 23% have no established attitude, and 10% of the respondents believe that the manager does not contribute to creating a comfortable working environment. A comfortable work environment is thought to facilitate internal, especially two-way communication, and managers should therefore pay attention to creating a supportive work environment for employees. Respondents' opinions about obtaining the appropriate information needed to perform their workplace tasks are presented in Chart 3.



*Chart 3: The manager provides all the necessary information to the employees
(Buljat, 2018, p. 33)*

60% of the respondents stated that they received the necessary information from the manager about what he or she was expected to do in the workplace, while one third of the respondents said that they had partial information about the expectations of their superiors in connection with the performance of certain tasks. The respondents' assessment of how much the manager motivates and encourages them to develop is presented in Chart 4.



*Chart 4: Manager often motivates employees and encourages their development
(Buljat, 2018, p. 32)*

A successful manager needs to know how to motivate employees and encourage them to develop further. Motivation in the form of praise for a job well done gives employees a sense of value and boosts their confidence. From the presented results, it is evident that 48% of the respondents think that the manager often motivates and encourages them to professional development, while 41% of the respondents think that the manager only motivates them sometimes, and 11% think that their managers almost never motivate them. Respondents' answers to the frequency of managerial feedback are presented in Chart 5.

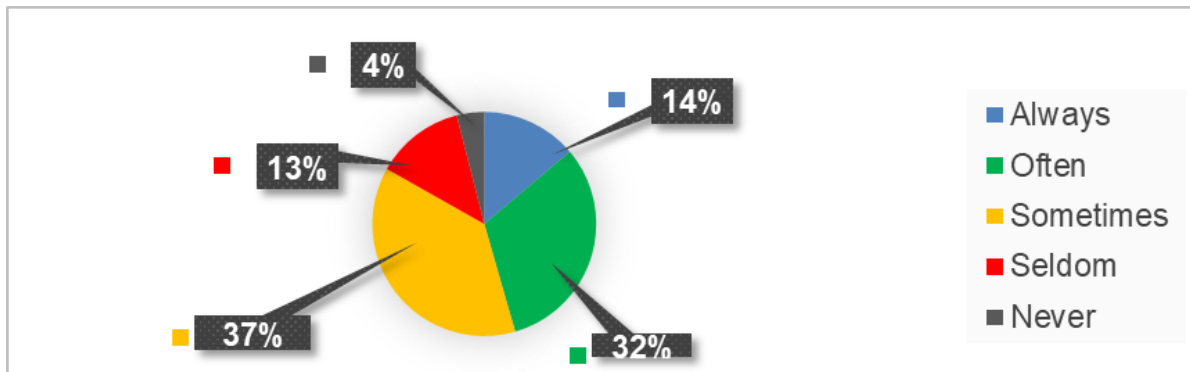


Chart 5: Managers and providing feedback (Buljat, 2018, p .34)

According to the survey, 46% of the respondents think they get enough feedback about their contributions and work, 37% of the respondents say they only get feedback from managers sometimes, and 17% of the respondents say they almost never get feedback about their work from their managers. Given that the research was conducted in a selected company from the ICT sector, providing feedback to employees is one of the priorities in improving managerial communication. The perception of the employees on how clearly managers communicate the values and goals of the organization is presented in Chart 6.

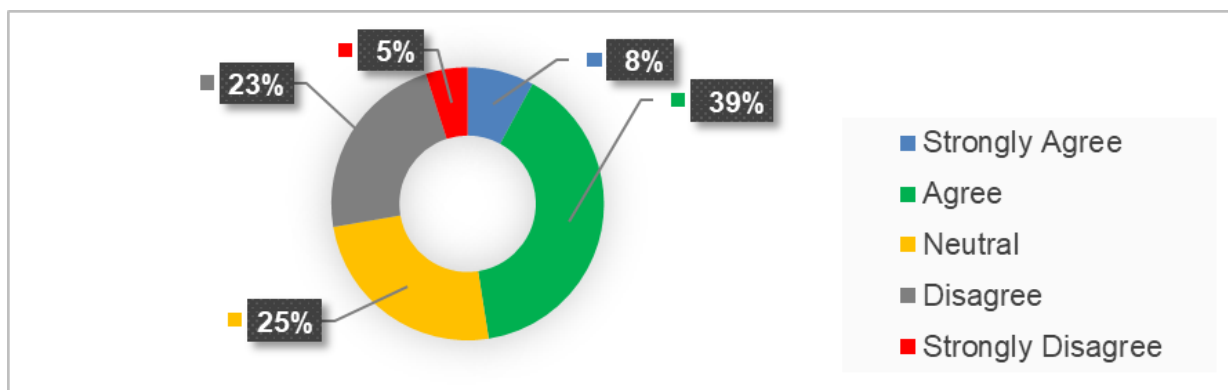


Chart 6: Management communicates clearly organizational values and goals
 (Buljat, 2018, p. 34)

One of the basic tasks of managers in every organization is to clearly communicate and demonstrate organizational values and goals. Communicating organizational goals and values is an important element in the construction and development of organizational culture, as well as the identification and sense of belonging among employees. Employees who are unfamiliar with the organization's values, goals, and culture may deliver poorer customer service and, consequently, cause customer dissatisfaction with the organization for failing to deliver the expected value. 48% of the respondents stated that their managers clearly communicate organizational values and goals, 25% could not express themselves, and as many as 28% of respondents said that their managers do not clearly communicate organizational values and goals. The impact of communication quality with superiors on employees' desire to remain in the organization is shown in Chart 7.

Chart following on the next page

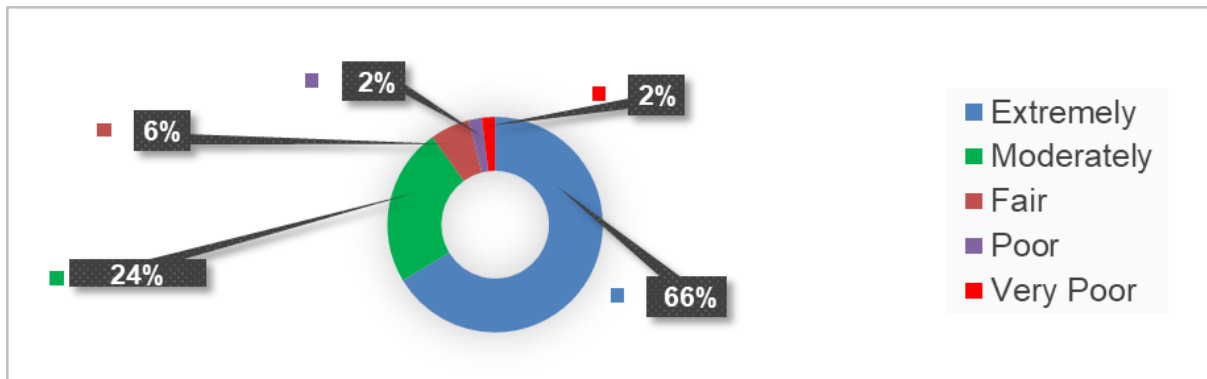


Chart 7: Influence of the quality of managerial communication on employees desire to remain in the organization (Buljat, 2018, p. 36)

The results of the survey indicate that a large number of employees consider good communication with the manager important for staying in the organization. As many as 66% of respondents rate the quality of communication with the manager as very important, 24% of respondents consider it moderately important, while only 10% of respondents say it has little or no influence.

3.3. Discussion

Successful implementation of the strategy and other plans requires the establishment of quality two-way communication within the organization. It is the responsibility of managers to create a good organizational climate, work environment and establish open communication with employees as a prerequisite for building relationships based on mutual trust and respect. The results of the survey indicate that part of managers do not pay sufficient attention to effective communication with the employees. The majority of the respondents think that managers are available when they need them (86%), while only 60% of the respondents think that they get enough information from managers needed to perform their jobs, 46% of respondents think that they get enough feedback on their contribution and work, and 48% of respondents believe that their responsible managers clearly communicate organizational values and goals. Less than half of the respondents (48%) believe that the manager is continuously motivating and encouraging them for professional development. 66% of respondents rate quality communication with a manager important for staying in the organization.

4. CONSLUTION

Given the projected shortage of skilled workforce in the ICT industry in the near future, managers and HR departments face the challenge of retaining quality employees, enhancing their satisfaction on the one hand, as well as devising specific development programs and hiring potential new employees on the other. In the ICT sector, internal and external communications are gaining importance because of their contribution to the effective and efficient fulfillment of customers' needs, and the raising of customers' satisfaction. Roots of customer satisfaction is now more than ever connected with employees' satisfaction. In order to improve the effectiveness of managerial communication, employees' perception should be taken into account. Based on the results of the conducted research, it can be concluded that effective managerial communication is an important factor in achieving employee effectiveness, their satisfaction and motivation, and also influences the employee's decision to remain with their existing employer. Furthermore, clear communication of organizational values and goals is a prerequisite for creating a good organizational climate, which facilitates the achievement of internal and external organizational goals and business success. Therefore, it is a recommendation for organizations operating in a changing and highly competitive business

environment to invest in improvement of managerial competencies, with an emphasis on communicational skills. Without developed communicational skills, a manager cannot be an active leader, who motivates, gives vision and a sense of meaning and belonging to employees in the organization. Developed and effective managerial communication reduces dissatisfaction and information overload of employees, and enable managers to keep track on the development of people and the achievement of business goals, as the main organizational priorities.

LITERATURE:

1. Buble, M. (2006). *Menadžment*. Split: Ekonomski fakultet.
2. Buble, M. (2006a). *Osnove menadžmenta*. Zagreb: Sinergija.
3. Buljat, K. (2018). *Analiza percepcije zaposlenika o učinkovitosti menadžerske komunikacije na primjeru odabrane organizacije*. Zagreb: Veleučilište Vern'.
4. Business Dictionary: *Management*. Retrieved (24.08.2019.) from: <http://www.businessdictionary.com/definition/management.html>
5. British Library: *Business and Management – Peter Drucker*. Retrieved (24.08.2019.) from: <https://www.bl.uk/people/peter-drucker>.
6. Drucker, P.F. (1986). *Management: tasks, responsibilities, practices*. New York: Truman Talley Books, E.P. Dutton. Retrieved (05.09.2019.) from: <http://markethinkzone.com/wp-content/uploads/2013/06/Management-Tasks-Responsibilities-Practices-by-Peter-Drucker.pdf>
7. Drucker, P.F. (1992). *Efikasan direktor*. Zagreb: Privredni vjesnik.
8. Drucker, P.F. (2004). What Makes an Effective Executive? *HBR's 10 Must Read – On Leadership* – 2011, reprinted. Boston: Harvard Business Review Press. Retrieved (12.09.2019.) from: <https://exec-leadershipllc.com/wp-content/uploads/2012/12/HBR-10-Must-Reads-on-Leadership.pdf>
9. Eurostat. *ICT Sector. Eurostat Metadata. Statistical Presentation*. European Union, Retrieved (28.09.2019.) from: https://ec.europa.eu/eurostat/cache/metadata/en/isoc_se_esms.htm.
10. European Commission (2015). *Monitoring the Digital Economy & Society 2016 – 2021*. Retrieved (29.09.2019.) from: <https://ec.europa.eu/eurostat/documents/341889/725524/Monitoring+the+Digital+Economy+%26+Society+2016-2021/7df02d85-698a-4a87-a6b1-7994df7fbeb7>
11. Hrvatska enciklopedija: *Menadžment*. Leksikografski zavod Miroslav Krleža. Retrieved (24.08.2019.) from <http://www.enciklopedija.hr/Natuknica.aspx?ID=40070>.
12. Robbins, S.P., Coulter, M. (2007). *Management* 9th ed. New Jersey: Pearson Education Inc.
13. Rupčić, N. (2018). *Suvremeni menadžment – teorija i praksa*. Rijeka: Ekonomski fakultet.
14. Rupčić, N. (2016). How to increase productivity? *Poslovni savjetnik*, 12 (2016), 6; 36-36. Retrieved (24.08.2019.) from <https://www.bib.irb.hr/817842?&rad=817842>.
15. Vertiv. *EMEA. News and Insights*. Retrieved (30.09.2019.) from: <https://www.vertiv.com/en-emea/about/news-and-insights/articles/blog-posts/how-i-did-my-bit-unintentionally-to-tackle-the-data-centre-skills-crisis/>
16. Weihrich, H., Koontz, H. (1994). *Menadžment* – 10th. ed. Zagreb: Mate.

THE CITY AS THE LEADER OF SUSTAINABLE DEVELOPMENT

Jerko Glavas

*Associate Professor at Faculty of Economics in Osijek,
Josip Juraj Strossmayer University of Osijek, Republic of Croatia
jerko.glavas@efos.hr*

ABSTRACT

Urban economy focuses on promoting urban strategies and city policies that help the cities to understand their potentials and ways of achievement. Cities are places in which people live and gather in order to negotiate jobs, buy and sell, share information, etc. They are the initiators of economic development, wealth, and job creation. In addition to the foregoing, cities are the leaders of sustainable development. The goal of sustainable development is to maintain and enhance natural wealth and beauty of the environment in which people live. This concept advocates a more even and rational use of resources today, in order to keep the quality of life at the level at which it is today, or even better. Along with sustainable development, the development of cities and the whole society is encouraged, not by the cost of environmental destruction, but through the promotion of sustainable development that will preserve its environment and contribute to its development. Cities encourage their people, through the practice of sustainable development of life, by breaking down and separating waste, recycling and participating in projects and activities aimed at improving the environment. A large number of cities in the world practice sustainable development and thus contribute to the development of society through environmental care. The city of Rijeka was among the first cities in Croatia to engage in sustainable development. During the last ten years it has encouraged all those interested, through various activities, projects, workshops and events, to learn about the day-to-day importance of caring for the environment and to practice it. This paper attempts, through an online survey and targeted questions, to understand the perception of young people about the concept of a sustainable city and the city as the leader of basic activities.

Keywords: *city, development, environment, sustainable development, perception*

1. INTRODUCTORY CONSIDERATIONS

The world is driven by changes. More specifically, by people who have influence on the development of their environment through learning, conducting researches and organizing events. Through their actions, humans primarily have influence on each other and the environment. Through the years, the concept of sustainable development has evolved. Sustainable development seeks to strike a balance between the usage, saving and renewal of the resources that people have today, all with the goal to ensure that future generations have the same resources at their disposal. Cities are leaders of sustainable development. These are places in which supply and demand meet, businesses is done, manufacturing facilities are opened, and training and various facilities are offered. Sustainable development has an impact on various segments of people's lives- education, business, food consumption. By practicing sustainable urban development and ecology, economics and culture is effected. In order to prosper and develop, it is important to invest in the development of cities, not only for the authorities but also for the residents themselves who should come together and contribute jointly to the development of the environment in which they live and work. Through sustainable development, cities are raising awareness and encouraging their residents to think about what society, cities and the environment will look like in the future. Therefore, they are today guiding their residents to act more responsibly and live in harmony with their environment.

2. METHODOLOGY

The topic of this paper is the city as a leader of sustainable development. The city of Rijeka was chosen as an example of a city that has been applying the concept of sustainable work for years. The scientific methods used in this paper were primarily: a synthesis method that explained the connection of cities and sustainable development, and an analysis method that demonstrated the impact and the influence of sustainable development. It is also necessary to point out the survey method (online) as a scientific method that attempts to confirm / refute the claims made in this paper.

3. URBAN ECONOMY AS A PHENOMENON – LITERATURE OVERVIEW

The urban economy is focused on promoting urban strategies and policies that help cities to understand their potential. Cities are drivers of economic development, wealth and job creation. Therefore, they should develop and improve. Although urban economy and urban economics are different concepts, they are often mixed and used in the wrong context. "Urban economy is the real economy of a society and its structure, and urban economics is a scientific economic discipline that studies the urban economy and its laws" (Šimunović, 2007: 16). The urban economy focuses the overall economy of a society, ie the strategies, policies and structure of a society, while urban economics analyses and studies the urban economy, i.e., urban areas. "Urban economics is a branch of spatial economics that deals with the spatial and economic sights of a city and the contribution of its spaces to the successful development of the city and its economy in the narrower and broader meaning of the term" (Šimunović, 2007: 17). Urban economics analyses problems of urban areas such as crimes and violations, education system, public transport, accommodation and city management. "The basic object of urban economics is accommodation, that is, the choice of location for businesses and households in the city. Other economic disciplines neglect this problem. From a spatial point of view, urban economics answers the question where to place business and other activities within a city, where to place households, ie where to live and where to work" (Šimunović, 2007: 17). The main task of urban economics is to study the city-its location and opportunities. All this for the purpose of planning and choosing the right place for certain objects in the city area. This branch of the economy is important because it makes sense to choose the locations for doing the best businesses in which the residents will built their homes. "Urban economics mainly refers to two important choices of location, namely the choice of the most suitable location for activities and the choice of the most suitable location for household placement, that is giving the answers where to work and live" (Šimunović, 2007: 17). The most important choices that people make throughout their lives are their settlements. Different things are important to people when choosing a place of residence, that is, a place to build their homes. For some, it's important to be close to work, to others close to parks, shops, schools, kindergartens, etc. When choosing business places, it's important to be reachable to customers for achieving optimum results at low cost of space use. From all of the above, the importance of urban economics in a society is evident. It helps and facilitates accommodation and maximizes the use of space in a city. Depending on the area in which they live, residents of a country can be roughly classified as living in a city or village. "The city as a whole and in its parts gradually, over decades, centuries and even longer units of time, changes, develops, grows or shrinks, builds and demolishes, presenting with its structure construction, but also destruction. Therefore, the main characteristic of the city is "temporality", long duration, constant change of individual ambiances of the whole city and the wider urban area"(Čaldarović and Šarinić, 2017: 13). Over the years, it has been evident that some cities are developing, stagnating or shrinking. Various reasons influence on the development or absence of the cities: population, educational institutions, conservation and exploitation of landmarks and natural resources, levels of investment in development and innovation.

"A city, whether large or small, basically denotes a specific geographical area with a high population density in a relatively small area" (Šimunović, 2007: 18). Cities are places where sellers and buyers gather, develop industries, start businesses and realize projects. These are places full of various possibilities and are therefore attractive to people to settle. "Cities are always a combination of the standard, the usual, which is left to the annoying everyday life of the widest possible population, and the special that stands out in terms of dimensions (churches, palaces, bridges, and more recently skyscrapers), materials (exclusive, ordinary) and location (exclusive, ordinary) " (") (Čaldarović and Šarinić, 2017: 11). In order to prosper and develop, it is important, not only for the authorities, to invest in the development of cities, but also for the residents themselves to come together and contribute jointly to the development of the environment in which they live and work. "The city is not permanent recognized on several known symbols - it changes, supplements, upgrades and dissolves; some are forgotten and are to be replaced by new ones that will also be forgotten after a while and less" characteristic "and refreshed by something new" (Čaldarović and Šarinić, 2017: 13). One way which could contribute to the city's development is to invest in the promotion of existing amenities and sights, as well as to invest in the development of new amenities that will attract both new visitors and new residents. "The city space can be divided into "organised" and "not organised" parts (parts, neighbourhoods). There are also "city spaces in between" that are mostly undefined, neglected, in the gap between order and clutter. Implicitly and explicitly some parts (for years) have been designated for "demolition" (reconstruction) and represent "mockery" and "noncity", they are not "proper" and it is necessary just to remove and replace them with images of the city that are perceived as genuine "urban" environments, "normality", "expectedness" (Čaldarović and Šarinić, 2017: 21). No city in the world is "perfect. Each city has its own arranged and less arranged space. Both contribute to the city's "charm" and ultimately make the city unique. Is important to promote and to exploit better parts of the cities, as well as to develop and improve parts of the city that are less regulated.

4. THE CITY AS THE LEADER OF SUSTAINABLE DEVELOPMENT

Urban residents are the initiators of development and change. Cities as a whole (including industries, businesses, residents) are the drivers and agents of change in countries, which ultimately means that they are also the drivers of the development of society and the world as a whole. The society and world needs development and progress. Any innovation and new technological invention is welcome as it changes people's lifestyles for the better. Development gives people new opportunities and broadens people's perspectives. "Development means economic growth, and sustainability refers to living, working, producing and consuming within ecological boundaries but at the same time guaranteeing continued economic growth as a way of combating poverty, disease and other difficulties" (Blewitt, 2017: 62). Changes that are happening in society and in the world drive development and progress. As we progress, everyone needs to be aware that everything done today has an impact on everything that will happen in the future. That is why people should keep in mind that everything done today will have an impact on the future. To put simply-people are shaping the future with their actions and decisions. Sustainability as a concept goes back to the last century. "The idea of sustainable urban development conceived in the 1990s, embraced sustainability as a new ethical-ecological term or a new philosophy of development viewed in a historical context, as well as being general and common, international, national, global and local in its political meaning" (Šimunović, 2007: 171). According to Blewitt (2017), sustainable development "has a long history of taking care about our Earth and preserving it under conditions in which humans are constantly exploiting it to improve their lives." Concern for the well-being of the Earth has always existed, but it only became relevant a few decades ago. People have realized that if they continue to do as they did, they will endanger the natural resources of the Earth, which means

that there will be great pollution and scarcity of natural resources in the future. If it cannot be avoided it should happen as late as possible. "Sustainable development requires learning and willingness of all to engage in dialogue with each other in order to find a way to achieve a better world for every creature on this planet" (Blewitt, 2017: 62). In order to fully implement sustainable development as a concept, all the inhabitants of the Earth should be involved in its realization. Otherwise, sustainable development makes no sense. If some struggle and invest in achieving a better world and others live as if they do not care about the future- nothing will be achieved. That is why it is important for all people to come together and work together to create a positive and optimistic future for our planet. "Sustainable development as a project and a long-term process, an almost general development landmark, disappointed on the one hand the professional, political and general public, because it didn't immediately prove operational and fruitful. On the other hand, it survives as almost the only coherent planetary concept for a balanced development in the future" (LAY, 2007: 1033). Every beginning is difficult. The beginning of the concept of sustainable development was difficult too, but over time people came to the conclusion that participating in the implementation of plans related to sustainable development would greatly contribute to their present and future way of life. "The World Commission defined sustainable development as a development that meets the needs of the present without compromising the ability to meet the needs of future generations" (Šimunović, 2007: 171). The goal of sustainable development is to maintain and enhance the natural resources and the environment in which people live. This concept is committed to a more even and rational use of resources today in order to keep the quality of life in the future at the level it is today or even better. "Sustainable development is actually the maintenance and enhancement of environmental wealth or, to put it another way, the paradigm according to which consumption in the present should not significantly reduce the benefits for consumption and quality of life in the future" (Šimunović, 2007: 171-172). In addition to sustainable development, the development of cities and the entire society is encouraged, but not at the cost of destroying the environment, but through promoting sustainable development, preserving the environment and contributing to its development. According to Jambrović (2011), "the primary objective of sustainable development is to reconcile the needs of society (equality, socialization, security, freedom...) and the economy (industry, jobs, agriculture, trade...) without harming the environment (clean air, water and soil, flora and fauna, ecosystems ...) and to preserve its natural values for future generations." Sustainable development has an impact on various segments of people's lives, from education, to business and consuming food. Through the practice of sustainable urban development it affects primarily ecology, economics and culture. "Long-term social changes towards a greater level of sustainability in the reproduction of society are changes on the levels of values, goals, interests, knowledge, ideas, skills, skills and new practices in the coming years and decades. These changes will achieve:

- a) ecological: a new dynamic balance between material growth and the natural basis of life;
- b) economic: increase of material goods and services and realization of assumptions for improving the quality of life of (all) people, but provided that such promotion does not endanger the health and survival of people and the living world, ie the quality of air, water, soil and the biosphere;
- c) sociocultural: a systematic renewal of identity, but also of appropriate humanity, simply of the humanity of the social milieu and the culture in which we live." (LAY, 2007: 1034)

Given the climate crises that the world has been facing for years, it is evident that sustainable development is more needed by society today than ever before. "Effective sustainable development presupposes - and will even more so as the ecological and global climate crisis worsens - a conscious and planned leadership towards a specific long-term ecologically / economically / socio-culturally sustainable goal, that is, a new situation.

The social actor of this and such leadership can only be a factor aware of the importance of knowledge about sustainable development solutions, equipped and firm, persistent and innovative in behavior" (LAY, 2007: 1043-1044). By using sustainable development and without endangering future generations it is the goal to achieve the basic needs for all living beings and to ensure the same living conditions regardless of their country of residence. "Sustainable development is about protecting and preserving the natural environment of the planet and promoting social justice and economic equality within and between states" (Blewitt, 2017: 34). It is important to raise awareness and encourage people to think about what the society, cities and environment will look like in the future, which will be the reason to act more responsibly and live in harmony with their environment.

5. THE ROLE OF THE CITY AS A LEADER OF SUSTAINABLE DEVELOPMENT

A society and areas people live in developed simultaneously. People also changed the perception of their living space. People needed to take care of the environment in which they spend their time on a daily basis, more precisely the need to live and act in harmony with nature. Over the years, people have paid great attention to ecology and environmental protection. They realized that the pace of life they were practicing and the way they performed their daily activities had no good influence on the nature, so they decided to make some changes. "Urban areas, cities and parts of cities are spatial and social entities that are gradually changing with incremental "additions"(Čaldarović and Šarinić, 2017: 13). The development of cities is influenced by new technologies, new markets, flows of financial capital, and new business development. "The emergence of a global city, the change in its spatial scope, the sprawl but also the spill-over of some cities, the emergence of megacities or megapolis and ever-increasing urbanized areas, and the terrifying dimensions of certain urban areas all support the need for a critical reflection on the functions and future of the global city" (Čaldarović and Šarinić, 2017: 16). Thanks to the technological and information advancement of society, there has also been progress in cities. Today, there are global cities that offer numerous opportunities for development, learning and living. "The city gathers industrial activities, together with city-regional and international trade, offering certain products, savings, investments, technology and many ideas that are national and international" (Šimunović, 2007: 172). The peculiarity and charm of cities lies in the fact that they are places in which a large number of people meet, who through mutual interaction negotiate jobs, sell and buy goods and services, decide to invest in projects and / or companies, develop new technologies. "Cities are competing in attracting new features and content that will enable further development" (Pegan and Jukić, 2001: 50). It is logical to conclude that cities are competing with each other and that in order to attract new residents and investors, they need to work on their own environmentally friendly development. "Environmental changes are the result of the way we live and use space. These changes have become so great and worrying that it is our obligation to participate in addressing and preventing the cause of their occurrence. All users of space - those who plan to use it, those who design it and those who use it - must become aware of environmental responsibility"(Pegan and Jukić, 2001: 53). If cities want to be the leaders of sustainability they need to develop environmental and political processes and connect with other cities, villages and rural areas to be sustainable. In this way, they will be able to develop and contribute to the sustainable development of countries. "Development must be synonymous with fundamental and key freedoms, including those relating to:

- political expression, dialogue and organization
- economic and income sufficiency
- social opportunities, eg health or education
- transparency and openness in government and social interactions
- security understood in terms of well-being, sufficient food and jobs"(Blewitt, 2017: 59)

For a sustainable development of cities, it is necessary to be focused on the well-being of all residents and to improve the environment in which the inhabitants of the city live. Cities are encouraged to open new manufacturing facilities and companies and invest in education. Through the activities listed above, it is important that all activities undertaken by people are in harmony with nature and the environment because this is the only way in which sustainable development will produce successful results. Through practicing sustainable living development, cities encourage their residents to decompose and separate waste, recycle and participate in projects aimed at improving the environment.

6. THE CITY OF RIJEKA - THE CARRIER OF SUSTAINABLE DEVELOPMENT

There is a large number of cities in Croatia that are driven by applying sustainable development. Among the most prominent cities is Rijeka. Rijeka was among the first European cities to sign the Covenant of Mayors in 2009, thus taking the Sustainable Development Initiative. From that moment on, Rijeka began to pay special attention to activities that take place in the city are in harmony with the environment. The main goals of sustainable development and environmental priorities of the City of Rijeka are described in the main documents of the Spatial Planning (Spatial Plan of the City of Rijeka and the General Urban Plan):

- ensure the sustainable use of natural resources for the benefit of present and future generations, without significantly damaging parts of nature and minimizing the balance of its components
- achieve the first category of air quality
- provide sufficient quantities of clean drinking water for primary use and other water of such quality, including the sea, to ensure the unhindered use of water for authorized purposes
- achieve that state of space in which the population will not suffer from the effects of excessive noise, especially those that interfere with sleep
- ensure that municipal waste management measures are implemented, using a central zone for (joint) treatment, storage and permanent disposal of municipal and non-hazardous technological waste, with space being provided in the city area and construction of buildings for separate collection, transportation and primary recycling of municipal waste.
- to ensure the most favourable conditions for the preservation and free development of the natural environment
- establish an integrated environmental management system. "(Source: <https://www.rijeka.hr/teme-za-gradane/stanovanje-i-gradnja/energetska-ucinkovitost-zastita-okolisa/>)

Over the past few years, various activities have been held in Rijeka, numerous projects have been supported and a large number of interactions with the citizens of all ages have been carried out with the purpose to promote care and protection of the nature in which they live.

Some of the projects and activities held over the past few years in Rijeka are:

- action "Give a tree to the city - Golden people plant"
- a performance of "Arrivals of the President, Let's Clean the Theater!" and cleaning the Theater Park
- workshop "Ecological footprint in Rijeka Urban Garden"
- "Rijeka Green Week" - an event that takes place every year
- Volunteer action for decorating the square and painting the stairs on Sušak
- Action to clean the Rječina river "Don't be bad-throw in the basket"

The above are just some of the projects and activities that have been implemented over the years as a part the sustainable development promotion of the City of Rijeka. These are all projects and activities involving people of all ages, all with the aim of awakening awareness.

7. RESEARCH ON THE PERCEPTION OF A SUSTAINABLE CITY

According to a survey conducted on a sample of 174 respondents during May - April 2019, an online survey shows the awareness and importance of certain urban components for the functioning of the city, the national economy and thus the sustainable development. The study involved 100 male and 74 female persons.

GENDER

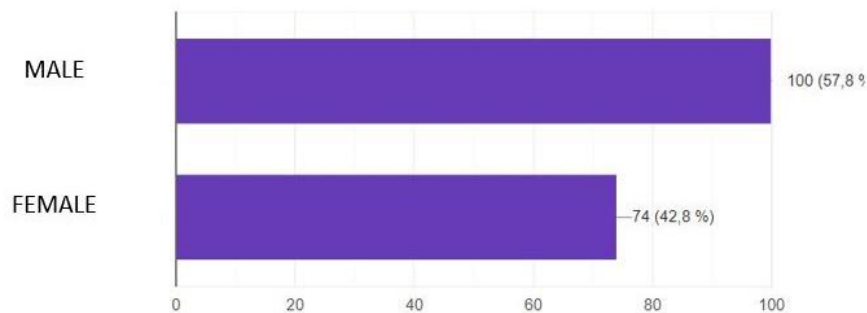


Figure 1: The study - Gender

By age, the structure is very clear as stated in the description of the research. The largest part of the sample consists of young people aged 18 - 25 (92.5%).

AGE

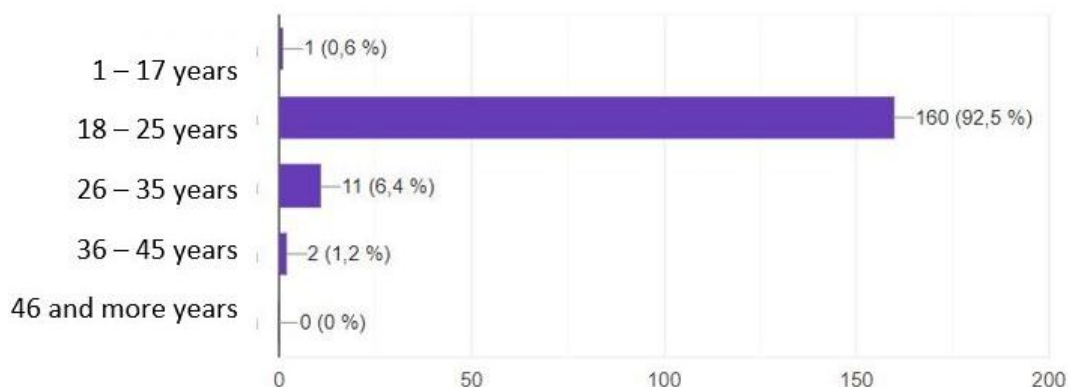


Figure 2: The study - Age

In their own assessment of the satisfaction of the environment in which the respondents live, it is evident that more than half of the respondents are very satisfied or absolutely satisfied with the environment in which they live, while the number of respondents who are undecided is still alarming. A little less than 10% of respondents were dissatisfied.

Figure following on the next page

173 respondents

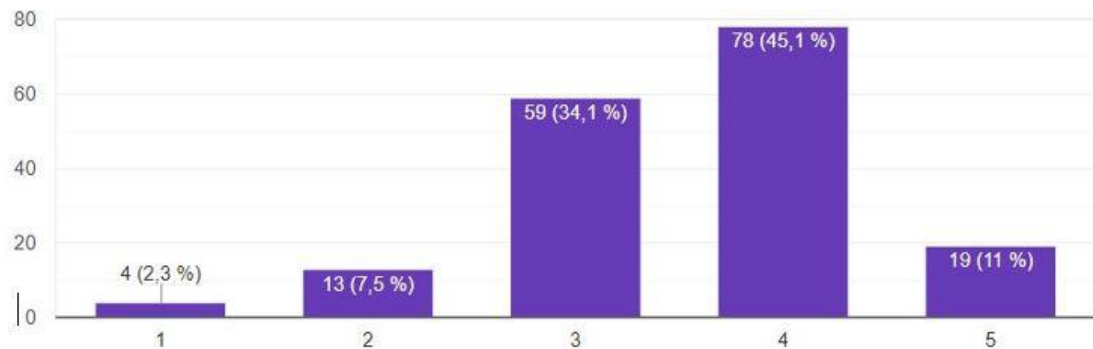


Figure 3: Satisfaction with the environment in which the respondents live

Talking about the general appearance of the environment in which they live, the situation is similar to the question of general satisfaction with the environment in which the respondents live. There is only a slightly higher dissatisfaction with the overall appearance of streets and buildings (16.2% overall).

173 respondents

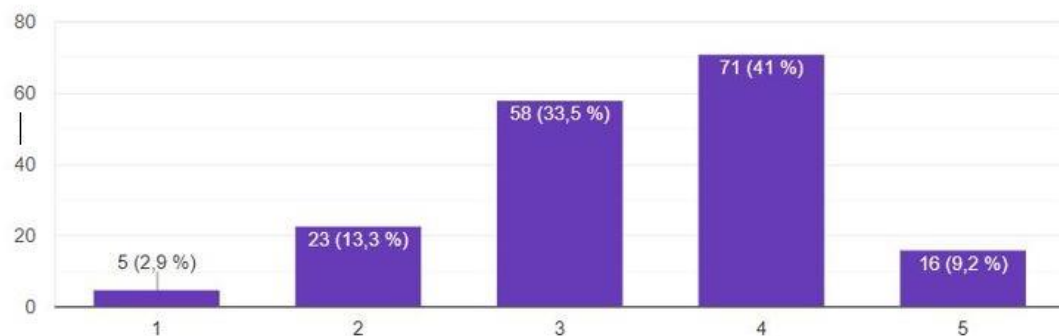


Figure 4: Main look of the streets and buildings – percentage of satisfaction

One of the main prerequisites for living in a particular environment is, of course, employment. As this part of the online survey was conducted in the area of Osijek - Baranja County (as part of eastern Croatia), it is evident that almost half of the respondents believe that no place of employment can be found in the place of residence and 38.2% of the respondents are not sure about this claim. It is a worrying piece of information about young people's perceptions of one of the most important components of urban and sustainable development of the city or environment in which the respondents live.

Figure following on the next page

173 respondents

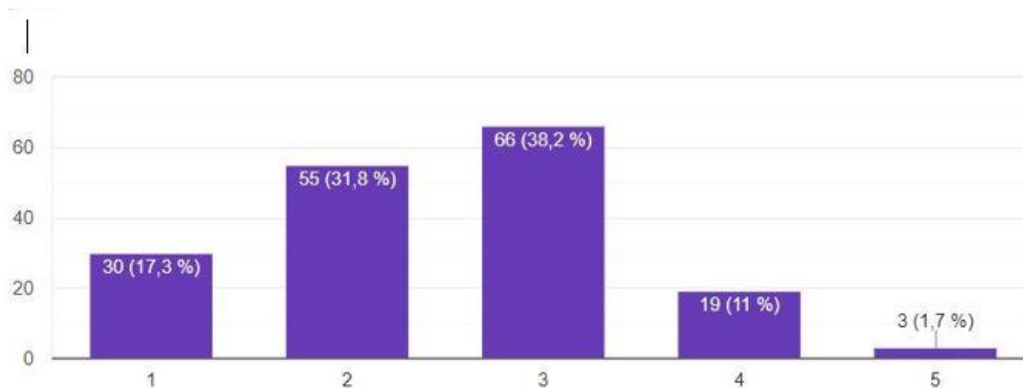


Figure 5: Finding job in town – without problems

The survey also shows that the environments from which the respondents come are ascending multicultural awareness and that foreigners and minorities are welcome.

173 respondents

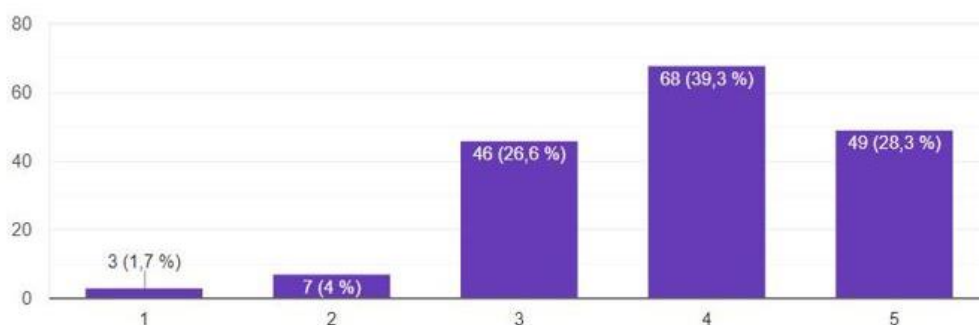


Figure 6: Opinion about foreigners and minorities

The quality of life and the condition for sustainable development also implies satisfactory water and air quality. Respondents consider in their own experience that the air quality is very good or excellent, while only 11.5% think that the air quality is not satisfactory.

173 respondents

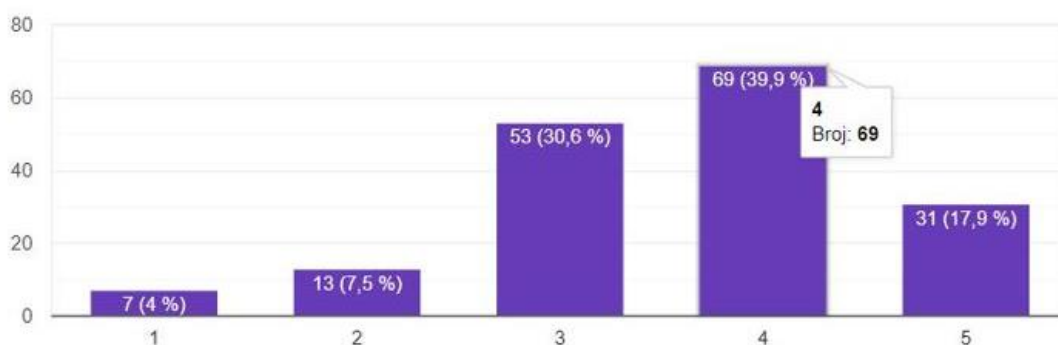


Figure 7: Air quality is on the high level

The combination of basic and other conditions can lead to a "formula" for the urban development of a particular environment and encourage the trend of economic and sustainable development.

8. DISCUSSION

The progress of the world, as well as the progress of society, is not possible without the personal progress of people who initiate and bring about change. Through actions and words people influence on the world today and make the basis for the world in the future. The development of technology caused the development of society, which brought about changes in people lives. In recent years, people have begun to be negligent, they adopted a fast-paced rhythm of life, started to eat unhealthy, lived in a mess and didn't pay attention to the world around them. This all has led to environmental problems. In order to solve the problem of environmental care, the concept of sustainable development has emerged. The goal of sustainable development is to maintain and enhance the natural resources and the environment in which people live. This concept is committed to a more even and rational use of resources today in order to keep the quality of life in the future at the level it is today or even better. Cities play a major role in promoting and practicing sustainable development. Cities are places where sellers and buyers gather, develop industries, start businesses and realize projects. Cities are places full of various possibilities and are therefore attractive to people for settlement. All the above mentioned makes cities the perfect carriers of sustainable development. Through the practice of sustainable living, cities encourage their residents to decompose and separate waste, recycle and participate in projects and activities aimed at improving the environment. A large number of cities around the world practice sustainable development and thus contribute to the development of society through environmental care. Among the first cities in Croatia to engage in sustainable development was Rijeka that encouraged during the last ten years, through various activities, projects, workshops and events, all interested to inform themselves about the day-to-day importance of caring for the environment. Following the presentation of the case study, an online survey was analysed, which showed the lack of basic conditions for remaining in the settlement in which the respondents live. These are housing and work. In addition to other conditions that a certain environment possesses (location appearance, air quality, general satisfaction with the environment and other urban components), the already mentioned basic conditions must be satisfied. The combination of basic conditions (business and housing) and other urban components in a certain positive trend can lead to urban development and contribute to its sustainable development.

LITERATURE:

1. Blewitt, J. (2017). „Razumijevanje održivog razvoja“. Zagreb: Naklada Jasenski i Turk: Visoka škola međunarodnih odnosa i diplomacije Dag Hammarskjöld
2. Čaldarović, O., Šarinić J. (2017). „Suvremeni grad: javni prostori i kultura življenja primjer Zagreba“. Zagreb: Naklada Jasenski i Turk: Hrvatsko sociološko društvo.
3. Grad Rijeka (The City of Rijeka - Official Web Site), Retrieved 30.04.2019. from: <https://www.rijeka.hr teme-za-gradane/stanovanje-i-gradnja/energetska-ucinkovitost-zastita-okolisa/>
4. Jambrović, F. (2011). „Održivi razvoj u obrazovanju“. Zbornik radova Međimurskog veleučilišta u Čakovcu, 2 (1), 14-27. Retrieved 10.09.2019. from: <https://hrcak.srce.hr/71319>
5. Lamza – Maronić, M., Glavaš, J., Mavrin, I. (2016). „Urbani management - Izazovi, upravljački trendovi i regeneracijske prakse za gradove“, Ekonomski fakultet u Osijeku, Studio HS internet, Osijek

6. Lay, V. (2007). „Održivi razvoj i vođenje“. Društvena istraživanja, 16 (6 (92)), 1031-105. Retrieved 17.09.2019. from: <https://hrcak.srce.hr/19245>
7. Pegan, S., Jukić, T. (2001). „Polazišta održivoga prostornog razvoja grada“. Prostor, 9 (1(21)), 49-54. From: <https://hrcak.srce.hr/10804>
8. Šimunović, I. (2007). „Urbana ekonomika: petnaest tema o gradu“. Zagreb: Školska knjiga d.d.

DIGITALIZATION CREATES A NEW PARADIGM OF THE GLOBAL MUSIC INDUSTRY: THE TRADITIONAL MUSIC INDUSTRY IS UNDER PRESSURE OF THE STREAMING PLATFORMS

Josko Lozic

University North, Croatia

jlozic@unin.hr

ABSTRACT

The aim of this paper is to determine the underlying factors that have affected the changes in the global music industry. The global music industry has come under the pressure of digitalisation at the end of the last century. Digitalization of production and convergence of business activities within the media industry caused fundamental changes in the way business of global media corporations. Internet development and digitalization of production directly affected the decline in revenues of global media corporations. Sales of physical media carriers fell sharply, and various forms of piracy dropped the revenues of global corporations. Additionally, the sharing economy increasingly conquered Generation Z, and this influence spilled over to all post-industrial societies. Sharing music on the Internet was prevented in the first hurdle, but global corporations were aware that it was the last moment to change the way revenue was generated. With the emergence of streaming platforms that members of the postmodern community accepted with enthusiasm, the last nail was dumped into the classic management strategy of the music industry of the twentieth century. "Old" media corporations have taken on the challenges of the "new" media industry. Instead of selling physical products, the 21st century strategy implies the sale of copyrights and other forms of intangible assets. Over the past three years, revenues from global music corporations have risen again despite the growing popularity of streaming platforms.

Keywords: global media corporation, media management, music industry, post-industrial society, streaming platforms

1. INTRODUCTION

Digitalization of production in the media industry as well as global Internet development was an introduction to a very unstable period that will capture the media industry in the new millennium. Dramatic earthquakes will first capture the publishing and music industry, and then expand to the entire media industry. The media industry will first face the pirate model of content distribution, and later, generations of adults along the Internet will build a completely new paradigm of the music industry. Media encompasses all goal-orientated means or instruments for the procurement of information in print, visual, or auditory forms as well as the organisation and institutional entities behind them that generate and provide this information (Wirtz 2011: 12). The term „media industry“ covers a huge slice of territory ranging over print, sound, screen and digital bit sin space, in venue as various as corporate communications, advertising, websites, novels, films, recordings, and music being shared person to person on the Internet (Hilmes 2009: 21). The media industry is part of a broader concept that covers Theodor Adorno and Max Horkheimer in the “Dialectic of Enlightenment” book. In the book, one chapter is called "The cultural industry". Cultural industry was a concept intended to shock. Adorno and Horkheimer, like many other users of the term “culture” in the nineteenth and twentieth century equated culture in the its ideal state with art, with special, exceptional forms of human creativity (Hesmondhalgh 2015: 24). Radio, television, film, digital media, and the other products of media culture provide materials out of which individuals in contemporary media and consumer societies forge their very identities, including sense of self, notion of what it means to be male or female, and conception of class, ethnicity and race, nationality, and

sexuality (Douglas 2009: 95). As much, as media industries are cultural and political entities, they are also economic entities, and an understanding of the economic constraints and incentives under which they operate, and of the basic economic characteristics of the products in which they deal, can provide valuable insights into a wide range of dimensions of media industry behaviour (Napoli 2009: 161). Ringlsetter and Vizjak (2003) at the beginning of the century have already pointed to the importance of the media industry and have stressed that media industry revenue has been going on for decades. Revenue growth can best be attributed to the development of technology in the media industry. The media industry has evolved over the centuries and consists of several categories. The music industry is just one segment of the media industry. Wikstorm (2009) divides the music industry into three core categories: music recording, music licensing, and live music. Anderton (et al., 2013) divide the music industry into the following segments: recorded industry, song writing and publishing, music production, music distribution, music promotion and live music industry.

2. KEY FINDINGS

With the development of the Internet and digitization of the production process, the music industry was under pressure from structural changes within the media industry. The convergence of the production and distribution system of media content shook the foundations of the “old” music industry. According to Independent music companies association “Impala”, the revenues of the music industry have begun to recover in the last three years. The global music industry achieved \$ 17.3 billion in 2017, an increase of 8.1% over 2016. The music industry’s digital revenues grew by 19.1% in 2017, to \$9,4bn, with 41,1% increase in streaming revenue (2017). Digital music revenues now account for 54% of total industry revenues, compared to 30% of physical sales (2017). Number of paying subscribers rose to 176 million in 2017 (97 million in 2016) (Impala 2019). Last year saw music sales rise by 8.1 percent to \$17.3 billion and total digital income account for more than half of all trade revenue (54 percent) for the first time. The worldwide increase in streaming consumption was at the heart of the growth, with the number of paying subscribers climbing to 176 million across all markets (64 million of which were added in 2017) (Smirke 2018). The global recorded-music market worth \$17.3bn in 2017, up 8.1% on 2016 it was a third consecutive year of growth for the industry (Dredge 2018). Despite massive disruption and upheaval over nearly two decades, the recorded music industry remains highly concentrated at the top. According to data released by independent label group WIN, an astounding 62.4 percent of all music sold, download, and streamed worldwide comes from just three major labels, in 2016 (Resnikoff 2016). The worldwide increase in streaming consumptions was at the heart of the growth, with the number of paying subscribers climbing to 176 million across all markets (64 million of which were added in 2017) (Smirke 2018). Music streaming revenues grew by 41.1% to \$6.6bn, and now account for 38.4% of all recorded-music revenues – the biggest single one (Dredge 2018). Three major labels - Sony Music Entertainment, Warner Music Group, and Universal Music Group – are currently enjoying a surge in streaming revenues from companies like Spotify and Apple Music. Spotify and other streaming services, in turn, are paying the greatest percentage of their royalties to the majors. According to some estimates, the “Big Three” command more than 80% of streaming royalties from Spotify, Tidal, Apple Music, and others (Resnikoff 2016). While the compact disc has been on the deathbed for a while now — labels release fewer CDs these days, and major retailers like Target and Best Buy have decided to limit quantities or even stop stocking discs — the speed at which it’s crashing toward irrelevance is dramatic. Vinyl, on the other hand, is breeding optimism in the industry; while no one expects vinyl to usurp digital formats, musicians and experts alike are betting on its sustained future because of both its unique audio quality and nostalgic value (Wang 2018). The “vinyl revival” has been one of the industry's favorite underdog storylines of the past decade, after the format averaged 38 percent

growth from 2012 to 2015. [...] It's not the type of roaring growth that it was, but it's heading back in the right direction, with many fans still seemingly bent on having that physical piece of art to call their own (Rys 2018). The music industry is undergoing dramatic changes.

3. HYPOTHESIS

Technology development and digitization of the manufacturing process, as well as the process of convergence of use and distribution of media content, focused on media industry changes in two fundamental directions:

1. The drop in sales of physical music providers has significantly contributed to the decline in revenue of the music corporations.
2. The new way of distributing and using music content has enabled dramatically increased revenue for music stream platforms.

4. TRANSITION OF GLOBAL MUSIC REVENUE

Digitalization of production and distribution of music content has directly affected the global music industry's revenue over the last twenty years. Table 1 shows the trends of the total revenue of the music industry as well as the trend of revenue to certain categories. Revenues from the global music industry have been steadily falling from 1999 to 2014. In 2015, this trend is changing and revenue is growing. Over the past three years, revenues from the global music industry have grown rapidly. Most of the revenue of the "old" music industry, as well as the "old" media industry, came from sales of physical music and media content holders. Table 2 shows the results of the analysis of the income of the music industry over the last twenty years. Sales revenue from physical content holders dropped from \$ 25.2 bn in 1999 to \$ 5.2 bn in the last analyzed interval. The average drop in revenues was 8.3 percent year-on-year, or the total drop in revenue of 2017 compared to 1999 was 79.4 percent. Income from the sale of physical content carriers continues to be the dominant part of the revenue, compared to other revenues, but is less than five times compared to the period of twenty years ago. The decline in revenue from sales of physical products could not be offset by the growth in revenues from other categories of revenue. In 2001, the music industry reported for the first time the revenues from the sale of broadcast rights to performers with whom it has a contract of representation. Revenues grew on average 9.2% per annum or 400% in the analyzed period. In addition, the music industry gains the right to use music in other creative industries, public performances, concerts, etc. These are revenue from synchronization. In this category, revenue grew steadily and stabilized and did not show the tendencies of change.

Table following on the next page

Table 1: Global recorded music industry revenues 1999-2017 (US\$ bill.)

	Physical	Digital	Streaming	Performance right	Synchronisation	Sum
1999	25,2	-	-	-	-	25,2
2000	23,4	-	-	-	-	23,4
2001	23,8	-	-	0,6	-	24,4
2002	21,9	-	-	0,7	-	22,6
2003	20,1	-	-	0,8	-	20,9
2004	19,5	0,1	-	0,9	-	20,5
2005	18,1	1,0	-	0,9	-	20,0
2006	16,3	2,0	0,2	1,0	-	19,5
2007	14,1	2,7	0,2	1,2	-	18,2
2008	11,9	3,4	0,3	1,3	-	16,9
2009	10,4	3,7	0,4	1,4	0,3	16,2
2010	8,9	3,9	0,4	1,4	0,3	14,9
2011	8,2	4,2	0,6	1,4	0,3	14,7
2012	7,6	4,4	1,0	1,6	0,3	14,9
2013	6,7	4,3	1,4	1,8	0,3	14,5
2014	6,0	4,0	1,9	1,9	0,3	14,1
2015	5,7	3,8	2,8	2,0	0,4	14,7
2016	5,5	3,2	4,7	2,3	0,3	16,0
2017	5,2	2,8	6,6	2,4	0,3	17,3

Source: Statista (Own illustration)

In 2002, CDs made up 95.5% of music industry revenue (Routley 2018). The fundamental changes brought about by digitization have directly influenced the development and distribution of music content over the Internet. Additionally, the development of the streaming platform additionally took part of the revenue from sales of physical content holders. Sales of digitized content grew from 2004 to 2012, so that revenue would begin to decline. Generation Z, who grew up with the Internet, was no longer prepared to store and listen to music from different physical holders as they did the generations ahead of them. The interest in buying and storing music on various media remained among the non-adult Internet population. Knoper highlights the changes in the overall way of consuming music. Since Tesla began manufacturing cars without CD players, other companies like Ford and Toyota have recently followed (Knoper 2018). Generation Z and cars without CD devices marked the end of the old music industry. Revenues from sales of digitized music content appeared in 2004 and have increased by 900% for the following year. The following year they achieved a growth of 100%, which was nine times less than in the previous year. Only two more years ago, revenues were double-digit growth, so that 2013 saw a fall of 2.3% in revenues for the first time in 2013. After that, revenue declined year after year, which was still enough to make the revenue generated in the last analyzed interval to be 80.4% higher than the revenue in the first analyzed interval.

Table following on the next page

Table 2 Global recorded music industry 1999-2017 (US\$ bill.)

Global recorded music industry 1999-2017 (US\$ bill.)

	Physical	Digital	Streaming	Performance right	Synchro- nisation	Sum
1999						
2000	-7,1%					-7,4%
2001	1,7%					4,7%
2002	-8,0%			16,7%		-7,1%
2003	-8,2%			14,3%		-7,6%
2004	-3,0%			12,5%		-1,7%
2005	-7,2%	900,0%		0,0%		40,5%
2006	-9,9%	100,0%		11,1%		-29,1%
2007	-13,5%	35,0%	0,0%	20,0%		-9,2%
2008	-15,6%	25,9%	50,0%	8,3%		-5,5%
2009	-12,6%	8,8%	33,3%	7,7%		-5,8%
2010	-14,4%	5,4%	0,0%	0,0%	0,0%	-10,6%
2011	-7,9%	7,7%	50,0%	0,0%	0,0%	2,6%
2012	-7,3%	4,8%	66,7%	14,3%	0,0%	3,2%
2013	-11,8%	-2,3%	40,0%	12,5%	0,0%	-5,1%
2014	-10,4%	-7,0%	35,7%	5,6%	0,0%	-3,7%
2015	-5,0%	-5,0%	47,4%	5,3%	33,3%	5,5%
2016	-3,5%	-15,8%	67,9%	15,0%	-25,0%	10,0%
2017	-5,5%	-12,5%	40,4%	4,3%	0,0%	5,6%
Average	-8,3%	80,4%	39,2%	9,2%	1,0%	-1,2%
Nm/Nn	-79,4%	2700,0%	3200,0%	400,0%	0,0%	-30,3%

Source: Statista (Own illustration)

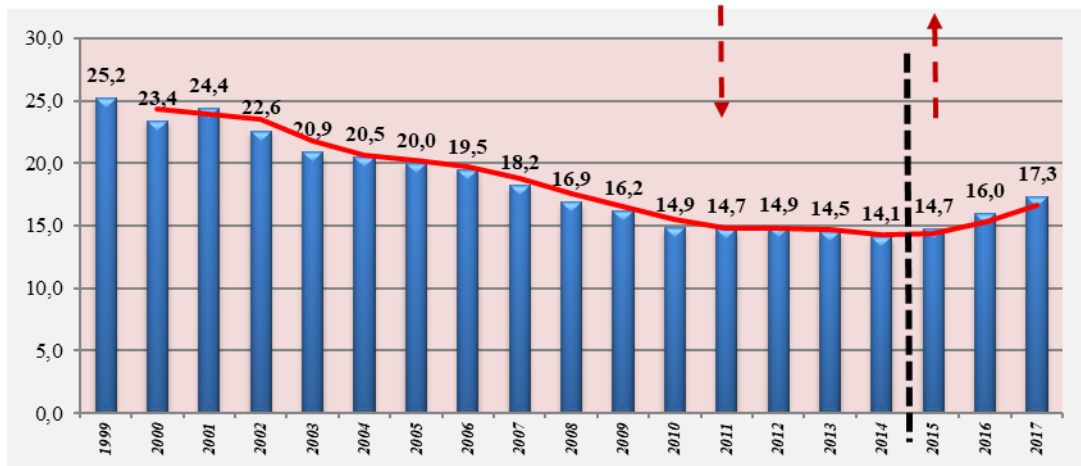
**Nm – last frequency in analysis; Nn – first frequency in analysis*

We cannot associate a drop in the revenue of the music industry with the development of the platform for streaming music content. Revenues generated by the music industry from the streaming platform have risen from year to year at an average rate of 39% per annum. The year-on-year increase in streaming revenue averaged 39% a year. The total revenue growth achieved by the global music industry was 3200%. The growth in revenue that the industry gained from the streaming platform as well as the sale of digitized content could not compensate for the decline in revenue from sales of physical content holders. The results of the analysis showed that total global music industry revenues fell year-over-year at an average rate of 1.2% per annum. Analyzing the difference between the total revenue of the global music industry in 2017 compared to 1999, the realized revenue was lower by 30.3%.

4.1. Trend of global music industry revenue

We can divide the total revenues of the global music industry into two fundamental parts. In the period from 1999 to 2014, revenues fell at an average rate of 2.8% per annum. In 2015, revenue grew by 5.5 percentage points in comparison to the previous year, and revenue grew year-on-year. Figure 1 shows the trend of revenue trends. The image shows two separate periods of revenue movement. In the first period, revenues are falling steadily, so that in the second period revenues will continue to grow steadily. There are two fundamental reasons that explain this situation. First, 2015 is slowing down the decline in revenue from sales of physical content. Second, the growth of streaming revenue is the highest in the entire analyzed period.

Figure 1: Global recorded music industry revenues 1999-2017 – sum (US\$ bill.)



Source: IFPI (Own illustration)

Table 3: Pearson correlation (global music revenue (1999-2017))

	Physical	Digital	Streaming	Performance right	Synchronisation
Pearson (1)	0,9575	-0,9483	-0,0377	-0,7735	-0,2033
Pearson (2)	-0,9934	-0,9934	1,0000	0,9608	-0,8660

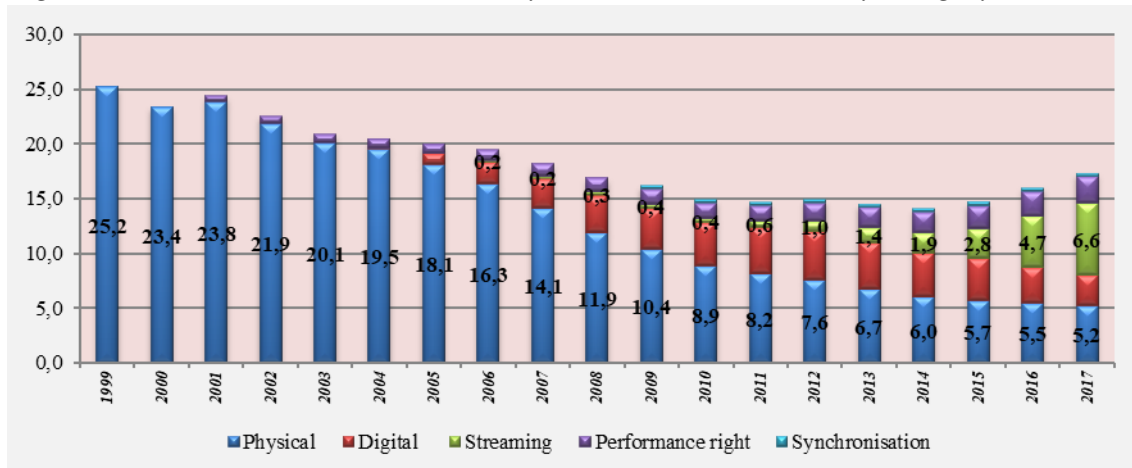
Source: Own illustration

The downward trend in revenue in the music industry is directly related to the spread of the Internet and the drop in sales of CDs. The development of the Internet, digitalization and the appearance of Napster facilitated the development of piracy. The CD sales drop directly affected the decline in revenue recorded in the segment recorded music as the largest segment at the turn of the century. The new century saw the decline of CD sales and the rise of digital technology and the widespread use of the Internet in particular. To date, the mix of digital technology and the Internet has proven to be more of a challenge than an opportunity to the music industry (Wikstorm 2009: 28). Sales growth in the last three observed periods was also boosted by the growth in sales of vinyl. According to the RIAA's report, when comparing the first half of 2018 with the first half of 2017, vinyl revenue increased 12.6 percent while CD revenue plummeted 41.5 percent. Those percentages are roughly the same for units of each format sold (Wang 2018). Table 3 shows the results of the Pearson correlation coefficient analysis. The correlation coefficient for the first period (Pearson 1) shows a very strong link between declining revenues from physical products with total fall in global music industry revenue. The analysis shows a very strong reverse link (-0.9483) between the fall in revenue of the total music industry and the rise in revenue from digital content. The link between the other categories of revenue and the total revenue of the music industry was inverted, and there was a very low correlation between streaming revenue and the decline in overall revenue of the global music industry. The correlation coefficient for the second analyzed period (Pearson 2) indicates a complete change in the revenue structure of the global media industry. Revenues from sales of physical products continue to fall, while overall yields are increasing. It is almost the same situation with the trend of revenue from the sale of digital products. Both coefficients show a very strong reverse link (-0.9934). The correlation coefficient for streaming and performance right (1,000 and 0.9608) shows a very strong link and gives an explanation for a complete turnaround in the global music industry's revenue trend. Revenues from Synchronization are stable and do not track the growth of total revenue.

4.2. Rise of influence of streaming revenue on global music revenue

Figure 2 shows graphically the movement and structure of global music industry revenue. The analysis was made according to the data published by the IFPI agency and complies with the survey results of the Statistic Agency which are the basis for the analysis in the tables in Chapter 4. The results of the analysis from Figure 2, which show the structure of the global music industry's revenue, will be compared with the results of the analysis of musical revenue industry in the USA. The global media industry, as well as the global music industry, earns the highest revenue in the US market. Trends in changes in revenue structure within the media industry, as well as trends in revenue changes within the music industry in the US, reveal the direction of change in which the global media industry will start.

Figure 2: Global recorded music industry revenues 1999-2017 – by category (US\$ bill.)



Source: IFPI (Own illustration)

Table 4 shows the structure and trend of revenue changes within the music industry in the USA. Compared to the results of the global music industry's revenue trends shown in Figure 2, the trend of revenue changes on the American music market is compounded by a strong correlation between the revenue structure of the US market and the global music market. In the global market, revenue in the Physical category continued to decline, while streaming revenues continued to increase. The greatest correlation is recorded in the revenue growth of digital products, which have grown steadily since 2013 began to decline continuously. In the US market sales of digital music sales show different trends. Revenue from Ringtones and Ringbacks falls continuously over the last ten years. Segment Ringtones and Ringbacks developed as a digital form of downloading music content at a time while the music industry still dominated the physical content carriers. In this context, they marked the transition period to digital forms of music content. This brief gap in technology – before smartphones hit mass adoption – brought us the ringtone era. Distribution was controlled by mobile carriers, so ringtones were a comfortable gateway for the record industry to get a taste for digital-based revenue. In 2008 alone, they injected over a billion dollars of revenue into an industry that was getting used to gloomy forecasts (Routley 2018).

Table following on the next page

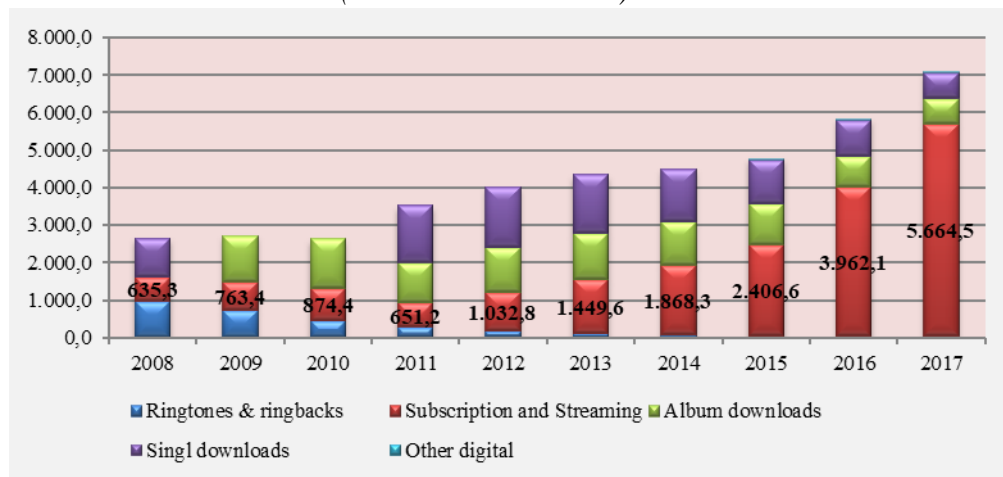
*Table 4: Digital music revenue in the United States from 2008 to 2018
 (in million U.S. dollars)*

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ringtones & ring backs	977,1	728,8	448,0	276,2	166,9	98,0	66,3	54,6	51,1	35,5
Subscription and Streaming	635,3	763,4	874,4	651,2	1.032,8	1.449,6	1.868,3	2.406,6	3.962,1	5.664,5
Album downloads	-	1.220,3	1.317,4	1.070,8	1.204,8	1.232,1	1.150,9	1.090,7	818,8	668,5
Single downloads	1.032,2	-	-	1.522,4	1.623,6	1.567,6	1.407,8	1.195,1	972,9	678,5
Other digital	-	-	-	-	-	-	-	10,1	24,2	21,9

Source: Statista (Own illustration)

Sales of albums and singles grew until 2013 and then declined continuously. As in the global market, streaming revenues are constantly growing. Total revenues in the US market did not grow continuously and in 2010 they fell by 2.7 percentage points compared to the previous year. After that, total revenue is constantly growing. In the global market, total revenues in 2010 fell by 10.5 percentage points (Table 4). The drop in revenue from the music industry has also warned by Hiatt and Serpick 2009 in Rolling Stones, in the article titled "The Recorded Industry's Decline". The way that music gets to consumer has forever been change as has the industrial structure that for so long almost completely dominated the business. The radio/music symbiosis is being challenge. Digital downloads both legal and otherwise are here to stay (Bellamy, Gross 2010: 128).

*Figure 3: Digital music revenue in the United States from 2008 to 2018
 (in million U.S. dollars)*

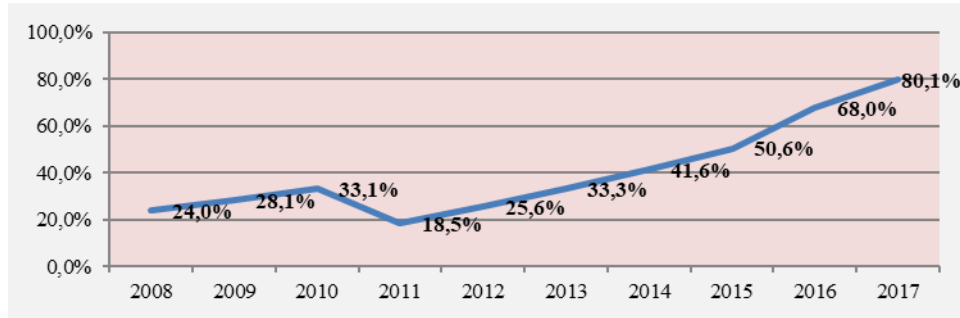


Source: Statista (Own illustration)

The 2011 revenue growth marked a significant increase in single-download revenue. The revenue growth of this segment will mark the emergence of a new way of distributing music content. The generation of adults on the Internet no longer preferred downloads of the entire album and purchased individual music content. The analysis of the results at the end of the period showed the significance of the decline of both segments and their revenue almost equalized.

Figure following on the next page

Figure 4: Streaming revenue in U.S. music revenue (%)



Source: Statista (Own illustration)

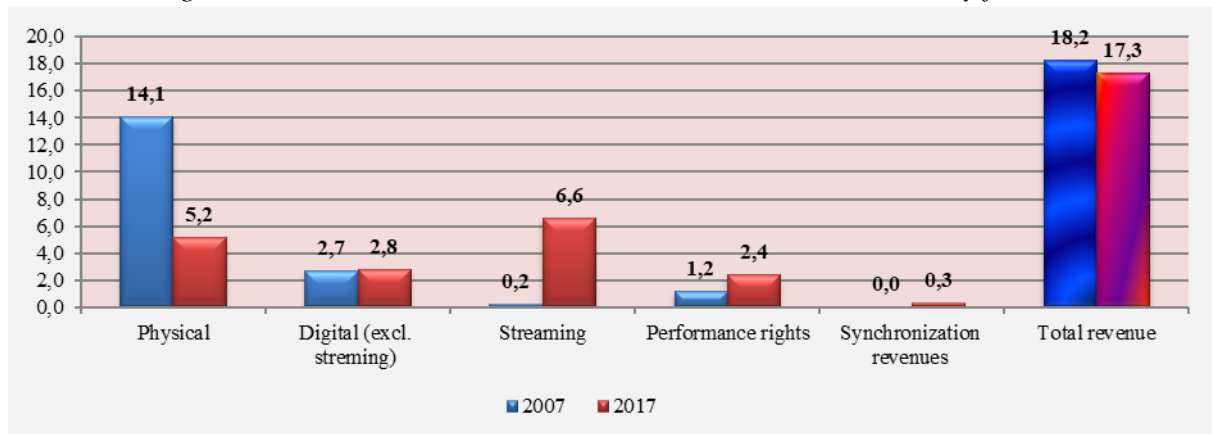
At this point the general trends of the RIAA year-end report are fairly predictable: streaming will gain, downloads and physical sales will fall, with the intrigue arriving in just how far in each direction the formats will move. But after revenue declines of 10.1 percent in 2015 and 15.7 percent in 2016, total physical revenues fell by just \$56.8 million in 2017 to \$1.5 billion, a decline of 3.7 percent (Rys 2018). The share of streaming revenue in US music industry's total revenues grew from 24% in 2008 to 80.1% in 2017. The increase in total share shows the trend we can expect on the global music market for several years. Revenues did not grow steadily, and 2011 dropped from 33.1% share to 18.5% in total US revenue. According to research results, streaming and subscription revenues in the US rose by 29.8 percent in 2018 and total revenue was \$ 7.4 billion.

5. DISSCUSION

The results of the research have precisely defined two different periods in the movements of the revenue of the music industry. The first period suggests a drop in the revenue of the music industry by 2014. In the second period since 2015, we have the rise in global music industry revenue. The drop in revenue of the music industry from the year averaged 8.3 percent, or the total drop in revenue was 79.4 percent. Wang (2019) points out that the music industry earns more revenue in 2018 during the global economic crisis in 2007. The correlation coefficient between the fall in sales of physical sales and the fall in total revenues in the first period is 0.9575, or there is a very strong correlation link. The analysis of the results of the research confirms the first hypothesis that the drop in physical revenues significantly affects the fall in total revenue of the music industry. The second hypothesis reflects on new ways of distributing music content. In 2017 revenues from streaming 6.6 US \$ billion, for the first time were higher than the revenue of physical 5.2 US \$ billion. That also means that for the first time in history, streaming become the single largest revenue sources in the global music industry (McIntyre 2018). Streaming services and their subscription revenue has saved the music business, according to a new music industry report, which notes that 2017 was the third consecutive year of revenue growth – again, thanks to digital music consumption (Perez 2018). Revenue generated by streaming grew by 9.2 percentage points a year on average, or 400 percent on the global market. Revenue of streaming was 80.1% of the revenue of the music industry in the US market. In the period after 2014, the correlation coefficient between sales of physical and total revenues was -0.9934, and it can be deduced precisely that total revenue growth is not related to physical sales. The correlation coefficient between the trend of streaming revenue and total revenue was 1,000. The results of the research confirm another leap, or a new way of distributing and using music content, allowing for a sudden increase in revenue for the streaming platform. The results of the research undoubtedly confirm and second hypothesis. The turnover of the music industry's revenue over the past ten years points to the trends that have transformed the "old" music industry.

The results of the research are shown in Figure 5. Revenues from physical fall are one-third of the income of ten years ago. Revenues from digital music content have remained the same. Conversely, earnings from performance rights and synchronization revenues grew. Streamlined revenue has grown rapidly, suggesting further development of the "new" music industry. However, revenue growth of the "new" music industry has not yet compensated for the fall in revenue of the old music industry. The revenue of the music industry 2017 is still lower than the revenue of the music industry in 2007.

Figure 5: Global recorded music revenues in 2007 and 2017, by format



Source: Statista (Own illustration)

The results of the research showed that the revenue growth of the music industry was most affected by a sudden increase in streaming revenue. The streaming industry has developed as a factor of a disruptive development model within the "old" media industry. Streaming platforms, as part of the platform-based economy, have grown to the value of technological innovations that have enabled new levels of convergence within the global media industry. Eeden and Chow classify this level of convergence in the last and third generation. Convergence 3.0 is starting from different core capabilities, business models, geographies, consumer behaviours and consumer expectations compared with the prior waves (Eeden, Chow 2018). Convergence 3.0" is redefining the competitive playing field. Differing from earlier waves of convergence, it's creating an ever-expanding group of "supercompetitors" and specialized, niche brands that are striving to secure the engagement and spending of increasingly demanding consumers (Wilson 2018). The disruptive impact of technology on the "old" music industry has provided a new wave of convergence or convergence 3.0. However, the influence of the postmodern society has contributed to the mixing of influences and styles, both in music and in the way of consumption. On the one hand, the dramatic drop in sales of CDs is directly related to the habits of the generation Z, which does not have the habit of having music on physical carriers. On the other hand, again, there was a demand for vinyl sound carriers. Revenues from vinyl can not compensate for a tenth of falling CD revenues, but their sales are constantly growing. Gone are the days when people would line up at the music shop for a hot new release. In fact, CD sales are down 80% in the past decade. Today, physical format sales only account for 17% of the industry's revenue. There is, however, one bright spot in physical format segment: vinyl. In 2017, vinyl sales hit 25-year high after making a slow and steady comeback (Routley 2018). "I definitely believe the next decade is going to be streaming plus vinyl," says Jack White. "Streaming in the car and kitchen, vinyl in the living room and the den. Those will be the two formats. And I feel really good about that" (Knopper 2018). The analysis of research findings opened up a new look at trends in contemporary music industry. The results of the research have shown a strong correlation between the decline of musical industry income by 2015 and

the decline in sales revenue from CDs. So we proved the first hypothesis. The rise in revenue of the music industry since 2016 is associated with a rise in streaming revenue, which proves the other hypothesis. The dramatic changes within the musical industry are directly related to the disruptive influence of the streaming platform as well as to the changes brought by the postmodern society. Waldfogel argues that digital technologies haven't killed creative industries, but they have created a renaissance of new cultural products that consumers like *and* that wouldn't have made otherwise (Chen 2019). Regardless of the decline in sales of CDs, the generations of vinyl adults are returning to "old love". Vinyl is written in stone. I think if it's made it for 120 years now, it's here forever (Routley 2018).

6. CONCLUSION

The sudden rise in revenue from streaming caused a dramatic change within the global music industry. The revenue growth most reflected on segment recorded music. Further development of convergence within the music industry will affect the growth of live music revenue, as in the video music segment. The growth of revenue was mostly attributed to the consumer habits of Generation Z. The postmodern society dictates habits that are significantly different from the habits of consumers before the emergence of internet and digital forms of production and distribution of media content. Within mixing styles and habits, the demand for vinyl returns again. Just the combination of streaming revenue growth with the return of vinyl demand points to cross cultural habits within the global music industry. In the coming time we can expect further revenue growth from streaming to the recorded segment, as well as revenue growth from live music and video segment.

LITERATURE:

1. Anderton, C.; Dubber, A.; James, M. (2013) *Understanding the Music Industries*, Sage
2. Bellamy, R.; Gross, R. (2010) "The First Domino: The Recorded Music Industry and New Technology", (ed.) Hendrick, J.A., *The Twentieth-First-Century Media Industry*, Rowan and Littlefield Publishers
3. Chan, A. (2019) "An economist explains what digital technology means for the future of popular culture Digital renaissance?", *The Verge*, <https://www.theverge.com/2019/1/4/18168457/digital-renaissance-joel-waldfogel-music-books-movies-television-technology-interview>, [05.03.2019.]
4. Dredge, S. (2018) „Global recorded music industry revenues grow 8,1% in 2017 says IFPI“, <https://musically.com/2018/04/24/recorded-music-revenues-grew-by-8-1-in-2017-says-ifpi/>, [15.03.2019.]
5. Eeden van, E.; Chow, W. (2018) „Perspectives from the Global Entertainment & Media Outlook 2018–2022: Trending now: Convergence, connections and trust“, <https://www.pwc.com/gx/en/entertainment-media/outlook/perspectives-from-the-global-entertainment-and-media-outlook-2018-2022.pdf>, [07.03.2019.]
6. Hesmondhalgh, D. (2015) *The Cultural Industries*, 3rd edition, Sage
7. Hilmes, M. (2009) „Nailing Mercury: The Problem of Media Industry Histography“, (eds.) Holt, J.; Perren, A., *Media Industry: History, Theory, and Method*, Willey-Blackwell Holt, J.; Perren, A. (2009) *Media Industry: History, Theory, and Method*, Willey- Blackwell
8. Impala – Independent Music Companies association, <https://www.impalamusic.org/>, [12.03.2019.]
9. [12.03.2019.]
10. Knopper, S. (2018) "The End of Owning Music: How CDs and Downloads Died", *Rolling Stone*, <https://www.rollingstone.com/music/music-news/the-end-of-owning-music-how-cds-and-downloads-died-628660/> [12.05.2019.]

11. McIntyre, H. (2018) "For The First Time, Streaming Is The Biggest Revenue Source In The Music Industry", Forbes, <https://www.forbes.com/sites/hughmcintyre/2018/04/24/for-the-first-time-ever-streaming-is-the-single-biggest-moneymaker-in-the-music-industry/#5d09162514cb> [15.05.2019.]
12. Napoli, P.M. (2009) „Media Economics and the Study of Media Industries“, (eds.) Holt, J.; Perren, A., Media Industry: History, Theory, and Method, Willey-Blackwell
13. Perez, S. (2018) "43% of music revenues came from streaming last year", Techcrunch.com, <https://techcrunch.com/2018/04/23/43-of-music-revenues-came-from-streaming-last-year/> [15.06.2019.]
14. Resnikoff, P. (2016) „Two-Thirds of All Music Sold Comes from Just 3 Companies“, <https://www.digitalmusicnews.com/2016/08/03/two-thirds-music-sales-come-three-major-labels/>, [13.03.2019.]
15. Ringlsetter, M.; Vizjak, A. (2003) "The only way for the media industry to grow and profit is with content", (eds.) Ringlsetter, M.; Vizjak, A., Media Management: Leveraging Content for Profitable Growth, Springer
16. Routley, N. (2018) "Visualizing 40 Years of Music Industry", Visual Capitalist, <https://www.visualcapitalist.com/music-industry-sales/>, [15.05.2019.]
17. Rys, D. (2018) "The Future of Downloads, Accelerating Growth & Vinyl Vinyl Vinyl: 5 Takeaways From the RIAA Year-End Report", Billboard, <https://www.billboard.com/articles/business/8257618/riaa-2017-year-end-report-five-takeaways-downloads-growth-vinyl>, [02.06.2019.]
18. Smirke, R. (2018) "IFPI Global Report 2018: Music Sales Rise for Third Straight Year as Streaming Becomes Biggest Revenue Source", <https://www.billboard.com/articles/business/8372798/ifpi-global-report-2018-music-sales-rise-streaming-revenue>, [14.03.2019.]
19. Wang, A.X. (2018) "CDs Are Dying Three Times as Fast as Vinyl Is Growing", Rolling Stones, <https://www.rollingstone.com/music/music-news/cds-are-dying-three-times-as-fast-as-vinyl-is-growing-727090/>, [15.05.2019.]
20. Wang, A.X. (2019) "Music Is Finally Making More Money Than It Was In 2007", Rolling Stones, <https://www.rollingstone.com/music/music-news/music-is-finally-making-more-money-than-it-was-in-2007-816480/>, [15.05.2019.]
21. Wikstorm, P. (2009) The music industry: Digital media and society series, Polity Press
22. Wilson, D. (2018) "PwC's Global Entertainment & Media Outlook 2018-2022 Reveals Long-Term Trends", Publishing Executive, <https://www.pubexec.com/article/pwcs-global-entertainment-media-outlook-2018-2022-reveals-long-term-trends/>, [25.05.2019.]
23. Wirtz, B.W. (2011) Media and Internet Management, Gabler Verlag, Springer Fachmedien Wisbaden GmbH

INFLUENCE OF SMART CITY COMPONENTS ON COMPETITIVENESS OF TOURISM DESTINATION

Kresimir Buntak

University North

Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia

kresimir.buntak@unin.hr

Maja Mutavdzija

University North

Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia

mamutavdzija@unin.hr

Ivana Martincevic

University North

Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia

ivana.martincevic@unin.hr

ABSTRACT

Smart tourism is defined as an innovative tourist destination, built on an infrastructure of state-of-the-art technology guaranteeing the sustainable development of tourist areas, accessible to everyone, which facilitates the visitor's interaction with and integration into his or her surroundings, increases the quality of the experience at the destination, and improves residents' quality of life. The main goal of creating smart tourism destinations is ultimately to improve the competitiveness of tourism organizations and destinations. Just as smart cities use sensors, technology and knowledge to collect and analyze data, so do smart tourism destinations use such data to enhance their tourism offer. The fact is that smart tourism destinations must embrace all the elements represented by the concept of a smart city, but the foundation for any new development must be smart management, facilitated by the use of new technologies. This secondary research collected and presented case studies and researches with examples of the implementation of smart concepts, as well as the main factors that influence the development of smart destinations.

Keywords: *competitiveness, ICT, smart city, smart tourism*

1. INTRODUCTION

The development of the Smart City concept has influenced the transformation of existing urban areas and their adaptation to the aforementioned, rapidly evolving concept. An increasing population in urban areas is demanding adaptation of the system to new changes, but also adapting to the needs of new generations of society. New generations of society also represent new generations of tourists, so in order to create the right tourism offer, urban areas must implement the components of the smart city concept. Every smart city or smart tourism destination must have smart local transport and good transport connectivity, developed digital infrastructure, involvement of citizens and local authorities in city-related decision-making and smart governance as the basis for the functioning of each of these components. It can be said that the basic components of smart cities, that is, smart tourism destinations are the following: economy, government, community of people, natural environment, infrastructure, technology, politics and organization. The main task in running a smart tourism destination is to organize the way the urban area functions, that is, the way to manage the area, and to set up technology that will serve smarter area management, all within the boundaries of certain values and policies that guide the urban area.

For such a tourism destination to function, the economy must be stable, the infrastructure developed and the natural environment must favor the development of the destination. Through the innovation and creativity of the local government, as well as all citizens of the area, it is possible to secure and initiate the development of a smart tourism destination.

2. SMART TOURISM DESTINATIONS

The main goal of creating smart tourism destinations is ultimately to improve the competitiveness of tourism organizations and destinations. Smart tourism destinations, through the use and development of information and communication technology, seek to improve the management and facilitate the development of products and services, that is, to improve the tourism experience (Gretzel et al., 2015). For tourism destinations, implementing smart concepts has become crucial as better connected, informed and engaged tourists who dynamically interact with the destination become co-creators of tourism products and add value to the tourism destination (Boes et al., 2016). Lopez de Avilla (2015) defines smart tourism as „an innovative tourist destination, built on an infrastructure of state-of-the-art technology guaranteeing the sustainable development of tourism areas, accessible to everyone, which facilitates the visitor's interaction with and integration into his or her surroundings, increases the quality of the experience at the destination, and improves residents' quality of life.“ Lamsfus and others state that a tourism destination can only be said to be smart when intensively utilizing the technological infrastructure provided by Smart City to enhance the tourism experience by personalizing and raising awareness of local and tourist services and products available at their destination, and when utilizing technological infrastructure for empowerment destination management organizations, local institutions and tourism organizations that make their own decisions and take action based on the information obtained at the destination, collected, managed and processed by the technical and technological infrastructure (Lamsfus et al, 2014). In addition to using smart technologies to attract potential tourists, the authors Kaur, K. and Kaur, R., consider smart tourism destinations from a different perspective. The authors state that the tourism industry plays a key role in using new technologies to develop smart tourism destinations. In this regard, key areas will be cities with developed heritage and culture. Such tourism destinations can be equipped with sensors, cameras, touch screens and other smart devices, which can collect information about tourists. Using Cloud servers over a wired or wireless network, it is possible to store data, analyze it and use it effectively to develop the tourism sector (Kaur and Kaur, 2016). Therefore, it can be concluded that smart tourism destinations are those destinations that use technological infrastructure to improve destination management, collect data to improve the destination, and provide personalized services and experiences to all tourists.

3. DEVELOPMENT OF SMART TOURISM DESTINATIONS

In addition to the requirements of traditional tourism, the development of smart concepts places new demands on tourism destinations. As one of the challenges in the tourism sector is the presence of many stakeholders who have different interests, so a smart approach is a must. Wang et al. (2016), point out that the concept of smart tourism reflects the response of the tourism industry to a broader vision that seeks to make the world "smarter" based on a global initiative to create more interconnected and intelligent systems through information technology. Such global initiatives seek to achieve socio - economic growth (Wang et al, 2016). The development of smart tourism destinations is discussed more by Gretzel et al (2015). The authors emphasize that information and communication technology is crucial for the conceptualization and development of smart tourism. Although the notion of smart tourism has become popular among scholars and practitioners a few years back, the ability to smartly support tourism has been predicted for a long time (Gretzel et al, 2015).

In the context of smart tourism, technology is viewed as infrastructure, not individually. This means that technology embraces and integrates various technological types and advanced analytics, which make smarter decisions. Authors Gretzel et al further comment that information and communication technology is not the only basis for the development of smart tourism destinations, but that tourism organizations and their businesses also play a major role. Tools and applications derived from information and communication technology have enabled tourism organizations to become "smarter", ie to increase their performance and competitiveness. They can achieve this by automating or transforming business functions or processes (Gretzel et al, 2015). The evolution of tourism concepts is provided by Jovicic (2017), which is shown in the following table.

Table1: The evolution of tourism destination concepts (Jovicic,2017, p.5)

The traditional concept of tourism destination	The systemic approach to tourism destination	The smart tourism destination
Agglomerations of attractions and services; the negligence of cooperation within the destination, and the role of tourists as actors in the destination	Interaction between tourists, companies providing services, and residents of destinations; constant contact with macro environment; non-linear connections between stakeholders	Interweaving of digital and real realms; public–private– consumer collaboration; participatory governance; creative and knowledgeable people; value co-creation; personalized services

Traditional tourism organizations need to redefine their business model in order to survive. Sigala (2015) describes smart tourism as a change in all or some of the following five market elements: the object of exchange, market players, market structure, market institutions and market practices. The economic power of smart tourism comes from controlling the sources and flows of information. It is also important to recognize that value comes not only from ownership but increasingly from access to infrastructure or data. Therefore, beyond traditional value propositions, organizations seeking to operate in smart tourism environments must consider the value of use (value creation through the use of data, technology and infrastructure, not ownership) (Bick et al. 2012). Smart tourism destinations differ from traditional tourism destinations in the way they manage and function an urban area. Despite the availability of technology, the use of technology is an aid to achieving the goals set through effective area management.

4. FACTORS INFLUENCING SMART TOURISM DESTINATIONS

Authors Boes, Buhalis and Inversini conducted a study and identified key factors influencing smart tourism destinations. The authors selected cities for the survey and identified the six best performing cities, namely Amsterdam, Barcelona, Copenhagen, Helsinki, Manchester and Vienna. Of these six, Barcelona, Amsterdam and Helsinki are ranked as the three cities that provide the most innovative smart solutions in Europe and were selected as cases for the research conducted. The results of the case study show the presence of advanced technological infrastructure and infrastructure used to manage information, but also to connect all social and economic actors in the urban area. From the analyzed datasets, four basic components or factors are identified, which are associated with a high level of "smartness", namely: innovation, social capital, human capital and leadership (Boes et al, 2016). Based on a case study, the authors proved that "smartness" drives innovation and innovation drives smartness. Through the concept of smart tourism destinations, all stakeholders are introduced to the system, which provides a more comprehensive perspective for the study of innovation. Along with innovation, social and human capital is the foundation for developing smart destinations. The knowledge and skills of human capital is the basis for creating added value and therefore competitiveness.

The previous mentioned research (Boes et al, 2016) shows that the connection between human and social capital is strongly emphasized in Barcelona, Amsterdam and Helsinki and the study suggests that innovative development, which is crucial for the success of smart destinations, is underpinned by quality human capital. Social capital is defined as a network of shared norms, values and understanding that facilitates cooperation within and between groups (Keeley 2007: 103). Accepting technology as the foundation of smartness depends on leadership approaches. Case studies (Boes et al, 2016) show that different leadership styles have been implemented in all three cases. While Barcelona has a top-down approach, Amsterdam and Helsinki have a bottom-up approach. Although bottom-up approach is considered typical of smart cities, the initiatives of Amsterdam and Helsinki, which are promoted as bottom-up approaches, include various types of top management and communities. One particular example is the launch of the Amsterdam Smart City platform. Here, stakeholders such as KPN telecommunications provider, Liander network manager, Amsterdam Economic Committee and other government agencies, research institutes and universities have set up a smart city initiative. As a criticism, it is often emphasized that the bottom-up approach often neglects the importance of state bodies. Authors Buhalis and Amaranggan conducted another study that emphasized content personalization as a key factor influencing smart tourism destinations. Through their research, they prove that providing personalized service to tourists is crucial, considering several aspects. The first is real-time information gathering; the current feedback loop, in order to get the users opinion on the service offered; a dynamic platform that enables different stakeholders to share information to promote service integration and the ability to accurately predict what the visitor wants, by identifying identifiable services and a dynamic referral system through historical data (Buhalis and Amaranggana, 2014). Factors that influence the development of smart cities also influence the creation of smart tourism destinations. Authors Su, Li, and Fu classify smart tourism as one of the components of smart cities and emphasize that smart tourism must be based on existing tourism information and infrastructure, taking into account the benefits of digital information and the Internet of Things in order to achieve cost-effective solutions that can consider and fulfill management and tourism tasks (Su et al, 2011). Based on the above research, it is possible to conclude that the components of smart cities are the components of a smart tourism destination. Just as smart cities use sensors, technology and knowledge to collect and analyze data, so do smart tourism destinations use such data to enhance their tourism offer.

5. SMART TOURISM DESTINATION COMPETITIVENESS MODEL

Destination competitiveness is defined as the ability of destinations to provide a better travel experience for tourists and to create a better living environment for locals than other destinations (Crouch, 2010). The authors Koo et al (2016) designed a competitive tourism model for a smart tourism destination. The conceptual model is based on the destination competitiveness model (set by Crouch and Ritchie, 1999) for recognizing the model as the best within the destination competitiveness research area. The existing model has been expanded by the authors through literature reviews and brainstorming. The basis for the research were the following questions:

- “What are the factors that determine the competitiveness of a major smart travel destination? Is it possible to prioritize these factors?”
- What criteria can be used to assess competitiveness?
- What are the biggest competitive forces of existing smart tourism destinations?
- What are the main determinants of the term "smart" destination?
- How does a destination improve its competitive position? In short period? Long term? (Koo et al, 2016)."

Based on the above questions and the research conducted, the authors Koo et al (2016) create a competitive model for the smart tourism destination, presented in the following Figure.

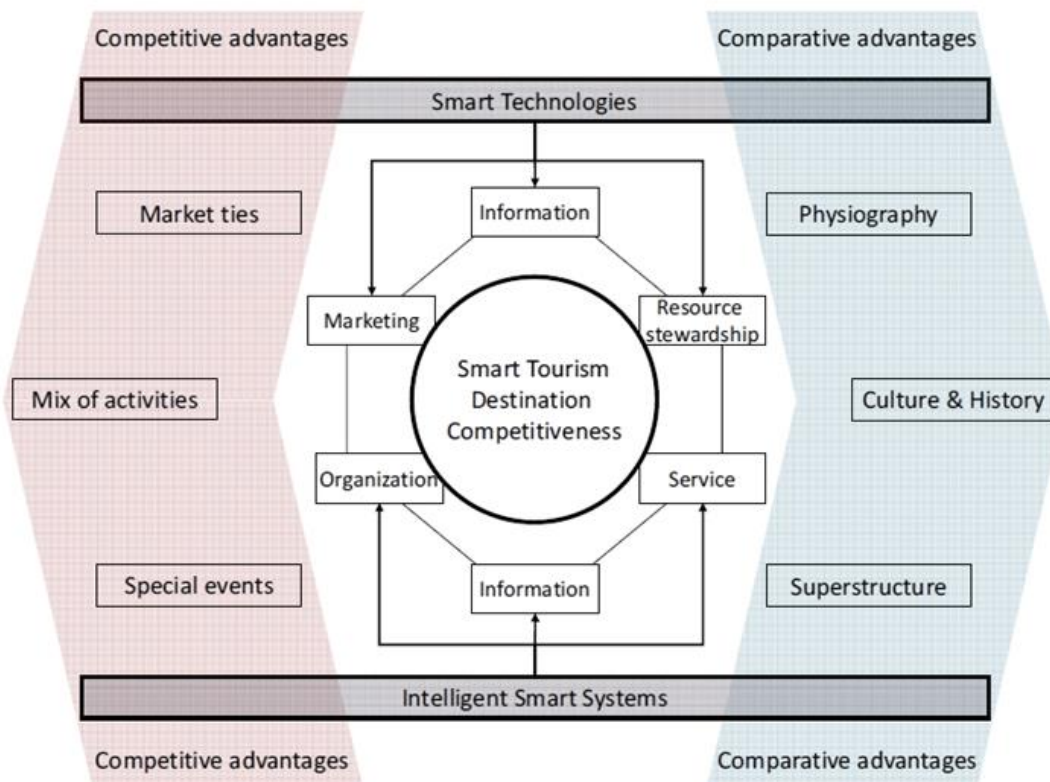


Figure1: Smart tourism destination competitiveness model (Koo et al 2016, p.376)

In the proposed model by Koo, Shin, Gretzel, Hunter, and Chung, called the DestCompST model, smart technology is a key factor, that is, the core of smart destination competitiveness, and plays a central role in all destination management activities (Koo et al, 2016). This model forms the basis for conducting all future research in the field of smart tourism, and can be used as a model for directing the competitiveness of certain smart tourism destinations, as well as the basis for constructing smart tourism destinations. This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government.

6. CONSLUSION

Given the rapid development of technology and the implementation of technological solutions in all spheres of human life, the development of smart tourism is a consequence of the development of the concept of smart cities. Some authors consider smart tourism to be a component of a smart city. The fact is that smart tourism destinations must embrace all the elements represented by the concept of a smart city, but the foundation for any new development must be smart management, facilitated by the use of new technologies. Case studies show a number of examples of the implementation of smart concepts, as well as the major factors that influence the development of smart destinations. In the territory of the Republic of Croatia, no such research has been carried out and a case study of Croatian cities is proposed for further research, because several of Croatian cities have awards related to the implementation of smart solutions. It is necessary to compare the situation in Croatia with the situation in other European cities and to investigate what the differences are and in what direction Croatian cities need to develop in order to compete with their tourism destinations.

LITERATURE:

1. Bick, M., Bruns, K., Sievert, J., & Jacob, F. (2012). *Value-in-use of mobile technologies*. In Back, A., Bick, M., Breunig, M. Pousttchi, K., Thiesse, F. (ed.s) MMS 2012, pp. 56-67. Bonn, Germany: Köllen Druck & Verlag.
2. Boes, K., Buhalis, D., & Inversini, A. (2016). *Smart tourism destinations: ecosystems for tourism destination competitiveness*. International Journal of Tourism Cities, 2(2), p. 108–124.
3. Buhalis, D., & Amaranggana, A. (2014). *Smart Tourism Destinations Enhancing Tourism Experience Through Personalisation of Services*. Information and Communication Technologies in Tourism 2015, p.377–389.
4. Crouch, G. I. (2010). *Destination Competitiveness: An Analysis of Determinant Attributes*. Journal of Travel Research, 50(1), p. 27–45.
5. Gretzel, U., Sigala, M., Xiang, Z. et al. (2015.) *Special issue on smart tourism: convergence of information technologies, experiences, and theories*, Electron Markets 25: 179
6. Gretzel, U., Reino, S., Kopera, S., & Koo, C. (2015). *Smart tourism challenges*. Journal of Tourism, 16(1), p. 41-47.
7. Jovicic, D. Z. (2017). *From the traditional understanding of tourism destination to the smart tourism destination*. Current Issues in Tourism. 22(5) p. 1-7
8. Kaur, K., & Kaur, R. (2016). *Internet of things to promote tourism: An insight into smart tourism*. International Journal of Recent Trends in Engineering & Research, 2(4), p. 357-361.
9. Keeley, B. (2007), *Human Capital: How What You Know Shapes your Life*, OECD, Paris.
10. Koo, C., Shin, S., Gretzel, U., Hunter, W. C., & Chung, N. (2016). *Conceptualization of smart tourism destination competitiveness*. Asia Pacific Journal of Information Systems, 26(4), p. 561-576.
11. Lamsfus, C., Martín, D., Alzua-Sorzabal, A., & Torres-Manzanera, E. (2014). *Smart Tourism Destinations: An Extended Conception of Smart Cities Focusing on Human Mobility*. Information and Communication Technologies in Tourism 2015, p. 363–375
12. Lopez de Avila, A. (2015). *Smart Destinations: XXI Century Tourism*. Presented at the ENTER2015 Conference on Information and Communication Technologies in Tourism, Lugano, Switzerland, February 4-6, 2015.
13. Sigala, M. (2015). *From demand elasticity to market plasticity: A market approach for developing revenue management strategies in tourism*. Journal of Travel and Tourism Marketing, forthcoming.
14. Su, K., Li, J., & Fu, H. (2011). *Smart city and the applications*. 2011 International Conference on Electronics, Communications and Control (ICECC).
15. Wang, X., Li, X. (Robert), Zhen, F., & Zhang, J. (2016). *How smart is your tourist attraction?: Measuring tourist preferences of smart tourism attractions via a FCEM-AHP and IPA approach*. Tourism Management, 54, p. 309–320.

KNOWLEDGE MANAGEMENT: CASE OF CROATIA

Ljubica Milanovic Glavan

Faculty of Economics and Business, Croatia

ljmilanovic@efzg.hr

Lucija Ivancic

Faculty of Economics and Business, Croatia

ljuros@net.efzg.hr

ABSTRACT

Knowledge management (KM) has received a lot of attention in the past two decades. However, it is still under-researched in Croatia. Goal of this paper is to determine the actual state of KM in Croatian companies with special emphasis on information technology (IT). IT has become a vital and integral part of every KM initiative today and one of the aims of this study is to analyse and identify the role of IT in KM and to determine if there is a connection between IT and KM. The results of the research conducted in big, middle and small Croatian companies show that a trend of KM exist in Croatia, but also that there is a potential for further development, especially in IT field. The paper describes main concepts connected with this topic, shows the results of the empirical research and gives guidelines on how to improve KM.

Keywords: Croatia, empirical research, information technology, knowledge management

1. INTRODUCTION

For many companies, the time of rapid technological change is also the time of incessant struggle for maintaining a competitive advantage. It is obvious that knowledge is slowly becoming the most important factor of production, next to labour, land and capital (Brčić, 2002, p. 11). Even though some forms of intellectual capital are transferable, internal knowledge is not easily copied. This means that the knowledge anchored in employees' minds can get lost if they decide to leave the organization. Therefore, the key objective of management is to improve the processes of acquisition, integration and usage of knowledge, which is exactly what KM is all about (Kovačić, Bosilj Vukšić, Lončar, 2006, p. 57). The purpose of managing the knowledge is connecting those who need knowledge with those who possess knowledge. Although many organizations worldwide are introducing KM practices there is the lack of research and literature on this topic in Croatia. Considering that, the main goal of this paper is to explore the development of KM practice in Croatia. The paper is organized as follows: first, introduction is given; the second section gives an overview of KM and its success factors; third, the research methodology is described and also data analysis and data results are presented; finally, conclusions, limitations and future work are outlined.

2. THE THEORETICAL BACKGROUND OF KNOWLEDGE MANAGEMENT

2.1. The concept of Knowledge Management and its benefits

The KM concept consists of two words: management and knowledge. Managing means guiding activities and development and caring about jobs of certain company and institution. Knowledge is the sum of accepted knowledge about nature, community, history and man. It is acquired through education, introducing and experience, transfer of thoughts and learning. Knowledge is always expanding and changing alongside with the development of man and community where it belongs. Polany (1969, p. 55) distinguishes knowledge as explicit and tacit. Explicit knowledge is that knowledge that can be found in books and that can be learned through the education process. Implicit knowledge is personalized, private and it consists of someone's experience, his/her own value, opinions and skills.

It is very hard to uncover this knowledge because it is hidden in the person and it is not expressed even though it has a bigger value than explicit knowledge. So, how is KM defined? KM refers to capturing, organizing, storing and disseminating the knowledge and experiences of individual groups within an organization (Dalkir, 2005, p. 78). Nowadays, competitive advantage no longer relies just on tangible assets and natural resources, but on how effectively companies manage knowledge. Intensifying global competition forces companies to innovate and improve or upgrade their competence frequently in order to maintain their competitive advantage in the global market. In general, this requires fast exploring and acquiring of critical information and knowledge of the market and of its internal organization (Davenport and Prusak, 2000, p. 17). Firestone (2003, p. 23) suggests that future opportunities can be discovered by combining an entrepreneurial orientation with knowledge management. When this combination can be effectively maintained by organizations, the likelihood of underpinning innovation and developing new competencies tends to be higher. KM is fundamentally a systematic approach for optimizing access to relevant advice, knowledge, and experience. Organizations which have not implemented KM may be aware that they cannot capture and reuse good or best practices, and are likely to lose what some employees have learned but not shared about suppliers, customers and competitors, and risk repeating mistakes. The primary business problem that KM is designed to tackle is that teams and individuals are performing sub-optimally, because they do not have access to knowledge acquired through external experience. In addition, new endeavours and innovations may be impeded from lack of access to knowledge via KM practices and tools (Gottschalk, 2005, p. 83). By managing knowledge as a continuous process organizations are able to meet existing and emerging needs and identify and exploit existing and acquired knowledge assets in order to develop new opportunities (Sherif, 2006, p. 34). Furthermore, since knowledge is the key resource for competitive advantage, storing and protecting knowledge creates value for the organization (Rašula, 2008, p. 112) to keep innovating without fear of being imitated by others. Knowledge that is unique and specific to an organization is now viewed as the key asset that can lead to a sustainable competitive advantage (Nonaka and Takeuchi, 1995, 34). Information and KM are recognized as driving forces behind the creation of organizational value (Bosilj Vukšić and Kovačič, 2004, p. 88). Looking at KM historically through the stages of its development tells us not only about the history of KM, but it also reveals a great deal about what constitutes KM. Koenig (2004, p. 61) talks about three stages of KM. The initial stage of KM was driven primarily by IT. That first stage has been described using the metaphor as "by the internet out of intellectual capital". The concept of intellectual capital provided the justification and the framework, the seed, and the availability of the internet provided the tool. The consulting community jumped at the new capabilities provided by the internet, using it first for themselves, realizing that if they shared knowledge across their organization more effectively, then they could avoid reinventing the wheel, underbid their competitors, and make more profit. The salient point is that the first stage of KM was about how to deploy that new technology to accomplish more effective use of information and knowledge. So, the characteristics of the first KM phase are focus on: IT, intellectual capital and the internet. The second stage of KM emerged when it became apparent that simply deploying new technology was not sufficient to effectively enable information and knowledge sharing. Human and cultural dimensions needed to be addressed. It became clear that KM implementation would involve changes in the corporate culture, in many cases rather significant changes. KM therefore extends far beyond just structuring information and knowledge and making it more accessible. So, the characteristics of the second KM phase are focus on: communities of practice, organizational culture, the learning organization and tacit knowledge. The third stage developed from the awareness of the importance of content, and in particular the awareness of the importance of the retrievability of content, and therefore of the importance of the arrangement, description, and structure of that content.

Since a good alternative description for the second stage of KM is the "it's no good if they don't use it" stage, then in that vein, perhaps the best description for the new third stage is the "it's no good if they try to use it but can't find it" stage. The characteristics of the third stage of KM are: taxonomy and content.

2.2. Measuring Knowledge Management

Ahn and Chang (2004, p. 405) state that it is of great importance to measure knowledge. Without having a reliable measurement, a comprehensive theory of knowledge or knowledge assets is very difficult to develop. Consequently, there is no visible progress in the efforts to treat knowledge as a variable to be researched or asset to be managed. Although many organizations worldwide are introducing KM practices, there is no generally acknowledged methodology for assessing, where the organization stands, compared to its competitors. Also, the methodology of measuring KM is complex. In this paper the methodology developed by Rašula (2008, p. 133) was used. By combining a set of critical success factors with a set of measurable KM factors, an intersection was made to define a new set of measurable key elements of KM (Rašula, 2008, p. 74). Those elements or critical success factors of KM were united into three categories: (1) information technology (the ability of technology to capture knowledge and usage of information systems), (2) organization (people, organisational climate and processes) and (3) knowledge (knowledge accumulation, utilisation, sharing practices and knowledge ownership identification). The value that KM adds, lies in increasing individual, team and organizational efficiency through the use of KM tools (IT). Some authors say that the most dominant KM paradigms are about IT (Rašula, Bosilj Vukšić and Indihar Štemberger, 2008, p. 53). Results of research show that 70 % of papers on KM stress the importance of IT systems, developed to manage explicit knowledge. Even authors, whose main field of KM research is not about the importance of IT, state that IT is crucial for successful knowledge management (Perez, 2004, p. 100). Two elements form the IT component of KM: the first element is the ability of IT to capture knowledge and the second element is usage of IT tools. When it comes to judging the influence of those two elements on the KM construct, it is believed that the level of capturing both explicit and tacit knowledge with IT tools affects KM in a positive manner. It is the same with the usage of IT tools. The higher the quality of tools, quality of information, user satisfaction, usage and accessibility, the greater the positive influence on KM (Lee and Yu, 2004, p. 350). As a result of Carvalho and Ferreira research (2001, p. 11), a ten KM software categories typology are proposed, as follows: Intranet-based systems; Electronic document management; Groupware; Workflow; Artificial intelligence-based systems; Business intelligence; Knowledge map systems; Innovation support tools; Competitive intelligence tools; Knowledge portals. Nevertheless, the compelling need for KM in organizations is fuelled by a host of social economic and technological factors and only when used in tandem with an appropriate KM strategy, IT is a powerful enabler of organizational success. Organizational culture has a great contribution to KM due to the fact that culture determines the basic beliefs, values, and norms regarding the why and how of knowledge generation, sharing, and utilization in an organization. An organization can achieve a competitive edge by creating and using knowledge about its' processes and by integrating its' knowledge into business processes. Organizational elements are considered to be the second component of KM (Martin, 2005, p. 343) as organization itself is important for establishing any form of new activities and processes for managing knowledge. Organization is a multi-dimensional construct that is defined differently throughout literature. For the purpose of this research the construct was defined as a set of several key indicators, focused strictly on organizational climate elements (such as motivation and collaboration) and on organizational processes. People and the organizational climate, as the first element of organization, include values, trust, motivation, creativity, teamwork, collaboration, role of employees and managers

in decision-making, development of innovative culture, and other important factors (Škerlevaj, 2005, p. 350). On the other hand, organizational processes, as the second element, with their execution, re-engineering and integration, are also found to be important for successful KM. Organization, as a combination of those two elements, also affects KM practices in a positive manner. For the first element, people and organisational climate, it is believed that the better and higher the trust, creativity, teamwork and collaboration among employees, the greater the positive influence on KM. Also, the more the KM activities are integrated into processes, the greater the positive influence on KM (Robinson, 2006, p. 800). The third key component of KM is knowledge. Defined as a component of four elements it consists of knowledge accumulation, utilisation and knowledge sharing practices, and knowledge ownership identification (Kiessling, 2009, p. 422). Knowledge accumulation can be internal or external, occasional or intended. Knowledge can be accumulated through externalisation or internalisation. The term knowledge utilisation covers individual and group knowledge, learning from experience or innovative solutions. Knowledge sharing can also be both formal and informal. The ownership of knowledge, as the last element of this construct, can be used to describe knowledge as an individual or group identity and to point at specialist or general sources of knowledge in a given organization. All four elements have a positive impact on overall KM practices. It is believed for knowledge accumulation that the higher the effectiveness of knowledge accumulation (internal, external, through internalisation or externalisation) in an organisation, the greater the positive impact on KM (Tiwana, 2000, p. 14). Secondly, the higher the effectiveness of utilising knowledge in organizations, the greater the positive impact on KM. Thirdly, the study shows that the higher the effectiveness of sharing of formal or informal knowledge, the greater the positive impact on KM (Lee and Yu, 2004, p. 249). Lastly, the better the accessibility of knowledge and the practices of defining ownership of knowledge in an organization, the greater the positive impact on overall KM practices (Keskin, 2005, p. 171).

3. THE EMPIRICAL ANALYSIS OF KNOWLEDGE MANAGEMENT IN CROATIAN COMPANIES

3.1. Research instrument

In 2017 an empirical research was carried out whose main goal was to assess the current state of KM in Croatian companies. In this research original instrument for KM measurement that was developed by Rašula (2008, p. 97) was used. A questionnaire had 23 questions regarding KM characteristics that were divided in 3 domains (dimensions) that presented critical success factors: Knowledge (8 questions), Information technology (6 questions), Organizational culture (9 questions). Degree of presence of these characteristics in the organization is measured on a 7 point Likert scale (1=Strongly disagree, 2=Disagree, 3=More disagree than agree, 4=Neither agree or disagree, 5=More agree than disagree, 6=Agree, 7=Strongly Agree). The collected data were analysed using Statistical Package for Social Sciences, SPSS.

3.2. Data collection and sample characteristics

The research was conducted among big, small and middle sized companies in Croatia. The main source of data about Croatian companies was the database of The Institute for Business Intelligence and the questionnaire was sent randomly to the 1750 companies. The questionnaire was addressed to the CEOs or the chairpersons of the companies who were instructed to fill out the questionnaire themselves or give it to a competent person within the organization. A total of 200 Croatian managers responded, so the final response rate was 11.43%. The selected companies were analyzed according to the number of employees. In the resulting data set 5% of companies had between 1 and 50 employees, 62% of companies had between 50 and 249 employees and 33% of companies had 250 or more employees.

Respondents were mainly from the manufacturing industries (59), construction (26) and sale (16). It can be stated that the data set is adequate representation of small, big and medium sized Croatian companies from all sectors.

3.3. Data analysis and results

Before all, the compound measure of KM construct was analyzed, which revealed the overall state of KM. This was done by calculating the average grade for each domain of the questionnaire. Based on the sample the compound measure of the KM in Croatia is 4.9535. Table 1 shows average grades for each domain of KM measurement construct. It can be seen that Croatian companies have the lowest grade for IT aspect of KM.

Table 1: Average grades for each domain of KM (source: author's calculation)

	N	minimum	maximum	mean	standard deviation
Organizational culture	194	1.67	7.00	5.1220	1.2590
Information technology	185	1.00	7.00	4.7243	1.3499
Knowledge	178	1.88	7.00	4.9628	1.1743
valid N	171				

Chart 1 shows detailed analysis of all the questions for IT domain. The highest grade have statements that information tools enable effective work in an organization (5.03) and that organization uses information tools for managing data about customers and suppliers (5.01). All statements/questions have very similar grades, except the one about using videoconference calls and communication tools that has the lowest grade (3.99).

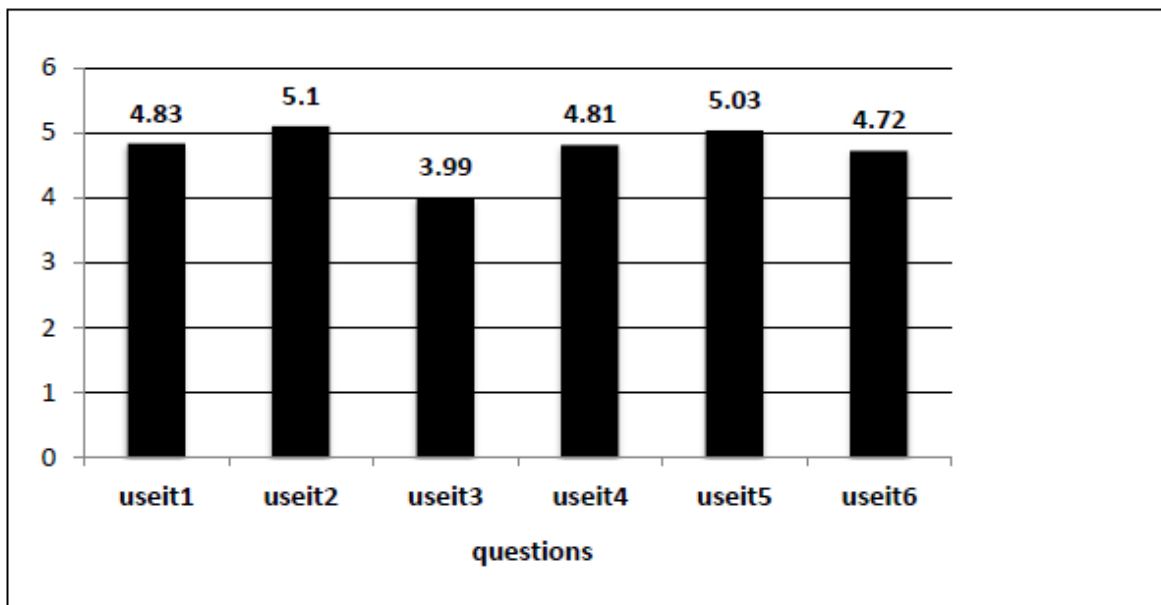


Chart 1: Average grades for each question of IT domain (source: author's calculation)

In order to determine if there is a connection between KM and IT in the organization correlation analysis was conducted. IT presented independent variable and KM presented dependent variable. Correlation analysis showed that Spearman's correlation is $\rho=0.638$ with statistical significance $p=0.000$. According to Guilford table that kind of connection is moderate. Statistical analysis that was conducted shows that Croatian companies are in the second stage of KM.

Several facts prove that statement:

1. The analysis calculated that average grades for organizational culture of KM and for human dimension of KM are higher than the grade for IT. In previous chapter it was described that the focus on culture dimension and human dimension of KM are characteristics of the second KM stage.
2. Spearman's correlation showed that there is a moderate relationship between IT and KM and that is also the characteristics of the second KM stage.
3. Vidović (2008, p. 137) has conducted the research about the state of KM in big and middle sized Croatian companies and has proved that companies in Croatia are in the first stage of KM. She has used different methodology, but nevertheless it is logical that Croatian companies have evolved regarding KM concept throughout all this time.
4. KPMG research (2014) showed that the third stage of KM nowadays exists only in big, leading European companies.

In order to advance to higher stage of KM Croatian companies have to:

- Actively develop and use all critical success factors of KM. It means that companies have to have KM strategies, KM workers and organizational culture where the motto will be: "Sharing knowledge is power."
- Increase the use of IT for all KM tasks.

4. CONCLUSION

This paper presents three main components important for KM, namely: (1) information technology, (2) organizational elements and (3) knowledge. The state of those components and the overall KM in Croatia are presented through the empirical research. The results of this research can be applied as a starting point for managers who are to implement KM in their organization and also these results provide solid basis for further research in the field it addresses. Although this research reveals new findings, it is significant to mention that it has few limitations. The major limitation of this study is the sample size. The sample involved 200 companies. A bigger sample size would allow more findings. Also, the research was conducted using survey. This means that the conclusions of the research are subject to the general weaknesses of correlation studies. Further research is also possible. First of all the survey could be repeated to compare the results and to check the improvement. Besides that the same investigation could be performed in other countries to compare the results and to check how KM is developing.

LITERATURE:

1. Ahn Jae-Hyeon, Chang Suk-Gwon (2004), *Assessing the contribution of knowledge to business performance: the KP3 methodology*. Decision Support Systems, Amsterdam: North Holland, 36(4), pp. 403-416.
2. Bosilj Vukšić, V., Kovačić, A. (2004), *Upravljanje poslovnim procesima*, Zagreb: Sinergija-nakladništvo d.o.o.
3. Brčić, R. (2002.), *Organizacijska kultura u funkciji djelotvornosti upravne organizacije*, Zagreb: Ekonomski pregled, 53 (11-12)
4. Carvalho, R. B., Ferreira M. A. T. (2001), *Using information technology to support conversion processes*, Information Research, 7(1).
5. Dalkir, K. (2005.), *Knowledge Management in Theory and Practice*, Oxford: Elsevier Inc.
6. Davenport, T. H., Prusak, L. (2000), *Working knowledge: How organizations manage what they know*, Boston: Harvard Business School Press
7. Firestone, J.M., McElroy, M.W. (2003), *Key Issues in the New Knowledge Management*, Massachusetts: Elsevier Science.

8. Gottschalk, P. (2005.), *Strategic Knowledge Management Technology*, London: Idea Group Publishing.
9. Kiessling, T.S. et al. (2009), *Exploring knowledge management to organizational performance outcomes in a transitional economy*, Journal of World Business, (44), 421-433.
10. Koenig, M. E. D., Srikantaiah, T. K. (2004), *Knowledge Management Lessons Learned: What Works and What Doesn't*, New Jersey: ASIST.
11. Keskin H., (2005), *The Relationships between Explicit and Tacit Oriented KM Strategy, and Firm Performance*, Journal of American Academy of Business, Cambridge, 1, pp. 169-175.
12. Kovačič, A., Bosilj Vukšić, V. & Lončar, A. (2006), *A Process-Based Approach to Knowledge Management*, Economic Research, 19 (2), 53–66.
13. KPMG, (2014), *Knowledge Management Research Report: Finding Inner Connection*, Retrieved 13.09.2019. from: <http://kpmgcampus.com/kpmggo/kpmggospring14.pdf>
14. Lee, K. J. and Yu, K. (2004), *Corporate culture and organizational performance*, Journal of Managerial Psychology, 19 (4), 340–359.
15. Martin, V. A. et al. (2005), *Cultivating knowledge sharing through the relationship management maturity model*, The Learning Organization, 12 (4), 340–354.
16. Nonaka, I., Takeuchi, H. (1995), *The knowledge creating company*, New York: Oxford University Press.
17. Perez, L. S. et al. (2004), *Managing knowledge: the link between culture and organizational learning*, Journal of Knowledge Management, 8 (6), 93–104.
18. Polanyi, Michael (1969), *Knowing and Being*, Chicago: University of Chicago Press.
19. Rašula, J. (2008), *Vloga informacijske tehnologije in drugih dejavnikov v modelu zrelosti managementa znanja*, Doktorska disertacija, Ljubljana: Ekonomski fakultet.
20. Rašula, J., Bosilj Vukšić, V. i Indihar Štemberger, M. (2008), *The Integrated Knowledge Management Maturity Model*, Zagreb: International Review of Economics & Business, 11(2), 47-62.
21. Robinson, H. S. et al. (2006), *STEPS: a knowledge management maturity roadmap for corporate sustainability*, Business Process Management Journal, 12 (6), 793–808.
22. Sherif, K. (2006), *An adaptive strategy for managing knowledge in organizations*, Journal of Knowledge Management, 10(4).
23. Škerlavaj, M. et al. (2006), *Organizational learning culture – the missing link between business process change and organizational performance*, International Journal of Production Economics, 346-367.
24. Tiwana, A. (2000), *The knowledge mananagement toolkit: practical techniques for building a knowledge management system*, New Jersey: Prentice-Hall.
25. Vidović, M. (2008), *Upravljanje znanjem u velikim hrvatskim poduzećima*, Magistarski rad, Zagreb: Ekonomski fakultet.

SUSTAINABLE ENTREPRENEURSHIP AND RELATED DESTINATIONS, LITERATURE REVIEW FOR RESEARCH IMPLICATION

Ana Malnar

*Faculty of Economics and Business, University of Rijeka
Ivana Filipovića 4, 51000 Rijeka, Republic of Croatia
ana.malnar@efri.hr*

Katja Crnogaj

*Faculty of Economics and Business, University of Maribor
Razlagova ulica 14, 2000 Maribor, Republic of Slovenia
katja.crnogaj@um.si*

ABSTRACT

Whilst the entrepreneurship is being considered one of the most important forces of today's economic development, tourism is an economic sector in which the impact of vast everyday changes regarding the environmental and social issues can be easily seen. Considered to be a dynamic force for change, entrepreneurship is expected to contribute to this social, ecological and economic goal of sustainability. The enhancement of the sustainable development practice, in a form of sustainable entrepreneurship, has the potential to represent the core of the future entrepreneurial activities, and one of the areas where the sustainable entrepreneurship can be applied is the tourism sector. The purpose of this paper is to provide insight into recent literature on sustainable entrepreneurship in tourism and current trends and developments. Based on the review, it can be said that the field of sustainable entrepreneurship in tourism field has generated increased interest during the last ten years. Furthermore, the findings from the review and analysis lead us to the assumption that the multilevel approach to the concept of sustainable entrepreneurship is the one that most successfully highlights the role of each of those factors. Implemented in the tourism sector it highlights that the organizations are combined of individuals, sustainability-driven entrepreneurs, who on a daily basis make decisions regarding business opportunities which will consequently effect the organization and the organizational behavioural, as well as the national economy. Moreover, based on the findings and analyses, the paper discusses potential contributions from tourism entrepreneurship and suggests future directions.

Keywords: *Entrepreneurship, Sustainable development, Tourism*

1. INTRODUCTION

As the society is trying to find new solutions which will lead to the enhancement of the sustainable development practice, there is more light shed on the idea of sustainable entrepreneurship which has the potential to represent the core of the future entrepreneurial activities. Those activities should, while focusing on the successful market opportunities, be primarily focused on taking into the account the environmental and social issues. Further transition towards sustainable entrepreneurship will have significant effects in tourism sector. The fact that the number of suppliers, as well as customers, in this sector is getting too large, has an impact on the environment, and the whole eco – system as well. The sustainable entrepreneurship starts with the socially responsible entrepreneur who, in his decision making process, takes into account the environment and the society in general. Next step is to bring those ideas to the level of organization, and consequently to the national/regional level. Sustainable development of a tourist destination has to involve not only environmental protection, but has to be observed as a whole.

According to Kalemci (2019) the undeniable relationship of natural resources with the tourism sector and increasing international tourism mobility in recent years has required that the concept of tourism be evaluated in the context of sustainability. Sustainable tourism refers to any tourism that permanently contributes to the protection and promotion of the environment, natural and other resources, cultural values, and integrity of the local community (Angelkova, Koteski, Jakovlev and Mitrevska, 2012). According to Crnogaj, Rebernik, Bradac Hojnik and Gomezelj Omerzel (2014) tourism is therefore heavily dependent on entrepreneurship and cannot ultimately survive if it is not both sustainable and entrepreneurial at the same time. By adopting a descriptive research this paper reveals some sustainable entrepreneurship and related destinations literature review in last decade with the aim to provide insight into current trends and developments regarding this area of activities. Thus, the purpose of the current paper is to provide a systematic review of studies of entrepreneurship within the tourism activities, analysing the development and contributions from current research, and suggesting directions for future trends in this area.

2. THEORETICAL LITERATURE REVIEW

Kokkranikal and Morrison (2011) discussed how entrepreneurial innovation plays a significant role in tourism development, especially in communities with limited experience or expertise in tourism. Innovative tourism businesses, often in the small business sector, are likely to be more beneficial to the local community in terms of job creation and economic linkages. Such forms of tourism could offer new forms of livelihood in destination communities, making tourism an effective strategy for livelihood diversification that is more sustainable and community-based. Crnogaj, Rebernik, Bradac Hojnik and Gomezelj Omerzel (2014) in their model of researching the sustainable entrepreneurship in the tourism sector gave a systematic view on different levels of analysis. The suggested model shows that the tourism entrepreneurship factors at various levels impact the rate of entrepreneurship and consequently firm performance and development. The process of sustainably oriented entrepreneurship starts with an individual, an entrepreneur who is able to perceive business opportunities, having in mind ecological, economic and social factors. As previously mentioned, the sustainable entrepreneurship starts with an individual who, with his knowledge and capabilities, is willing to contribute to this process of high importance. In order to find out how future business people are prepared for creating and running businesses in sustainable tourism, Badulescu, Badulescu, Bac and Sipos-Gug (2014) run a research among master students of Business Administration trying to determine the which is the profile of future sustainable entrepreneur. The results show that the attitude of the interviewed master students on sustainability, both in their current quality of tourists, as well as in their possible future as entrepreneurs, is evidenced by the agreement with statements representing dimensions of sustainable behaviour. Solvoll, Alsos and Bulanova (2015) differentiate between two strategies for further development in tourism research; a convergent and a divergent track in examining a specific issue within the group of touristic activities. Following the convergent track involves transferring theories, models and measurements from mainstream disciplinary research and adapting it to the tourism sector, while a divergent approach to tourism entrepreneurship implies to develop methodologies and reach out in a cross-disciplinary manner. Hall, Daneke and Lenox (2010) state that the research concerned with sustainable development and entrepreneurship is emerging. It could be the focus of entrepreneurial future. Entrepreneurship has been recognized as a major conduit for sustainable products and processes, and new ventures are being held up as a panacea for many social and environmental concerns. However, there remains considerable uncertainty regarding the nature of entrepreneurship's role and how it may unfold. The overall goal of sustainable development is the long-term stability of the economy and environment; this is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout

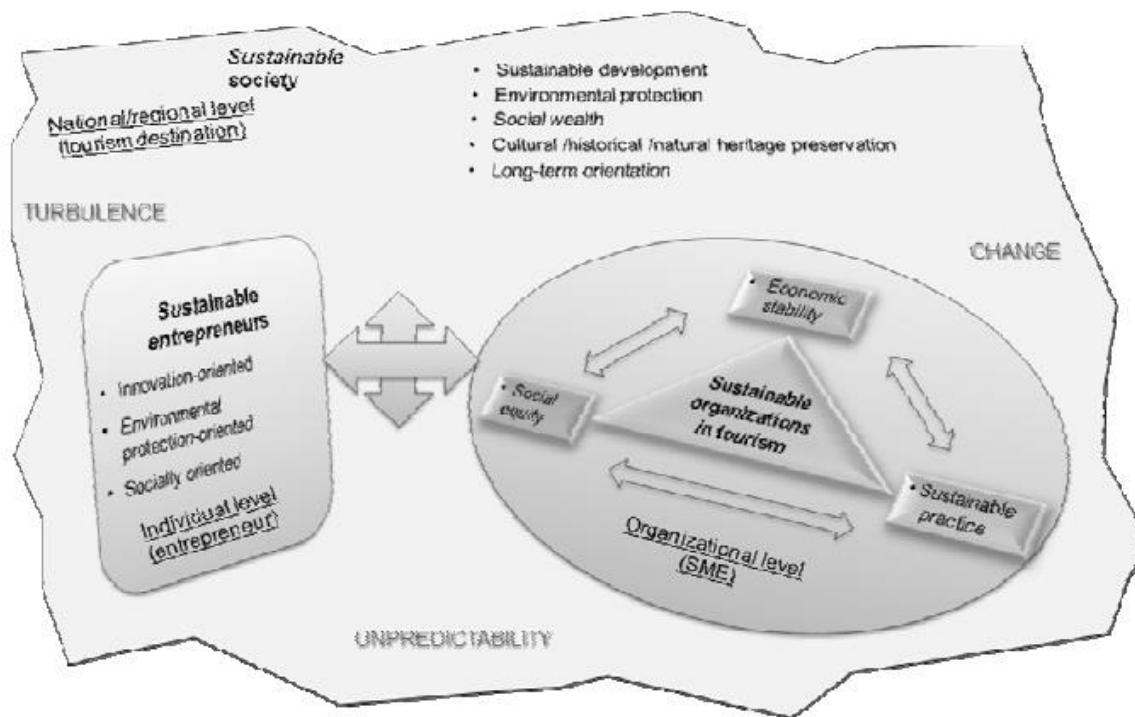
the decision making process (Emas, 2015). Because the tourism sector is a resource-based industry, it must be accountable in terms of sustainability both at the local and global scale (Lu and Nepal, 2009). Also Angelkova, Koteski, Jakovlev and Mitrevska (2012) discuss that the sustainability of tourism development depends on environmental opportunities to ensure a stable and lasting basis. The definition of sustainable tourism is still not precisely determined, due to constant changes and experiences that will continue in the coming years until accepting the generally accepted definition of the term sustainable tourism. The conception of sustainable tourism should be a basic indicator of achievement of economic, social and aesthetic goals, while protecting the cultural values, social integrity, key ecological processes and biological diversity. For Angelevska-Najdeska and Rakicevik (2012) sustainable tourism development actually refers to environmental preservation planning and as such includes a variety of research activities and analysis prior to the decision for determining the direction of the development. All these activities have to be undertaken in order to prevent from the intensive use of resources in some specific areas, without previous care for the preservation of the resources. Ateljević and Li (2009) discussed the tourism development saying that since the emergence of mass tourism in the 1950s and 1960s, tourism development has gone through many different phases; from simplistic planning, the saturation stage in 1980s and the current phase of sustainable tourism. Current stage is characterized by an increasing number of innovative models and approaches, giving more power to the community in the process of development. Situmorang and Raafaldini Mirzanti (2012) in their study spoke about the insufficient awareness about sustainable ecotourism among the respondents. After they were introduced with the concept, almost all of them expressed their interest to visit ecotourism destination and approved the concept of ecotourism. Respondents expected to visit a real natural ecotourism destination, the more natural the better. Spatial planning and development strategies must be made, so that the buildings and construction on the site does not destroy the nature. Local culture is one part that needs special attention. Nowadays, many hotels and tourism destinations in Indonesia serve western food, while customers want something traditional, which shows the characteristic of those areas. The same conditions applied on hotel buildings and their ornaments, which imitated the architecture from abroad and did not show typical features of the local culture. Respondents' expectation to the development of ecotourism destinations was the increasing of local economy. Sustainable development of tourism can ultimately improve the welfare of local communities. Aquino, Lück and Schänzel (2018) in their work suggest Tourism social entrepreneurship (TSE) as a market-based strategy to address social problems whilst maximising the benefits and minimising the negative consequences that tourism may provide to host communities, due to the fact that local communities are at the foreground of these innovative tourism entrepreneurship and development strategies.

3. SUSTAINABLE ENTREPRENEURSHIP IN TOURISM – CONCEPTUALIZATION AND IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

In order to be called sustainable, the concept of development has to stand on three pillars; economical, ecological and social. Having that in mind the sustainable entrepreneurship practice in the tourism sector involves balanced economic, social and cultural development without endangering the environment, which enables the development of the same or higher level. Sustainable development is a process that allows development to be achieved without degradation or depletion of those resources on which it is based. That, generally speaking, can be accomplished or resource management so that they can renew the extent and used, or with greater representation and use of resources in which the regeneration period is short. This approach, resources can be used in future to the same extent as the current generation. The main question is whether is possible to maintain successful tourism sector that will at the same time contribute to the nature preservation, cultural values and the local community.

In order to answer that complex research question is necessary to take a look at sustainable entrepreneurship from three points of view; individual, organizational and national, with all of them being interconnected and coo-dependent. According to Crnogaj Rebernik, Bradac Hojnik and Gomezelj Omerzel (2014) studying sustainable entrepreneurship on three levels of analysis provides the opportunity to gain a more holistic picture of sustainable development in the tourism sector by considering more factors and exploring outcomes of entrepreneurship at different levels and their interconnection. This section draws on various fields of relevant literature to propose a model (Figure 1) that represents the range of sustainable entrepreneurship factors that can lead to greater degrees of sustainability.

Figure 1: Sustainable entrepreneurship framework in the tourism sector



Source: Crnogaj Rebernik, Bradac Hojnik and Gomezelj Omerzel (2014)

The sustainable entrepreneurship starts with the socially responsible entrepreneur who, in his decision making process, takes into account the environment and the society in general. At this level the variables used will include entrepreneur's age, gender, education, in addition to psychological factors such as perception of opportunity, entrepreneurial behaviour, and acknowledgment of social issues and fear of failure. The next step in the analysis is to bring the research to the level of organization, an SME. The research at this level would be directed towards finding how a sustainably oriented entrepreneur can implement his ideas into company's business and how will that contribute to its business performance. At the organizational level the variables used will include the usage of renewable sources, investment into research and development, contribution to the local community etc. The third level of the research would be based on the impact of priory mentioned practices on the regional or national level, taking into account the legal, social and institutional framework.

4. CONCLUSION

Sustainable development can only work successfully when four of its constituent elements, economic, social, cultural and environmental components have approximately equal importance and strength and conditioning and interconnection without the domination of any

part of these elements. Sustainable tourism development mainly depends on the ability of the environment to ensure a stable and lasting basis for development (Angelevska-Najdeska, Rakicevik, 2012). The objective of this paper is to give an insight into recent research and literature on tourism entrepreneurship, as well as to analyse trends and developments. Based on the review, it can be said that the field has generated increased interest and has recently experienced strong growth in the number of studies. As a result, the field of sustainable entrepreneurship in tourism is changing rapidly. There is a higher number and larger variety of studies, but there are also indications of stronger theoretical anchoring and more well-developed methodological designs. In conclusion, one of the approaches that most successfully highlight the role of each individual component is the multilevel approach to the idea of sustainable entrepreneurship. According to Parrish and Tilley (2016) current methodologies in sustainable entrepreneurship are still underdeveloped from the conceptual and empirical point of view. Implemented in the tourism sector it highlights that the organizations are combined of individuals who on a daily basis make decisions regarding business opportunities which will consequently effect the organization and national economy. Further development and trends should include the operationalization of the prior mentioned model, including quantitative data, rather than qualitative.

LITERATURE:

1. Angelevska – Najdeska, K., Rakicevik, G. (2012). *Planning of sustainable tourism development*. Procedia – Social and Behavioral Sciences, Vol. 44, pp. 210 – 220.
2. Angelkova, T, Koteski, C, Jakovlev Z, Mitrevska E. (2012). *Sustainability and competitiveness of tourism*. Social and Behavioral Sciences, Vol. 44, pp. 221 – 227.
3. Ateljevic, J., Li, L. (2009). *Tourism entrepreneurship – concepts and issues*, Ateljevic, J., Page, S. (Ed.), Tourism and Entrepreneurship: International Perspectives, Elsevier Ltd, UK, pp. 9-32.
4. Aquino, R.S., Lück, M, & Schänzel, H. (2018). *A conceptual framework of tourism social entrepreneurship for sustainable community development*. Journal of Hospitality and Tourism Management, 37, 23-32.
5. Badulescu, A, Badulescu, D, Bac, D, Sipos-Gug, S. (2014). *Attitudes and intentions of business master students towards sustainable tourism and entrepreneurship*. Amfiteatru Economic Journal, ISSN 2247-9104, Vol. 16, Iss. Special No. 8, pp. 1110-1124
6. Crnogaj, K, Rebernik M, Bradac Hojnik, B, Omerzel Gomezelj, D. (2014). *Building a model of researching the sustainable entrepreneurship in the tourism sector*. Kybernetes, Vol. 43 Iss 3/4 pp. 377 -393.
7. Emas, R. (2015). *The Concept of Sustainable Development: Definition and Defining Principles*. Brief for GSDR 2015.
8. Hall, J.K, Daneke, G.A, Lenox, M.J. (2010). *Sustainable development and entrepreneurship: Past contributions and future directions*. Journal of Business Venturing, Volume 25, Issue 5, pp. 439-448.
9. Jithendran, K., Alison M. (2011). *Community Networks and Sustainable Livelihoods in Tourism: The Role of Entrepreneurial Innovation*. Tourism Planning &Development, pp. 137-156.
10. Kalemci, R.A. (2019). *A content analysis of sustainable development in the tourism literature*. Sustainable Tourism Practices in the Mediterranean.
11. Kokkranikal, J, Morrison, A. (2011). *Community Networks and Sustainable Livelihoods in Tourism: The Role of Entrepreneurial Innovation*. Tourism Planning and Development Volume 8, Issue 2, pp. 137-156.

12. Lu, J., Nepal, S. (2009). *Sustainable tourism research: An analysis of papers published in the Journal of Sustainable Tourism*. Journal of Sustainable Tourism, 17(1), 5–16. [Taylor & Francis Online], [Web of Science ®], [Google Scholar]
13. Parrish, B.D., Tilley, F. (2016). Sustainability Entrepreneurship: Charting a Field in Emergence. In: Schaper, M. (Ed.), Making Ecopreneurs, Developing Sustainable Entrepreneurship, Gower Publishing Limited.
14. Situmorang, D.B.M., Raafaldini Mirzanti, I. (2012). *Social entrepreneurship to develop ecotourism*. Procedia Economics and Finance 4, pp. 398 – 405.
15. Solvoll, S, Alsos. G.A, Bulanova, O. (2015). *Tourism Entrepreneurship – Review and Future Directions*. Scandinavian Journal of Hospitality and Tourism, Vol. 15, Supplement 1, pp. 120–137.

SUBJECTS OF LEGAL REGULATION – DIFFERENT APPROACHES OF COMPETITION, PUBLIC PROCUREMENT AND CORPORATE LAW

Katarina Kalesna

*Faculty of Law, Comenius University in Bratislava, Slovakia
Katarina.kalesna@flaw.uniba.sk*

Maria T. Patakyova

*Faculty of Law, Comenius University in Bratislava, Slovakia
Maria.patakyova2@flaw.uniba.sk*

ABSTRACT

To have a proper regulation is arguably an ultimate aim of every regulator. In order to achieve this goal, the regulator needs to define to whom the regulation shall be addressed. With the conception of legal persons, this definition is a tricky task to do. Due to the fact that legal persons have separate legal personality, the legal state of affairs and the business state of affairs do not need to correspond. This may cause issues from regulatory point of view. This paper discusses the subjects of three different types of regulation. Competition law of the European Union is, in general, focused on undertakings. The notion of undertakings is based mostly on economic approach and it can overcome purpose-built creation of de iure separate legal persons. Such approach may be very efficient and it is unfortunate that this understanding is not completely reflected within competition law of the Slovak Republic. Economic operators under public procurement law are understood differently from undertakings. We present the subjects of public procurement law of the Slovak Republic in the light of law of the European Union. Lastly, both concepts differ from legal persons and their employment in concerns under corporate law. The legal norms of the Slovak Republic are analysed in this regard. Thus, the paper asks to what extent are these concepts similar, whether their dissimilarities are rationalised and what possible negative consequences they may have in practice.

Keywords: *Undertakings, Competition Law, Public Procurement, Concern Law, Group of Companies*

1. INTRODUCTION

Since the inception of legal personality of non-human entities, business has been growing rapidly. Taking advantage of gathering people and property into an entity; of limiting liability of the entity's owners; of dividing jobs and roles within the entity; last centuries and decades resulted in a boom of legal persons. However, by the same token, separate legal personality has brought many issues into legal regulations. Various of them remain unsolved till today. One of the core problems lies in the separation of the legal state of affairs and the business state of affairs. A company may be legally separated from another company, whereas under business point of view, they are the same. This may commonly happen if both companies are owned by the same person. Different areas of law treat this situation differently. This paper looks into three chosen areas of EU and Slovak law: competition law, public procurement law and regulation of concerns under corporate law. The paper deals with the question of addresses of the chosen areas of law. It presents and compares the subjects of each particular area of law. The paper identifies the differences between the approaches and tries to find out whether there are objective reasons for such differences. The paper also asks whether it is beneficial to have such nonuniform approach and, consequently, whether there are negative consequences arriving from this status quo. In order to analyse these questions, the paper is organised as follows.

First, thoughts on internal market qua the framework for competition and public procurement are outlined. Next, the concept of undertaking under European competition law and Slovak competition law is presented. Part four is dedicated to the subject of the Public procurement law, followed by the chapter on chosen issues of Slovak corporate law. All the main findings are gathered in the conclusion.

2. INTERNAL MARKET – FRAMEWORK OF COMPETITION AND PUBLIC PROCUREMENT

Internal market as a goal of economic integration in the European Union is subject to regulation in the Treaty on Functioning of the European Union („TFEU“) as far as free movement of goods, freedom of establishment and freedom to provide services is concerned. Competition and the competition rules of the TFEU are crucial for the functioning of the internal market. Public procurement has to comply with the principles of the TFEU¹ and in particular with fundamental freedoms of the internal market as mentioned above. To achieve the aim of public procurement – „to determine... which tender is the most economically advantageous tender“² with regard to „price–quality ratio“³ leading to „the most efficient use of public funds“⁴ - public procurement has to be „opened up to competition“.⁵ In this sense competition and public procurement represent two relatively independent pieces of economic regulation of the internal market (Sanchez Graells, 2015, p.3) meeting each other in those relations where goods or services are purchased by public sector. (Kalesná, 2015, p. 23). Both pieces of economic regulation undoubtedly „share common goals and principles“ (Sanchez Graells, 2015, p.5) but on the other hand they may have different optics conditioned by different interests they follow.

3. CONCEPT OF UNDERTAKING IN COMPETITION LAW

One of examples of such different optics of competition and public procurement is undoubtedly the concept of undertaking/economic operator in competition law and public procurement law.

3.1. European Competition Law

Having in mind absence of a definition in competition rules of the TFEU, „the word ‚undertaking‘ has been interpreted in the widest possible sense to include any legal or natural person engaged in some form of economic or commercial activity, whether in the provision of goods or services, including cultural or sporting activities,...banking,...insurance...and transport“ (Steiner, Woods, 2009, p. 666). With the aim to achieve the widest possible application of the EU competition rules, the European Court of Justice („ECJ“) has offered in its case law a definition of undertaking as a „unit carrying on economic activity regardless its legal form and way of financing.“⁶ Undertaking thus represents economic unit „comprising uniform organisation of personal, material and immaterial means following an economic objective on lasting basis and participating on abusive behaviour under Art. 81 TEC“.⁷ Broad definition of undertaking elaborated by the ECJ case law enables application of this concept not only on individual undertakings/corporations both in public and private sphere, but even on the whole economic units comprising usually the parent company and its subsidiaries acting on the market as a single economic unit although legally independent. (Kalesná, 2017, p.127). That means that notion of an „economic unit“ is „not necessarily linked in the EU with a single

¹ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC („Directive 2014/24/EU“), Recital Nr.1

² Ibid. Recital Nr. 90.

³ Ibid.

⁴ Ibid. Nr. 2.

⁵ Ibid. Nr. 1.

⁶ C-41/90 *Klaus Höfner and Fritz Elser v Macrotron GmbH*.

⁷ T-11/89 *Shell International Chemical Company Ltd v Commission of the European Communities*.

natural or legal person“ (Blažo, 2014, p. 115). Consequently, agreements between/among members of the single economic unit are not caught by Art. 101 TFEU. On the other hand, in case of participation of the whole economic unit on anticompetitive behaviour, liability is usually assigned to the parent company, if this company has executed a decisive influence on performance of the economic unit on the relevant market. (Petr, 2013, p.81). But not to exclude are also cases where joint liability is applied.

3.2. A need for economic activity

As shown already, concept of undertaking is a crucial concept for competition law. „EU case law has adopted a functional or anti-formalistic approach to the concept of ‚undertaking’ ...“ (Sanchez Graells, 2015, p.137), which is dependent on the concept of economic activity, as undertaking is defined as entity carrying out economic or commercial activity. Interpretation of concept of economic activity has thus a substantial influence on the concept of undertaking and scope of its application both in competition and public procurement law. The famous case FENIN v. Commission is of great importance for meaning of undertaking.⁸ In this judgement „the CFI emphasized that an undertaking must carry on economic activity, which is characterised by the business of offering goods or services in a particular market, rather than the simple fact of making purchases. Provided that the purpose for which goods purchased are subsequently used is part of an economic activity, then the purchase itself is an economic activity“ (Steiner, Woods, 2009, p. 666.). This judgement has significant implications for assessment of whether public procurers are to be seen as undertakings. This is usually not the case, since „procurement activities are not to be considered ‚economic‘ activities in and by themselves... Rather, ... the nature of these purchasing activities must be determined according to whether or not the subsequent use of the purchased goods amounts to an ‚economic activity. In other terms, procurement that is ancillary to non-economic activity, does not by itself qualify as ‚economic activity‘ for the purposes of Art. 101 and 102 TFEU“ (Sanchez Graells, 2015, p. 140.).

3.3. Slovak Competition Law

Unlike the EU competition law with rules addressed to undertakings, the Sec. 3(1) of APEC⁹ defines addressee of national competition rules as entrepreneur pursuant to Sec.2 of the Commercial Code¹⁰ as well as natural and legal persons, their associations and associations of these associations with respect to their activities and conduct that is or may be related to competition, regardless of whether or not these activities and conduct is profit oriented. The Explanatory note to the APEC states that, for the purposes of this Act, the entrepreneur is each subject who:

1. is economically independent;
2. disposes of legal personality;
3. is focused on activity of commercial or producing character;
4. participates on the market relations on the side of either supply or demand.¹¹

It flows from the above that the national legislation in Slovak competition law links the notion of entrepreneur to the legal personality and, therefore, it addresses single natural or legal

⁸ T-319/99 *Federación Nacional de Empresas de Instrumentación Científica, Médica, Técnica y Dental (FENIN) v Commission of the European Communities*.

⁹ Act No. 136/2001 Coll. on Protection of Economic Competition, as amended („APEC“).

¹⁰ Act No. 513/1991 Coll. Commercial Code, as amended („Commercial Code“). Entrepreneur under Sec. 2 of the Commercial Code is: a) person registered in the Commercial Register; b) person engaged in business activity under a trade licence; c) person engaged in business activity under specialised legislation; d) persons engaged in agricultural production and registered in a particular register.

¹¹ Explanatory note to the proposal of the Act No. 136/2001 Coll., p. 8.

persons rather than the whole economic unit consisting of several legal persons. However, pursuant to opinions of academics, the notion of entrepreneur should be interpreted in a euro-conform manner (Kalesná, 2012, p.17, p. 18), (Munková, 2009, p. 29). Similarly, the Slovak National competition authority, the Antimonopoly Office of the Slovak Republic, refers to European concept of undertaking. "Due to the fact that the office applies European law besides the [APEC], it shall interpret the liability institutes in a euro-conform manner while enforcing responsibility for anti-competitive action, in line with the principles of European case-law" (the Antimonopoly Office of the Slovak Republic, 2014). There are several drawbacks arising from this situation. For instance, if persons to whom a fine for an infringement of competition law is imposed, each legal person within the undertaking must be identified; it is not enough to simply identify the undertaking as the economic unit (Blažo, 2017, p. 16).

4. ECONOMIC OPERATORS AS ADDRESSEES OF PUBLIC PROCUREMENT RULES

4.1. More bids from undertakings belonging to the same economic unit

Unlike competition law addressing its rules to undertakings as mentioned above, public procurement rules are addressed to economic operators. The EU public procurement law defines "economic operator" as „any natural or legal person or public entity or group of such persons and/or entities including any temporary association of undertakings, which offers the execution of works and/or a work, the supply of products or the provision of services on the market“.¹² The Slovak APP¹³ defines in Sec. 2 (5) a) economic operators similarly as „natural persons, legal persons or association of these persons, who deliver goods, performs construction works or provide services.“ Public procurement law thus works in principle with single persons (Petr, 2018, p. 38), whereas economic units as potential addressees of competition rules can comprise more legally independent subjects. Difference in approach of both pieces of economic regulation to this key concept is confirmed by the ECJ case law. Two important ECJ judgements have to be mentioned in this regard. In its first judgement *Lloyd's of London*¹⁴ was the ECJ confronted with the question of „the compatibility with EU law of an Italian rule that prevented the simultaneous participation in tenders for public contracts by tenderers belonging to the same „decisional unit“.“ (Sanchez Graells, 2018, p. 556). Under this rule “tenderers which”... „are in relation to another participant in the same tendering procedure, in a [legal] situation of control..., or in any relationship, including a de facto relationship, where the situation of control or relationship means that the tenders are attributable to a single decision-making centre would be excluded from participation in a procedure for the award of concessions and of public works, supply and service contracts, and could not conclude contracts pertaining thereto or sub-contracts.“¹⁵ In this case two *Lloyd's* syndicates were excluded from public procurement with regard to the fact that their tenders were signed by the same *Lloyd's* representative for Italy. In its preliminary ruling the ECJ stated, that „the automatic exclusion of candidates or tenderers that are in a relationship of control or of association with other competitors goes beyond that which is necessary to prevent collusive behaviour and, as a result, to ensure the application of the principle of equal treatment and compliance with the obligation of transparency... Accordingly it precludes the possibility for those candidates or tenderers of showing that their tenders are independent and is therefore contrary to the EU interest in ensuring the widest possible participation by tenderers in a call for tenders...“¹⁶ Very similar reasoning was used in *Spezialzuotas Transportas*¹⁷, a case constituting „the mirror image of *Lloyd's of London*“

¹² Art. 2 (10) Directive 2014/24/EU.

¹³ Act No. 343/2015 Coll. on Public Procurement, as amended („APP“).

¹⁴ C-144/17 *Lloyd's of London v Agenzia Regionale per la Protezione dell'Ambiente della Calabria*.

¹⁵ Ibid., para 10.

¹⁶ Ibid., paras 35-38.

¹⁷ C-531/16 *Šiaulių regiono atliekų tvarkymo centras and „Ecoservice projektai“ UAB*.

(Sanchez Graells, 2018, p.557). In this case the Court pointed out „that groups of undertakings can have different forms and objectives, which do not necessarily preclude controlled undertakings from enjoying a certain autonomy in the conduct of their commercial policy and their economic activities, inter alia, in the area of their participation in the award of public contracts...So, the contracting authority is obliged to verify...whether their offers are in fact autonomous.“¹⁸ So, the very same conclusion is to be derived from both cases. It is not independence of undertakings, but the independence and autonomous character of their bids, that is decisive for the purposes of public procurement.

4.2. Consortium and vertical forms of cooperation

Possible participation of consortia or other temporary associations of undertakings is a source of tension between competition and public procurement law especially in those cases, where the undertakings concerned could provide their own, independent bids. On the contrary, consortium could be desirable in those cases when it enables also undertakings unable to provide their autonomous bids to participate on public procurement. (Petr, 2017, p. 112-113). Also, where the cooperation in form of consortium could lead to a better bid, although the undertakings could provide their own independent bids, consortium could be acceptable also from competition point of view. (Petr, 2017, p. 113). Similar principle – capacity to provide independent bid should also be decisive to evaluate cooperation of economic operators regarding vertical cooperation in sub-contracting relations. (Petr, 2017, p.115).

5. CORPORATE LAW

Slovak corporate law, as regulated mainly by the Commercial Code, is based on the addressees of legal norms being separate natural or legal persons. Legal persons are regulated by Sec. 18 et seq. of the Civil Code. Pursuant to Sec. 18 (2) of the Civil Code, “[l] legal entities are:

- a) associations of natural persons or legal entities;
- b) special purpose property associations;
- c) municipal authorities;
- d) other entities designated as such by law”.

Companies are understood as legal persons. The incorporation of legal persons is related to their recognition by law.¹⁹

5.1. The concepts of controlling and controlled persons

However, Slovak corporate law partially recognises the economic substance of legal persons. The Commercial Code admits in Sec. 66a that not every company, although it is separated in legal sense, is separated also in the economic sense. It introduces a concept of controlled and controlling persons, which, according to Kubina, lays down the basics of the Slovak regulation of concerns (2016, p. 242). “A controlled person is a company in which a certain person has a majority share in the voting rights because they have either a share or shares in the company involving a majority of the voting rights, or because, based on an agreement with other entitled persons, they may exercise a majority of the voting rights notwithstanding the validity of invalidity of such agreement”²⁰. The latter is conditional upon existence of the agreement as well as the actual exercise of voting rights (Csach, 2017, p. 467). It shall be pointed out that agreements between shareholders are legal and valid under the Commercial Code.²¹

¹⁸ Ibid.

¹⁹ To this end, see also Sec. 19(2) of the Civil Code: „Legal entities come into existence on the day they are entered into the Commercial Register or another register determined by law, except as provided by special Act.“

²⁰ Sec. 66a (1) of the Commercial Code.

²¹ Sec. 186a of the Commercial Code.

A share in the voting rights is further increased by voting rights:

- a) "connected with shares in the controlled person or attached to shares of the controlled person that are owned by other persons controlled either directly or indirectly by the controlling person,
- b) exercised by other persons in their own name on the account of the controlling person."²²

It is interesting to point out that the Commercial Code does not specify what is meant by the majority of shares. Although a simple majority, i.e. more than 50% might be seen as what is required in order to have a majority of votes. If a shareholder has more than 50% of the shares, it can adopt decisions in the company despite of disagreement of the other shareholders. (Bartová, 2016, p. 301). However, this does not apply in cases when the Commercial Code or Articles of Association of that company requires higher majority. This leads to certain ambiguity in the wording of the Commercial Code. Nevertheless, in line with other provisions of the Commercial Code, particularly Sec. 115 para 8, which stipulates that majority business share means at least half of all votes or a business share to which the agreement of association attaches at least half of all votes. The fact that more than 50% of the voting rights shall be sufficient is supported also by Csach (2017, p. 466). Zooming in on the aim of this regulation, Bartová presents that the aim is to regulate behaviour of the controlled and controlling person and minimisation of negative externalities on minority owners of these companies (2016, p. 301).

5.2. Drawbacks of the concept

Before analysing practical problems related to this concept, it is worth mentioning that Sec. 66a of the Commercial Code has introduced elements of concern law into the Slovak legal order. However, this introduction was rather unsystematic. Taking the German example, there is a difference between contractual concern, established by a contract on control which brings along the right for the controlling person to delimitates the actions of the controlled person; and factual concern, which is established by the factual situation. The Slovak concept is closer to the factual concern (Csach, 2017, p. 465). The Slovak legal order still lacks a complex regulation of concern law. Above all, Sec. 66a does not take into account other possibilities how to control a person apart from exercising of voting rights (Lacko, 2018). This results in separate definitions of various types of influence on company, as showed below. Plus, the definitions of controlling and controlled persons are meaningless without further reference to them. This reference sporadically appears in certain provisions of the Commercial Code. One of the aspects of divergence between business and legal reality is a possibility to use a separate legal person for avoidance of a risk. Subsequently, it may easily happen that this separate person will end up with financial difficulties and, eventually, go into bankruptcy. Since the controlling person (using the terminology of Commercial Code) is usually the first to know about the financial complications of the controlled person and the controlling person may take an advantage of this knowledge. The corporate law attempts to deal with the situation *via* various provisions. For instance, there is an *expressis verbis* liability of a controlling person for the bankruptcy of the controlled person upon fulfilment of certain specific conditions (Mašurová, 2018). Creditors of the controlled person may claim damages from the controlling person, if the controlling person substantially added to the bankruptcy of the controlled person. The liability shall be lifted if the controlling person shows that it processed in with knowledge and a good faith, that it acted in favour of the controlled person.²³

²² Sec. 66a (3) of the Commercial Code. Moreover, Sec. 66a (4) of the Commercial Code specifies the instances under which the share in the voting rights is reduced, e.g. if such shares are transferred to the controlling person as a security.

²³ Sec. 66aa of the Commercial Code.

Although the legislator has showed efforts to make the provision work in practice²⁴, its applicability remains questionable. For instance, the interpretation of »adding« to the bankruptcy is ambiguous and it may cause problems in practice. Likewise, the broad wording of the liberation from the liability, especially due to its unclear wording, may render the provision unapplicable in practice. Plus, as pointed out by Mašurová, the provision does not take into account that, especially in joint-stock companies, shareholders holding less than 5% of the shares may have substantial effect on the company (2018, p. 180). Furthermore, it is not only the controlling person who is the emanation of the concern law in the Slovak legal order. Few years ago, provisions on crises were introduced whose aim was to secure capital maintenance rules for a company which is about to be bankrupt (Grambličková, Kačaljak, 2016, p. 1595). These provisions are related to the situation when a company is in bankruptcy or under the threat of the bankruptcy²⁵, there are limits, restrictions and special obligations for such company and persons related to it.²⁶ What is of particular importance is the conversion of loans²⁷ provided by certain qualified persons to a fulfilment supplementing the own resources of the company. Such resources cannot be returned during the crisis, or if, by returning them, the company would end up in the crisis.²⁸ The qualified persons are statutory bodies and leading employees of the company; person having direct or indirect at least 5% share in the company or having an influence on the company which represent such share; secret shareholder; and persons close to the persons enumerated above or acting on their account.²⁹ There are several flaws in the drafting of the provisions and in the reference to it in other provisions of Commercial Code (Grambličková, 2016, p. 257), (Patakyová, Grambličková, Kisely, 2017). Since an exhaustive critical analysis is out of the scope of this paper, suffice it to note that this provision limits the possibility of the persons within one concern (within one economic group), to finance the companies within the concern (Grambličková, Kačaljak, 2016, p. 1601). Taking into account the fact that certain types of companies may be permanently in crisis, the provisions are capable of impairing the way how concerns work in under other jurisdictions. Another emanation of the regulation of concerns in the Slovak Republic is established by Sec. 67j of the Commercial Code. This provision represents a broadening of the general principle of prohibition to return contributions to the shareholders. It stipulates that a fulfilment without an appropriate consideration³⁰ is provided by a company to its shareholder or for its benefit (meaning for a person having direct or indirect share representing at least 5% of the basic capital of the shareholder, or having influence or benefit in the shareholder representing at least 5%) is considered to be a return of the contribution. The same applies for the fulfilment given due to guarantee, intercession, pledge or other security provided by the company for its shareholder or for its benefit. The notion of shareholder comprises ex-shareholders and future shareholders for the period of two years. In case of the breach of the prohibition to return the contribution, such contribution shall be returned and members of the statutory body are guaranteeing this return.³¹ Alongside practical problems identified by Grabličková and Kačaljak, the formulation of the Sec. 67j of the Commercial Code may hinder ordinary business conducted between the

²⁴ For instance, the provision cannot be circumvent by the fact that the controlled person has practically no assets whatsoever, which leads to non-opening of the bankruptcy procedure. Similarly, as the creditors would need to show damages, the legislator make the evaluation of damages easier, as it introduced a presumption that the damages are in the amount of the unsatisfied receivables. See Sec. 66aa paras 2 and 4 of the Commercial Code.

²⁵ The threat is presented if the ratio between the own property of the company and the obligations of the company is less than 8 to 100. See Sec. 67a para 2 of the Commercial Code.

²⁶ There are special obligations for statutory organs with possible arising of liability (Grambličková, Kačaljak, 2016, p. 1597).

²⁷ The loans must be proied during crisis, hence, the moment of the entering into crisis is crucial (Patakyová, Grambličková, Kisely, 2017).

²⁸ Sec. 67f para 2 of the Commercial Code.

²⁹ Sec. 67c para 2 of the Commercial Code.

³⁰ This is defined by the para 5 of Sec. 67j of the Commercial Code. It is not clear what should be considered as an appropriate consideration. The need for an expert opinion should not be necessary in each case (Grambličková, Kačaljak, 2019).

³¹ Sec. Sec. 67k of the Commercial Code.

persons within one economic group (2019).³² Last but not least, arguably the main obstacle in identification of the regulation of concerns lies in the Sec. 135a of the Commercial Code. The provision stipulates that managing directors of limited liability companies are obliged to exercise their powers with due care and in line with the interests of the company and with all its shareholders. If this obligation is infringed, managing directors shall be liable for damages caused by this. In case of exercising of a resolution of general assembly, managing directors shall be immune from liability. However, such immunity is only partial, as the resolution cannot breach laws, articles of associations or by laws. Therefore, the very essence of concern law faces the obstacle of liability of managing directors, even in the case of their exercising of the will of shareholders/parent company. In particular, a situation may occur when an action is beneficial for the concern as a whole, however, it is not beneficial for the particular company as a part of a concern. The primary obligation of managing directors is to exercise their powers in line with the interests of the company, the exercising of resolutions of the general assembly appears to be only a secondary obligation (Duračinská, 2013, p. 78). This may be of practical relevance due to the active legitimization of creditors of a company whose managing director have breach Sec. 135a of the Commercial Code to claim damages from managing directors, if they cannot satisfy their receivables from the assets of the company.

6. CONSLUSION

Each of the three analysed areas of law addresses the matter of subjects in its own manner. That does not necessary need to be to the detriment of the regulation, as each law has a different goal in mind. However, it flows from the analysis that the regulation of concerns under Slovak law goes partially against the understanding of undertaking under EU competition law, especially regarding the prohibition for managing directors to accept instructions from their shareholders and, eventually, a parent company, if these are not in line with the interest of the particular company in which they are managing directors (although it might be in interest of the group as a whole). There does not seem to be a valid reasoning behind such regulation of corporate law. Similarly, separate bids in public procurements may come also from economic operators within one undertaking. At this point, the derivation from the competition law concept may be partially pardoned by the aim of the public procurement regulation to have the highest number of tenders possible. Pursuant to the opinion of the CJEU, it is the contracting authority who shall verify whether the presented bids are autonomous. The tenderers have to show that their bids are independent although they belong to the same economic unit. A tension between the public procurement law and competition law is visible also regarding consortia and vertical forms of cooperation especially in those cases where the undertakings concerned could present their own separate bids. Summa summarum, it seems that the discrepancies between the three analysed areas of law are substantial and that they are not always substantiated by different goals pursued by them. It is highly advised, yet undoubtedly difficult, to try to converge the view under the areas of law and to have different addressees of regulation only when it is reasonable and necessary.

ACKNOWLEDGEMENT: *This paper was supported from a Grant project of "Agentúra na podporu výskumu a vývoja v rámci projektu č. APVV-17-0641 "Zefektívnenie právnej úpravy verejného obstarávania a jej aplikácie v kontexte práva Európskej únie".*

LITERATURE:

1. BARTOVÁ Z. (2016). § 66a [Ovládaná a ovládajúca osoba]. In PATAKYOVÁ M. et al. *Obchodný zákonník. Komentár* (5th ed.) (p. 299-305). Praha: C. H. Beck.

³² There is a possibility that lawsuits may be brought by creditors of the company which, together with unclear criteria for determination of the appropriateness of the consideration, may result in decreased legal certainty for all parties involved.

2. BLAŽO O. (2017). Definícia pojmu podnikateľ v zákone o ochrane hospodárskej súťaže ako prekážka eurokonformnej aplikácie súťažného práva. In PATAKYOVÁ M. (ed.) *Efektívnosť právnej úpravy ochrany hospodárskej súťaže – návrhy de lege ferenda. Zborník z konferencie* (p. 12-21). Bratislava: Univerzita Komenského v Bratislave, Právnická fakulta.
3. BLAŽO, O. (2014) Twenty years of Harmonisation and Still Divergent: Development of Slovak Competition Law. In *Yearbook of Antitrust and Regulatory Studies. Vol. 2014, 7 (9)* (p. 109-123). Warsaw: Centre for Antitrust and Regulatory Studies (CARS), University of Warsaw, Faculty of Management.
4. CSACH K. (2017). § 66a. In OVEČKOVÁ O. et al. *Obchodný zákonník. Veľký Komentár. Zväzok I* (p. 465-471). Bratislava: Wolters Kluwer.
5. DURČINSKÁ J. (2013). Povinnosť štatutárneho orgánu riadiť sa pokynmi iného orgánu a dopad na zodpovednosť štatutárneho orgánu. In VRBA M. (ed.) *Odpovednosť a ručení v právu obchodných spoločností* (p. 73-87). Praha: Univerzita Karlova v Praze, Právnická fakulta.
6. GRAMBLIČKOVÁ, B. (2016) Spoločnosť v kríze – Dopad na delenie zisku alebo iných vlastných zdrojov spoločnosti. In LENHART, M., GIBA M. (eds.) *Milníky práva v stredoeurópskom priestore 2016* (p. 253-260). Bratislava: Univerzita Komenského v Bratislave, Právnická fakulta.
7. GRAMBLIČKOVÁ, B., KAČALJAK, J. (2016). Sprísnenie pravidiel chrániacich veriteľov slovenských spoločností v kontexte základných slobôd EÚ. In KYSELOVSKÁ T. et al. (eds.) *COFOLA 2016* (p. 1593-1607). Brno: Masarykova univerzita.
8. GRAMBLIČKOVÁ, B., KAČALJAK, J. (2019). (Staro)nový inštitút zákazu vrátenia vkladu a pravidiel transferového oceňovania. In: *ACTA FACULTATIS IURIDICAE UNIVERSITATIS COMENIANAE, N. 2/2019*. Bratislava: Univerzita Komenského v Bratislave, Právnická fakulta. Not yet published.
9. KALESNÁ K. (2012) § 3 Vymedzenie niektorých pojmov. In KALESNÁ K., BLAŽO O. *Zákon o ochrane hospodárskej súťaže. Komentár* (1st ed.) (p. 15-22). Praha: C. H. Beck.
10. KALESNÁ, K. (2017). Je podnik (stále) legislatívnou výzvou? In *Acta Facultatis Iuridicae Universitatis Comenianae, N. 2/2017* (p. 122-133). Bratislava: Univerzita Komenského v Bratislave, Právnická fakulta.
11. KALESNÁ, K. (2015). Tendrové kartely a ich špecifiká. In POVAŽANOVÁ K. (ed.) *Aktuálne otázky súťažného práva v Európskej únii a na Slovensku* (p. 23-31). Bratislava: Univerzita Komenského, Právnická fakulta.
12. KUBINEC M. (2016). § 66a. In MAMOJKA, M. *Obchodný zákonník – Veľký komentár* (p. 241-243). Žilina: Eurokódex.
13. LACKO, P. (2019). Podmienky a problematické body novoprijatej zodpovednosti ovládajúcej osoby za úpadok ovládanej osoby. Not yet published. The paper was presented at the conference Bratislava Legal Forum, held in Bratislava on 14 and 15 February 2019.
14. MAŠUROVÁ, A. (2018). Zodpovednosť štatutárov, faktických štatutárov a tieňových štatutárov kapitálových spoločností voči veriteľom spoločností podľa novej úpravy Obchodného zákonníka a zákona o konkurze a reštrukturalizácii. In ANDRAŠKO, J., HAMULÁK J. (eds.) *Milníky práva v stredoeurópskom priestore 2018* (p. 169-181). Bratislava: Univerzita Komenského v Bratislave, Právnická fakulta.
15. MUNKOVÁ J. (2009) § 2 Vymezení některých pojmů In MUNKOVÁ J., KINDL J. *Zákon o ochraně hospodářské soutěže. Komentář* (2nd ed.) (p. 25-33). Praha: C. H. Beck.
16. PATAKYOVÁ, M., GRAMBLIČKOVÁ, B., KISELY, I. (2017). Current Changes in the Capital Doctrine – Report from the Slovak Republic. In: SHEPLYAKOVA T. (ed.) *Festschrift für Theodor Baums zum siebzigsten Geburtstag, Band 2* (p. 885-902). Tübingen: Mohr Siebeck.

17. PETR, M. (2013). Přičítání odpovědnosti za porušení soutěžního práva. In *Antitrust*, 3/2013 (p. 78-84). Praha: Sdružení KAIROS.
18. PETR, M. (2017) Konsorcia ve výběrových řízeních z hlediska soutěžního práva. In *Antitrust* 4/2017 (p. 112-115). Praha: Sdružení KAIROS.
19. PETR, M. (2018) „Obrácený“ bid rigging – více nabídek z jedné ekonomické jednotky. In *Antitrust*, 2/2018 (p. 38-41). Praha: Sdružení KAIROS.
20. SANCHEZ GRAELLS, A. (2015). *Public Procurement and the EU Competition Rules* (2 ed.). Oxford: Hart Publishing.
21. SANCHEZ GRAELLS, A. (2018). *Competition and Public Procurement*. In *Journal of European Competition Law&Practice*, 2018, Vol. 9, No 8. (p. 551-559). Oxford: Oxford University Press.
22. STEINER, J. WOODS, L. (2009). *EU Law* (10th ed.). Oxford: Oxford University Press.

MISSELLING IN THE FINANCIAL SECTOR - THE EXAMPLE OF THE UNITED KINGDOM AND POLAND

Marta Paduszynska

*University of Lodz, Faculty of Economics and Sociology
ul. POW 3/5, 90-255 Lodz, Poland
marta.paduszynska@uni.lodz.pl*

ABSTRACT

*Misselling of financial services products can cause serious harm and can take many forms. Customers are increasingly expressing their dissatisfaction by submitting complaints to supervisory authorities, as illustrated by the data presented in this article. Ethical values, trust in financial institutions are becoming very important factors in attracting and retaining client. The article focuses on misselling in the financial sector. The aim of this paper is to identify the concept of misselling, explanation of the reasons causing this phenomenon. The article shows also the scale of occurrence of this phenomenon on the example of the United Kingdom and Poland. The research methods used in this article include analysis of literature and comparative analysis. The paper is based on review, analysis and synthesis of selected important literature from the point of view of the discussed issue. Moreover, the paper includes an analysis of secondary data from official documents and reports of financial market entities. **Keywords:** misselling, financial sector, unfair practice in finance, consumer protection*

1. INTRODUCTION

Misselling in the finance describes selling practices in the financial sector that exploit the customer's reliance on the expertise, advice, and professionalism of the provider of the financial product or service in question. Financial products and services are still ranked as the worst consumer markets in the entire European Union according to the European Commission's Consumer Scoreboard (2016, p. 12). The financial services market is a type of market that has a significant impact on its customers. The source of threats may be the fact that financial institutions operate in the area of increased risk with a relatively low share of equity, and also, they rely on the funds entrusted to them by clients. A review of the literature reveals that fraudulent misselling practices are widespread in the financial services industry and can pertain to wide variety of financial products or services. Moreover, a lack of competence and understanding of financial mechanisms important reason for falling into excessive debt and being unable to get out of it. In addition, poorly educated consumers are a particularly easy object for aggressive and sneaky marketing practices (Lewicka-Strzańska, 2015, p. 225). The aim of this paper is to identify the concept of misselling, explanation of the reasons causing this phenomenon. The article shows also the scale of occurrence of this phenomenon on the example of United Kingdom and Poland. The article uses a review, analysis and synthesis of the content of selected publications important from the point of view of the discussed issue. An analysis of secondary data from official documents and reports of financial market entities was also carried out.

2. SPECIFICITY OF THE MISSELLING

Misselling is a phenomenon involving the violation of ethical and legal standards that accompany sales processes. In addition, such unethical behaviour is associated with deliberate misleading the customer, which underlines most of the definition of the phenomenon in question. Despite the fact that this is one of the most important and often discussed topics, no comprehensive and methodologically coherent definition of this phenomenon has yet been developed.

By some experts, misselling is understood as a wide spectrum of practices harmful to consumers. Starting from inadequately informing customers about the costs and level of risk associated with a financial product, aggressive sales or fraud (KPF, 2019). Other authors, on the other hand, present the phenomenon of misselling in a narrower sense - i.e. as misleading customers in the sales process - clearly distinguishing this phenomenon from other practices violating the good of the consumer (i.e. aggressive sales or fraud). Misselling is an unfavourable phenomenon in that it harms not only consumers but also the finance industry and economy in general. The existence of misselling means that consumers buy products which they do not need or with which they are not satisfied. In the financial market it concerns bank accounts, consumer loans and insurances. Particularly important are cases of mass misselling, where a single product or a group of related products is sold to a large number of consumers (Czechowska, Waliszewski, 2018, p. 24). Misselling due to the widespread occurrence and high degree of threat has become the subject of interest of the financial supervision of individual countries, which formulated their own definitions of this phenomenon. In 2013, the Financial Services Authority defined mis-selling as "a failure to deliver fair outcomes for consumers", and specified some of these outcomes. This can include providing customers with misleading information or recommending that they purchase unsuitable products (FCA, 2016, p. 5). The most prominent example of mis-selling is Payment Protection Insurance (PPI), which was sold widely between 1990 and 2009. In the UK, the Financial Services Authority (FSA) provided regulation for the financial services industry (initially banking supervision and investment services, but growing to include mortgage and general insurance) from 1997 to 2013. The FSA was succeeded by the Financial Conduct Authority (FCA), which now has responsibility for integrity and stability of markets and ensuring a fair deal for customers (cf. Article 1A item 1, part 1A, the regulators – chapter 1: the Financial Conduct Authority, Financial Services Act 2012). However, the Financial Services Act 2012 changed the regulatory structure following the financial crisis of 2008. The regulatory function of the FSA were effectively split between the Financial Conduct Authority (FCA) and the Prudential Conduct Authority (PRA). The PRA is a subsidiary of the Bank of England and is primarily responsible for the prudential supervision of deposit takers and insurers. The FCA is responsible for the conduct of business by all firms and the prudential regulation of those firms that are not prudentially regulated by the PRA (Kirk QC, Samuels, Finch, 2019). The supervisory authority on the financial market in Poland, i.e. Komisja Nadzoru Finansowego (KNF) defines misselling as "offering products that are not adapted to the individual needs and capabilities of consumers (i.e. their financial situation, market knowledge or acceptable risk level), both at the level of the sales process as well as at the stage of the marketing activities themselves. In the opinion of this institution, the problem of misselling lies in the commission remuneration system for employees of financial institutions" (KNF, 2014, p. 27). Most definitions of the misselling problem highlight the unethical behaviour of misleading sellers. Lack of reliable information about the financial product being sold is one of the most common reasons for unreliable sales. In turn, the lack of transparency and transparency of contracts concluded by consumers makes it difficult for them to properly assess the risk or the possibility of the price of the usefulness of the product being purchased. J Cichorska (2017, p. 22) listed main characteristic of misselling:

- inadequacy of the product to the character, profile or needs of the customer (eg sales of long-term products to the elderly),
- lack of explanation about the methods and time of liquidation of the product,
- lack of information on the structure of the instrument and the structure of the investment portfolio,
- lack of information about the risk level of the instrument,
- lack of information on how the customer's income is calculated.

J. Cichorska (2017, p. 21) also points out that most definitions of mis-selling refer to unethical behaviour of the staff misleading consumers (Wojnowska, Gniadek 2015) and to sales of inappropriate products (Wyman 2015, p. 5) unsuited to consumers' needs (Krasnodębska-Tomkiel 2016, p. 14; Financial Conduct Authority and Financial Ombudsman Service, 2016, p. 14; Financial Services Authority 2013; Ustawa z dnia 5 sierpnia 2015 r., art. 24 ust. 2 pkt. 4).

3. THE MAIN CAUSES OF MISSELLING IN THE FINANCIAL MARKET

3.1. The growing role of the financial sector in the economy and low level of knowledge and financial awareness of consumers

The financial sector is playing a more and more dominant role in modern economies. This phenomenon is manifested in the form of credit expansion. Excessive financing of expenses with credit money is the result of ongoing economic processes. This process is often referred to as "financialization". Financialization is a relatively new phenomenon, presented in literature mainly in macroeconomic terms. In the narrow sense, it is associated with the growing importance of financial activities in the economic activity of non-financial entities. The financial industry is accused of breaking away from the real economy, moving away from the role of a trustee and supplier of funds focused on facilitating and supporting economic growth and the good of customers. This industry has become an autonomous area oriented on its own development, maximizing profit achieved through specific financial innovations (Lewicka-Strzałecka, 2015, p. 216). Using the services of the financial sector involves taking risks that are specific to business ventures. Individual funds entrusted in this market by customers depend on the changing situation on the global financial market, as well as the ever-increasing complexity of financial instruments, which is certainly a source of threats. This situation may exceed the cognitive capabilities of average consumers and, on the other hand, create a situation of abuse by financial institutions. A significant proportion of consumers do not have sufficient or even elementary knowledge to carry out financial transactions that are good for them. Polish consumers stand out unfavorably against the background of consumers from other countries. In OECD studies, they performed particularly poorly in terms of understanding the risk taken and the risk-return relationship (Atkinson, Messy, 2012). The OECD report shows that the modern complexity of products together with progressive innovations causes a feeling of pressure and discomfort for the average consumer. Therefore, it becomes a challenge for people who are recipients of given goods to be able to meet the challenges they face, having an appropriate level of knowledge, which will translate into conscious decision-making and their better adjustment to their own needs (OECD, 2009, p. 8).

3.2. Information asymmetry in the client - institution relationship

Lack of reliable information about the financial product being sold is one of the most common reasons for unreliable sales. In turn, the lack of transparency and transparency of contracts concluded by consumers makes it difficult for them to properly assess the risk or the possibility of the price of the usefulness of the product being purchased (Cichorska 2017, p. 22). Information is one of the most important resources owned by market entities and used in mutual relations and in making decisions. "Asymmetry of information is a situation in which the parties to a relationship (transaction) have a different, varied range of information, which consequently affects the transactions they enter into, favoring the party with the greater scope of information." (Jakubowska, 2017, p. 128). There are situations on the financial services market when, in the process of selling a product or service, the lack of consumer knowledge combined with the incompetence of the seller leads to a strain on trust, often leading to the phenomenon of misselling. That is why the aspect of trust between financial market entities and clients is so important to minimize the effects of information asymmetry.

Trust remains the lowest in those markets where the asymmetry of information between the entrepreneur and the consumer is greatest (Komisja Europejska 2016, p. 54). Effective enforcement is all the more important as the position of consumers is particularly weak in the financial sector, where the complexity of offers and contractual provisions is a challenge for many consumers. Many of them do not know the terms of their contracts with banks and have difficulty reading bills and notifications from banks and do not compare product offers (Komisja Europejska 2016).

3.3. Unfair sales practices of financial service providers

The factors contributing to misselling include inappropriate behaviour of firms, specificity of a given market, mistakes on the part of the regulators, cultural norms, or lastly bonuses for employees for aggressive sale as a result of the pressure on managers to meet short term sales objectives (Czechowska, Waliszewski, 2018, p. 23). On the financial market consumers may be faced with problems resulting from the activity of financial service providers who strive ruthlessly to increase their financial efficiency (Dembiński, 2017, p. 147). The seller of financial services is privileged as to knowledge about the structure of the offered product, while customers often do not fully understand the specifics of the product. In such a situation, the seller should reliably provide full information to behave in an ethical manner (Sąlek, 2015, pp. 95-101). Very often, the management of banks, or another financial institution, guided by the desire to maximize profits, imposes on employees to full fill sales plans, forgetting about ethics (Trzeciak 2017, p. 105). Misselling is primarily unethical, because sellers of financial product or services often deliberately mislead their customers or do not intentionally inform them of certain aspects of the contract that are difficult for customers to accept. Especially in the retail financial market, the relative ignorance and lack of financial literacy of most consumers puts the sales agents at a considerable informational advantage. For example, a Eurobarometer study showed that when purchasing various financial products respondents had not been informed about additional costs involving commission, bonus or other additional remuneration (European Commission 2012, p. 52). Therefore, actions are taken, regulated by law, whose purpose is to provide transparent and comparable information (Directive 2014/92/EU).

4. THE SCALE OF THE FINANCIAL MISSELLING

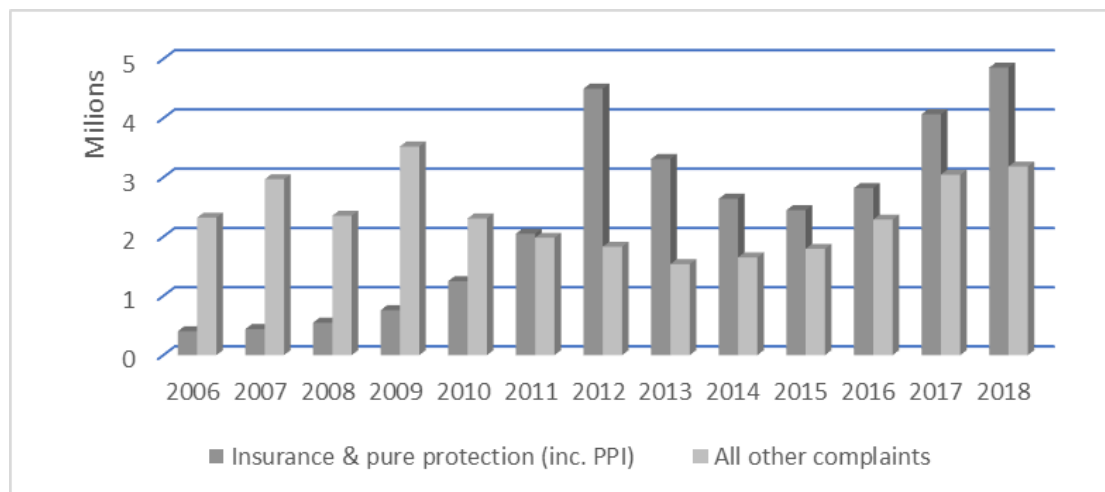
4.1. Example of the United Kingdom

Although the number of complaints made about unfair practices of financial institutions is one of the basic ways of measuring the phenomenon of misselling, it should be remembered that it is an excellent measure due to, among others at the time from the occurrence of the event to the submission of the complaint (Cichorska, 2017, p. 24). The scale of problems regarding unfair market practices in the UK is illustrated by the number of complaints filed against banks and other financial institutions to supervisory authorities in UK (such as Financial Conduct Authority, Financial Ombudsman Service). The misselling of Payment Protection Insurance (PPI) is a longstanding problem in the UK. Payment Protection Insurance (PPI) was sold on a mass scale in 1990-2009 and became the main misselling problem in the UK¹. Lanchester (2013, p. 3) has suggested that "if there had not been so much other lurid wrongdoing in the world of finance, and if mis-sold payment protection insurance had a sexier name, PPI would stand out as the biggest scandal in the history of British banking".

¹ PPI was sold to borrowers alongside credit products. It was meant to help repay some or all of their borrowing if they lost their income for a period (if, for example, they had an accident, became unemployed or sick, or died). The most commonly sold types of PPI were single premium policies on unsecured loans (around 48% of all PPI policies sold), credit card PPI (around 36%), and regular premium policies on loans or mortgages (around 15%). Moreover, PPI was not a simple product. It had complex pricing (premiums) and benefits, and detailed policy conditions (including eligibility criteria, exclusions from cover and limitations to benefits). Such details meant that PPI was suitable for some consumers but not suitable for all. So firms should have exercised particular care when trying to sell it. (Financial Conduct Authority 2014, p. 7).

The FCA estimated that more than 64m PPI policies were sold between 1990 and 2010 and the UK banks have set aside more than £40bn for consumer redress payments (not counting additional interest sums). The largest single fine imposed for PPI failures was £117m, paid by Lloyd's Bank in 2015 (John, Hodgson, 2017). According to the report, until November 2015 over 16.5 million complaints of this type were considered and 75% were upheld (Financial Conduct Authority and Financial Ombudsman Service 2016, p. 15).

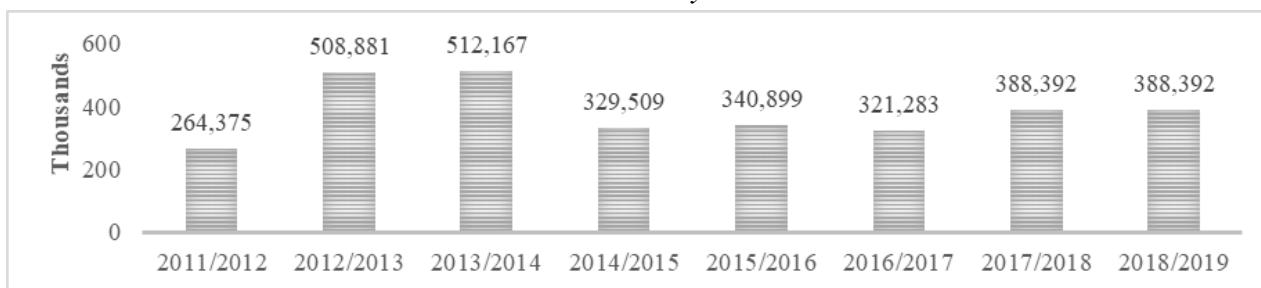
Chart 1: Volume of complaints receives (millions)



Source: own study based on FCA complaints data

Chart 1 shows the total number of customer complaints in 2006-2018. Until the end of 2018 over 30 million complaints of this type were considered. The number of complaints about payment protection insurance (PPI) in 2006-2018 represented on average 45% of all customer complaints. In 2018, PPI complaints accounted for 6 in 10 (60%) of all complaints. In addition to complaints to the FCA, the British can also lodge complaints with the Financial Ombudsman Service (FOS). The Ombudsman was set up by parliament to be an impartial and independent body, which resolve individual complaints between financial businesses and their customers. Chart 2 refers to the report of UK Financial Ombudsman and presents complaints on misselling in the financial sector in 2011-2018.

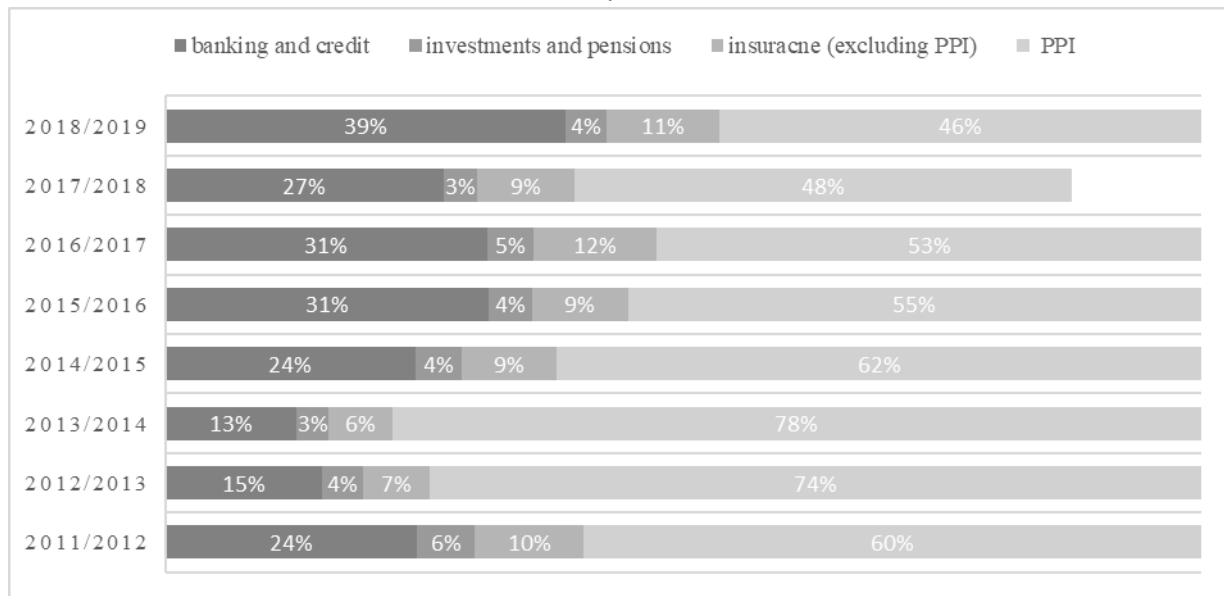
Chart 2: Total new complaints about financial institutions submitted to the Financial Ombudsman in the UK in years 2011–2018



Source: Financial Ombudsman complaints data

The largest number of complaints concerned the years 2012/2014, reaching over 500,000. However, since 2014 a significant decrease in the number of complaints is visible, which reached the lowest level at the turn of 2014/2015. Statistics about complaints from the point of view of financial products are presented in Chart 3 (below).

Chart 3: Complaints about financial institutions submitted to the Financial Ombudsman in the UK in the years 2011–2018



Source: own study based on Financial Ombudsman complaints data

Decreasing number of complaints occurred in all 3 groups listed in the chart, except for the banking and credit sector. According Financial Ombudsman data, the number of complaints about payment protection insurance (PPI) fluctuates in the years 2011-2018 at an average level representing 60% of all customer complaints. Excluding PPI complaints, in 2018/2019 the most complained about financial product remain banking and credit (39% of reported complaints), other general insurance (11%), and investments and pension (4%). Complaint processing time plays an important role in reducing misselling practices. In UK, effectiveness in this area has improved significantly. In 2015, the time needed to close a case was reduced to four and fewer weeks with eight or more weeks in 2014 (FCA 2016/2017, p. 15). Consumers who have suffered from misselling typically have to submit a claim in order to receive compensation. The FCA decides on its approach to redress on a case-by-case basis, having regard to specific regulatory failings and consumer detriment. According to the data, 59% of customer complaints to financial services firms related to misselling (including PPI) in 2014, compared to 25% in 2010 (Financial Conduct Authority and Financial Ombudsman Service, 2016, p. 4). Moreover, by 2016 the Ombudsman had closed more than a million PPI misselling cases. "Between April 2011 and November 2015, financial services institutions paid out at least £22.2 billion in compensation to people who had bought payment protection insurance, following complaints and regulatory action. The Bank of England has identified the consequences of misconduct by banks, including misselling, as a risk to financial stability. It views addressing misconduct as essential for rebuilding confidence in the financial system". (Financial Conduct Authority and Financial Ombudsman Service, 2016, p. 5).

4.2. Example of Poland

The ban on misselling as a practice harming collective interests of consumers was regulated and sanctioned by Art. 24 (2)(4) of the amended act on competition and consumer protection (Ustawa z dnia 5 sierpnia 2015). The justification of the amendments highlighted the need for commercial honesty to consumers, especially on the high-risk financial services market. The amendments concern the high-risk investment financial instruments such as life insurance and endowment insurance with insurance capital fund, mortgage loans in foreign currency and payday loans (Czechowska, Waliszewski, 2018, p. 24).

The problem of unethical sales in Poland was revealed in the offer of collective action groups against the insurer and banks selling insurance products (such as, for example, life insurance with an insurance capital fund ie. "ufk", and insurance policies) (Wierzbicka, 2016, p. 315). For example, in 2010 there were only 103, while in the years 2013-2015 the number of complaints totaled over 3700 (Rzecznik Finansowy, 2016, p. 233). Complaints filed in Poland against insurance capital market products represent a small fraction of the number of complaints submitted in the United Kingdom in this field. For example, in 2015, complaints lodged in Poland only due to irregularities in contracts for insurance funds with pension protection constituted only 7% of similar complaints in the UK. The detailed statistics of complaints addressed to the Rzecznik Finansowy in Poland are presented in the table 1 (below).

Table 1: Number of complaints regarding insurance companies directed to the Rzecznik Finansowy in 2010-2017

Year	Number of complaints		% of ufk
	about ufk	All	
2010	103	11 947	0,86
2011	146	14 356	1,01
2012	516	15 273	3,4
2013	1 216	16 516	7,4
2014	1 422	15 429	9,2
2015	1 073	14 273	7,5
2016	1 053	13 021	8,1
2017	758	14 356	5,3

Source: own study based on Rzecznik Finansowy's data

The main problem of insurance policies with ufk lies in their design, especially in liquidation fees. In the first years of the term of the contract, insurers offer low premium allocation rates for investment purposes, while they set high exit fees, which in the first year often amount to all accumulated cash. In this way, insurance acquisition costs are transferred to customers (Wawszczak, 2014). Even in a situation, where customers were aware that they were taking out insurance (not a deposit agreement), there was an objection in the complaints that they were misled by not informing about the high fees that are associated with investing in this type of product. In response to these complaints, the Report of Rzecznik Ubezpieczonych (currently the Rzecznik Finansowy) was created, and its content explains in detail the very concept of life insurance with ufk as a specific insurance solution (Rzecznik Ubezpieczonych, 2012, p. 71). Moreover, policies with ufk are the main product on the life insurance market (including the group insurance department). In current sales, they dominated the classic type of life insurance contract (in Poland they are primarily group employee policies and bank loan supplementary insurance) and practically displace previous forms of individual life policies with an investment bonus (Wiśniewski, 2016, p. 68). In Poland, the premium from contracts with ufk in 2015 constituted over 47% of the premium from life insurance contracts. At the end of 2017, gross written premiums from life insurance with ufk in Poland amounted to PLN 11.3 billion, which accounted for over 46% of the total life insurance premiums. Life insurance contracts with ufk have also been one of the key areas of activity of the the Office of Competition and Consumer Protection (ie. Urząd Ochrony Konkurencji i Konsumentów -UOKiK) in recent years. In 2015-2016, the president of UOKiK closed seventeen proceedings relating to insurance companies providing contract with ufk. The allegations concerned the use of liquidation fees (UOKiK, 2016). In December 2016, as a result of agreements between the president of UOKiK, life insurance companies and the Polish Chamber of Insurance- ie. Polską Izbą Ubezpieczeń (PIU), there were agreements reducing liquidation fees with 16 insurance companies (for which decisions binding the president of UOKiK were issued). Entrepreneurs voluntarily undertook to significantly reduce the liquidation fees in existing contracts and eliminate them from the

new contract templates (UOKiK, 2016). "It is estimated that in the case of life insurance misselling with ufk, individual consumer losses range from several to several hundred thousand zlotys" (UOKiK 2016, p. 51). In Poland, another product with clear misselling features are loans denominated or indexed by a foreign currency exchange rate, commonly known as foreign currency loans. In addition, in the field of consumer loans, the loan companies offered - cash loans "chwilówki", were questioned (Butor-Keler, 2017, p. 12).

5. SUMMARY

Misselling concerns bank accounts, consumer loans and insurances. Particularly important are cases of mass misselling, where a single product or a group of related products is sold to a large number of consumers (Czechowska, Waliszewski, 2018, p. 23). Misselling can also happen to an individual client when their financial adviser recommends that they buy a product which is inappropriate for them. Charging financial services with a higher risk may increase the risk for consumers in the event of failures. Some products are less often used by consumers, which translates into the inability to draw conclusions and learn from mistakes. An example of such a product is a mortgage that is usually taken out once in a lifetime. The desire to increase the volume of sales at all costs encourages unethical behavior and forcing customers to buy unwanted products generating high service costs and additional risk. The author achieved this goal by using literature analysis and comparative analysis in the discussed issue. The results obtained approximate the scale of occurrence of this phenomenon on the example of the United Kingdom and Poland. Customers are increasingly expressing their dissatisfaction by submitting complaints to supervisory authorities, as illustrated by the data presented in this article. Ethical values, trust in financial institutions are becoming an important factors in attracting and retaining clients. Categories such as insurance forms and guarantees of invested funds, state guarantees, ethical norms and standards as well as legal provisions and regulations increase the sense of consumer safety. As it results from the above, the activity of entities of the financial insurance market is monitored by many institutions, equipped with legal instruments, enabling interference in the event of threat to the interests of clients of this market. In addition to legislative measures, it is important to emphasize the very importance of actions aimed at raising consumer awareness. Low awareness of financial institutions' clients is treated as one of the most important reasons for the phenomenon of misselling (Franke, Mosk, Schnebel 2016, p. 2).

LITERATURE:

1. Atkinson A., F. A. Messy (2012). Measuring Financial Literacy: Results of the OECD. *International Network on Financial Education (INFE) Pilot Study, OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing.
2. Butor-Keler (2017). Misselling a ochrona konsumenta na rynku usług finansowych. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*. Nr 326. pp: 10-20.
3. Cichorska J. (2017). Misselling, czyli sprzedaż niepotrzebnych instrumentów finansowych i jej skutki. Stan prawny w Polsce i Wielkiej Brytanii. "Rozprawy Ubezpieczeniowe". No. 24 (2/2017). pp: 18-34.
4. Czechowska I.D., Waliszewski K. (2018). Mis-selling in Finance as an Effect of Excessive Concentration on Sales. *Przedsiębiorczość i Zarządzanie*, vol XIX. Issue 1. part 1. pp: 19-31.
5. Dembinski P.H. (2017). *Ethics and Responsibility in Finance*, Routledge Taylor & Francis Group. London and New York.

6. Directive 2014/92/EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features, EU L 257.
7. European Commission (2016). *Consumer Market Scoreboard. Making markets work for consumers*. Luxembourg: Publications Office of the European Union. Retrieved: 04.10.2019 from:
https://ec.europa.eu/info/sites/info/files/consumer_markets_scoreboard_2016_en.pdf
8. Financial Conduct Authority (2014). *Redress for payment protection insurance (PPI) mis-sales Update on progress and looking ahead*. TR 14/14. London. Retrieved: 04.10.2019 from: <https://www.fca.org.uk/publication/thematic-reviews/tr14-14.pdf>
9. Financial Conduct Authority and Financial Ombudsman Service (2016). *Financial services misselling: regulation and redress, Report by the Comptroller and Auditor General*. National Audit Office.
10. Financial Ombudsman Service, *Annual review 2016/2017, data in more depth continued*. Location: Retrieved: 25.09.2019, from: <https://www.financial-ombudsman.org.uk/files/2022/Annualreview-fullreport-AR2016-17.pdf>
11. Financial Services Act of 2012. Location: Retrieved: 04.10.2019 from:
<http://www.legislation.gov.uk/ukpga/2012/21/section/6/enacted>.
12. Financial Services Authority (2013). Final guidance: Risks to customers from financial incentives. Location: Retrieved: 03.10.2019 from:
<https://www.fca.org.uk/publication/finalised-guidance/fsa-fg13-01.pdf>
13. Franke G., Mosk T., Schnebel E. (2016). Fair retail banking: How to prevent mis-selling by banks, *Sustainable Architecture for Finance in Europe. „White Paper Series”* nr 39. Research Center SAFE - Sustainable Architecture for Finance in Europe, Goethe University Frankfurt.
14. Jakubowska A. (2017). Zaufanie i asymetria informacji w relacjach podmiotów na rynku finansowym – wybrane aspekty na przykładzie banków i ich interesariuszy. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, z. 113, pp: 125-133.
15. John N., Hodgson L. (2017). The lessons of PPI mis-selling, Financial Conduct Authority. Location: Retrieved: 03.10.2019 from:
<https://www.ftadviser.com/regulation/2017/11/23/the-lessons-of-ppi-mis-selling/>.
16. Kirk QC J., Samuels T., Finch L. (2019). *Mis-Selling Financial Services*. London: *Elgar Financial Law and Practice*.
17. Komisja Europejska (2016). Study on consumer vulnerability across key markets in the European Union, Retrieved: 03.10.2019 from:
http://ec.europa.eu/consumers/consumer_evidence/market_studies/vulnerability/index_en.htm
18. Komisja Nadzoru Finansowego (2014)., *Rekomendacja U dotycząca dobrych praktyk w zakresie bancassurance*, Warszawa.
19. Krasnodębska-Tomkiel M. (2016), Misselling, czyli sprzedaż nieetyczna, „*Gazeta Bankowa*”, No. 6. Retrieved: 03.10.2019, from: <https://www.bdo.pl/pl-pl/publikacje/biuletyn-podatki-i-rachunkowosc/2016/misselling,-czyli-sprzedaz-nieetyczna>
20. Lanchester, J. (2013). *Are We Having Fun Yet?* London Review of Books 35(13), 3–8.
21. Lewicka-Strzałecka A. (2015). Kultura finansjalizacji. *Prakseologia*. nr 157, t. 2/2015. pp: 209-229.
22. OECD (2009). Financial Literacy and Consumer Protection: *Overlooked Aspects of the Crisis. OECD Recommendation on Good Practices on Financial Education and Awareness Relating to Credit*, Paris: OECD.
23. Rzecznik Finansowy (2016). Ubezpieczenia na życie z ubezpieczeniowym funduszem kapitałowym- *II Raport Rzecznika Finansowego*, Warszawa.

24. Rzecznik Ubezpieczonych (2012). Ubezpieczenia Na Życie Z Ubezpieczeniowym Funduszem Kapitałowym. *Raport Rzecznika Ubezpieczonych*, Warszawa.
25. Sałek P. (2015). Etyka w sprzedaży produktów finansowych, *Annales. Etyka w życiu gospodarczym / Annales. Ethics in Economic Life*. vol. 18. no. 1. pp. 95–101.
26. Trzeciak K. (2017). Ochrona praw konsumenta w kontekście realizacji tzw. planów sprzedaży w banku komercyjnym, "*Journal of Finance and Financial Law*", Vol. 2(14). pp: 101-113.
27. UOKiK (2016). *UOKiK zakończył kolejne postępowanie w sprawie opłat likwidacyjnych.*: Location: Retrieved: 01.10.2019 form: https://uokik.gov.pl/aktualnosci.php?news_id=12132&news_page=2.
28. Ustawa z dnia 5 sierpnia 2015 r o zmianie ustawy o ochronie konkurencji i konsumentów. (Dz. U. z 2015 r., poz. 1634).
29. Wierzbicka E. (2016). Misselling barierą rozwoju ubezpieczeń w Polsce, *Zeszyty Naukowe Wyższej Szkoły Humanitas. Zarządzanie*, nr. 2, pp: 315-327.
30. Wojnowska S., Gniadek K. (2015). Miss... co?!?. "*Gazeta Ubezpieczeniowa*". Location: Retrieved: 01.10.2019, form: [http:// www.gu.com.pl/index](http://www.gu.com.pl/index) 2015.
31. Wyman O. (2011). Financial Service, Mis-selling in the UK Location: Retrieved: 01.10.2019, from: https://web.actuaries.ie/sites/default/files/event/2011/07/111020_erm_forum-daniel_mikkelsen.pdf

MEASURING THE IMPACT OF SELF-EMPLOYMENT SUBSIDIES ON UNEMPLOYMENT IN CROATA

Kristina Marsic

Tekstilno – tehnološki fakultet, Croatia
kristina.marsic@ttf.hr

Anica Hunjet

Sveučilište Sjever, Croatia
anica.hunjet@unin.hr

Tena Sumski

Tekstilno – tehnološki fakultet, Croatia
tena.sumski@ttf.hr

ABSTRACT

Subsidies are a form of government transfer payments allocated to certain individuals or groups of beneficiaries, who are awarded said funds based on social, economic or other predefined and prescribed criteria. Self-employment subsidies are a form of financial support awarded to unemployed persons with the intention of starting their own businesses, in order to increase the employment rate in Republic of Croatia. Basic objective of this paper is to examine the impact of government self-employment subsidies on the number of unemployed persons, i.e. to determine the existence and the nature of the effect of self-employment subsidies on the number of unemployed persons. All counties in Republic of Croatia and the City of Zagreb were included in this analysis, as well as all relevant data for the time period from 2011 to 2018. The conducted analysis encompassed data sorted by year and county. Research results indicate a positive correlation between the observed variables, which means that the increase in unemployment leads to an increase in funds the government allocates to self – employment incentives. In the long run, this leads to a decline in unemployment.

Keywords: *transfer payments, self- employment subsidies, number of unemployed persons, analysis*

1. INTRODUCTION

State subsidies are defined as a form of government intervention wherein a state transfers funds to a certain portion of the economy or a certain business entity in order to incite economic activity or production of a certain product or service. The provider of state subsidy is therefore defined as an administrative body of the state, a ministry, regional or local government entity or each and every legal entity granting subsidies. Beneficiary of state subsidy is defined as each and every person or legal entity achieving the right to attain said subsidy. State subsidies are awarded according to the government subsidies plan, as based on the predefined objectives of great importance pertaining to economic development of the country. Republic of Croatia implements active employment policy measures (AEP) with the main objective of stimulating the labor force and integrating the unemployed population into the labor market, as well as lowering the job loss risks in the population of employed persons currently present on the labor market and characterized by lack of certain necessary knowledge and skills. Active employment policy measures are particularly directed towards subsidies for employment of unemployed persons, subsidies for self – employment, professional development, education of unemployed persons, vocational training, as well as subsidies for employment preservation. According to the Strategy for smart, sustainable and inclusive growth (European Commission 2010), employment promotion and encouragement policy constitutes one of the key development

measures. Government model and program for economic development is based on economic growth, which is, accordingly, based on GDP growth and employment promotion. Croatian Employment Service (HES) represents a key institution on the labor market, with the main objective of achieving higher employment rates through incitement and stimulation of labor supply and demand. HES is responsible for conducting active employment policy measures (AEP), as defined by The National Employment Incentive Plan for 2009 and 2010, as well as by The National Employment Incentive Plan for 2011 and 2012. Validity of The National Employment Incentive Plan for 2011 and 2012 has been extended to 2013, with some of its key measures still remaining valid and in force to this day (National Employment plan, 2011). A part of active employment policy measures is comprised of self – employment subsidies. Self – employment subsidies are funds awarded to unemployed persons starting their own businesses; the state therewith inciting entrepreneurial activity and lowering the unemployment rate. Accordingly, this paper is to determine the effects of government subsidies in the domain of self – employment during time period from 2011 to 2018, as well as the unemployment trends in all the counties in Republic of Croatia, including the City of Zagreb. Furthermore, this paper is to examine the correlation and effects of subsidies on the total number of unemployed persons, as sorted by year and county. This research paper is comprised in the following manner: introduction precedes a description of existent research pertaining to the field in question, followed by a chapter detailing and explaining employed methodology and the obtained results. The paper is capped off by a conclusion.

2. REVIEW OF RELATED STUDIES

Based on the The National Employment Incentive Plan for 2009, and still continued to this day, Republic of Croatia awards subsidies pertaining to said field in order to increase economic efficiency. In 2019, Republic of Croatia offers a subsidies program called “Employment measures leading to a career,” expanding the overall subsidies package in order to achieve a bigger impact on the total employment rates. Government subsidy programs designed to incite economic activity vary from state to state. Some economies attempt to incite economic activity by introducing tax exemptions. Republic of Croatia employs the aforementioned self – employment subsidies program in order to incite entrepreneurship and lower the unemployment rates, which have been continually increasing ever since 2009. This topic has been subject to many researches. Numerous Croatian researches have examined the effects subsidies have on certain economic branches, especially pertaining to agriculture (Grahovac, 2003) and livestock industry (Kralik & Tolušić 2009). Some examples of good practice have been provided by B. Škare's research (B. Škare, 2012), wherein the author describes positive results incurred by utilization of self – employment subsidies in year 2011. The author uses examples of start – up businesses founded due to utilization of self – employment subsidies, with a special emphasis on female entrepreneurs. All said examples focus on female entrepreneurs who were able to start their own businesses by utilizing the aforementioned subsidies. This research indicates that in 2011, the majority of granted subsidies was awarded to persons from the area of City of Zagreb or Osijek – Baranja County. Research pertaining to regional differences in self – employment (Valerija Botric, 2011) from 1998 to 2008 shows the entrepreneurial inclinations of certain groups in the observed population, as well as regional differences in self – employment. The obtained results indicate that, when observing the total employment rates, Lika – Senj County has generated the highest utilization of measures of self – employment by founding start – up companies, sole proprietorship businesses or other types of business organizations (f. e. agricultural), whereas Primorje – Gorski Kotar County has demonstrated the lowest utilization of said measures. The aforementioned results were calculated using average values for the time period from 1998 to 2008. Relevant researches were also conducted abroad; a group of researchers (Hall & Saenz, 2007) having examined the effects of government

subsidies on business expansions in the United States of America and Mexico. Objective of said research was to determine differences in state – awarded subsidies, as well as the impact of the aforementioned subsidies on business expansion, subsequently concluding that higher subsidies incite economic activity and lead to expansion of business in the observed countries. Briscoe, Dainty and Millet (2000) studied the effects of tax policy on self – employment in England's construction industry, concluding therewith that lower taxes incite self – employment. Accordingly, these authors use degressive tax policy to analyze the thusly achieved effects on self – employment. Analysis of labor market and self – employment policies in Canada has lead the authors (Moore & Muller, 2002) to various conclusions pertaining to the self – employment policies. The research emphasis lies on the hypothesis claiming that longer unemployment periods affect self – employment in a positive manner, as well as on the hypothesis saying that persons receiving unemployment benefits are less likely to utilize the existent self – employment policies than persons not receiving unemployment benefits, followed by the final hypothesis, suggesting that persons who quit their jobs, were laid off or fired are more likely to engage in self – employment. Researchers were able to conclude that, measured by the unemployment rate, workers' health does not affect the self – employment policy. These researches can only serve as guidelines when analyzing the labor market and the self – employment policy in Republic of Croatia. This paper represents a new research that is to determine the fundamental objective of government subsidies, i.e. the effects said subsidies have on the unemployment rate, as sorted and observed by year and county.

3. METHODOLOGY AND ANALYSIS OF OBTAINED DATA

This analysis uses secondary data obtained for the time period from 2011 to 2018; specifically, data pertaining to the exact amount of funds awarded in self – employment subsidies for all counties and City of Zagreb, as well as data detailing the number of unemployed persons. This analysis is to determine the type of correlation between the aforementioned variables, as well as the effects of self – employment subsidies on the number of unemployed persons. By observing the obtained results as sorted by year and county, we wish to determine whether higher subsidies cause lower unemployment on a yearly basis. Data pertaining to the number of unemployed persons was obtained from the Croatian Bureau of Statistics, whereas the data detailing exact amounts of funds awarded in self – employment subsidies was obtained from the Croatian Employment Service. (Statistical Yearbook 2011-2018, Yearbook, 2011-2018). Table 1 shows data pertaining to the number of persons who were recently included into said system (business entity owners/ sole proprietorship business owners), i.e. the number of newly employed persons who engaged in self – employment policy measures from 2011 to 2018. The displayed data is sorted by county, including the City of Zagreb.

Table following on the next page

Table 3: Newly employed persons engaging in self – employment policy measures

County	2011	2012	2013	2014	2015	2016	2017	2018	Average
ZAGREB	27	45	289	122	175	167	277	469	196,37
KRAPINA-ZAGORJE	26	31	175	84	89	55	114	186	95,00
SISAK – MOSLAVINA	28	38	185	126	104	91	122	303	124,62
KARLOVAC	17	17	109	33	41	57	55	119	56,00
VARAŽDIN	22	46	169	75	127	76	145	225	110,625
KOPRIVNIČA-KRIŽEVCI	6	17	75	73	45	46	82	144	61,00
BJELOVAR-BILOGORA	23	28	125	42	34	62	91	201	75,75
PRIMORJE-GORSKI KOTAR	78	87	471	222	222	156	177	348	220,125
LIČKA-SENJ	5	2	36	25	50	53	49	80	37,50
VIROVITIČA-PODRAVINA	52	40	138	74	41	31	63	110	68,62
POŽEGA-SLAVONIA	11	10	57	22	30	26	56	128	42,50
BROD-POSAVINA	18	31	118	57	68	44	78	118	66,50
ZADAR	23	20	98	35	49	61	91	122	62,37
OSIJEK-BARANJA	120	124	654	331	376	287	408	777	384,62
ŠIBENIK-KNIN	24	24	79	41	67	103	97	162	74,625
VUKOVAR-SRIJEM	42	64	213	90	82	58	90	146	98,12
SPLIT-DALMATIA	43	71	460	187	174	215	246	530	240,75
ISTRIA	18	32	208	125	136	99	157	258	129,12
DUBROVNIK-NERETVA	28	30	203	143	163	144	148	221	135,00
MEĐIMURJE	25	18	176	117	83	76	101	212	101,00
CITY OF ZAGREB	136	163	868	253	620	426	936	1626	628,50
TOTAL	772	938	4906	2277	2776	2333	3583	6485	3008,75

Source: Croatian Employment Service (Yearbook 2011-2018) and authors' own calculations

Table 1 shows an increase in newly involved users through the years (as sorted by the county), which can, *ceteris paribus*, be brought into relation with higher government subsidies. In order to better illustrate the observed trends, this table shows rounded off average values pertaining to the number of newly included users, as sorted by the county. Having excluded City of Zagreb from the analysis, the majority of new business entities / users have been noted in Osijek – Baranja County, whereas Lika – Senj County counts the least new business entities / users. Observing the total average pertaining to new users (3008, 75), it is possible to conclude that the number of new users in 2017 exceeds said average value. The number of new users in 2018 exceeds said average value doubly, thusly demonstrating the efficiency of said measure, *ceteris paribus*. The aforementioned data speaks of importance of entrepreneurship incitement funds. The following table shows trends in the awarded self – employment subsidies, as well as the total count of unemployed persons from 2011 to 2018.

Table 4: Awarded subsidies and total count of unemployed persons

Year	Number of unemployed persons	Awarded funds	Funds per unemployed person
2011	305333	16.422.078,47	53.781,00
2012	324323	22.742.967,71	70.124,00
2013	345112	70.114.685,66	203,165,00
2014	328187	105.432.491,12	321.257,00
2015	285906	69.595.750,01	24.342,00
2016	241860	56.082.871,71	231,881,00
2017	193967	126.180.106,71	650,523,00
2018	153542	347.231.450,40	2261,47,00

Source: Croatian Bureau of Statistic (Statistical Yearbook, 2011-2018)

During the years characterized by high unemployment rates, the total of funds awarded per unemployed person was 53. 781, 00 Kuna, ergo, each unemployed person was able to obtain 53. 781, 00 Kuna in government subsidies. In 2016, 2017 and 2018, government funds awarded per unemployed person were several times higher than in the initial years. The obtained data shows that entrepreneurship incitement through self – employment subsidies leads to economic development and a decline in unemployment in the long run.

4. RESULTS AND DISCUSSION

Regression analysis was conducted using the JMP 14 program tool (statistical analysis software) in order to determine the effects of subsidy amount on the number of unemployed persons. Table 3 shows the model representativeness based on determination coefficients. The observed analysis suggests the highest correlation between variables in the years 2013 and 2014; hence the established model is more representative. On the other hand, the correlation between variables is significantly lower in the years 2017 and 2018. Given the fact that the unemployment represents a variable all economies strive to lower, the noted lower correlation points to efficiency of the observed model; said model being profitable in the future according to the aforementioned estimations.

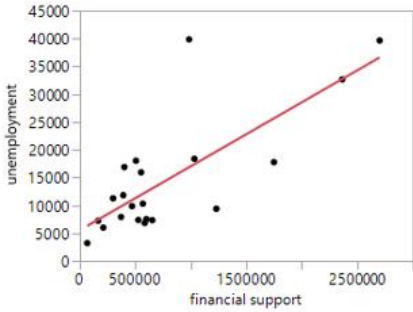
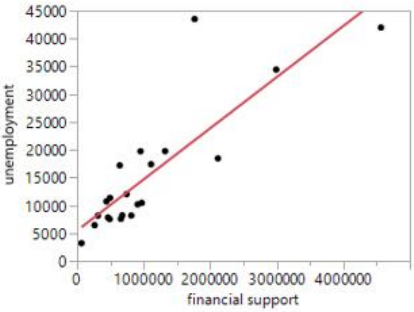
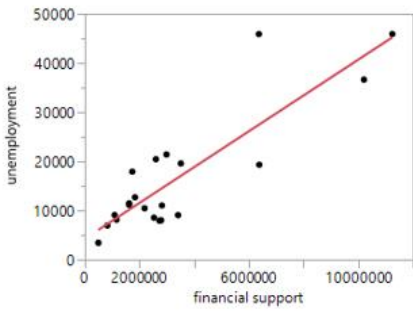
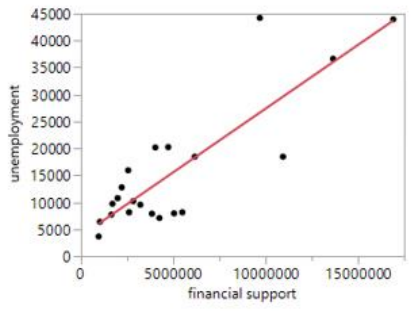
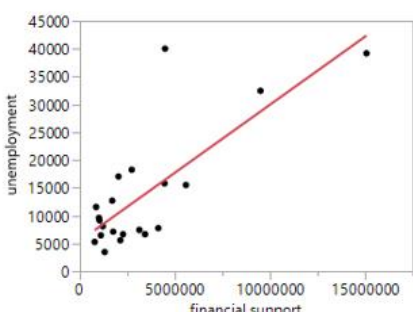
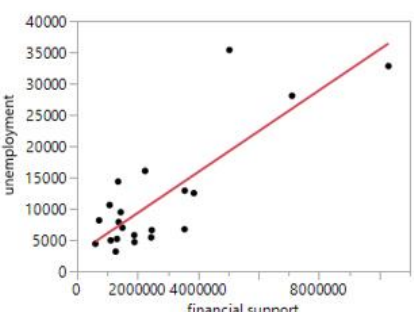
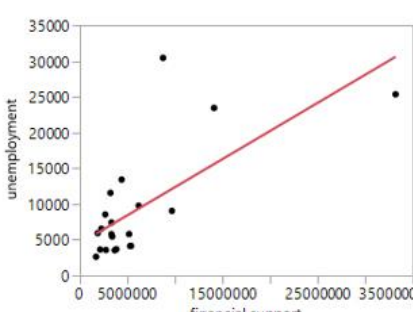
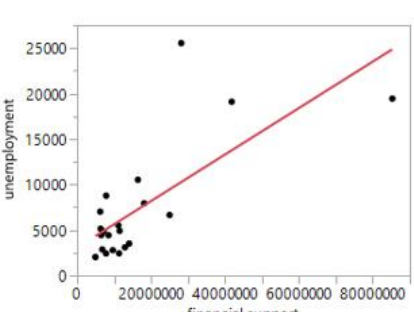
Table 3: Determination coefficient of the model

year	R^2
2011	0,577104
2012	0,719469
2013	0,742487
2014	0,724112
2015	0,596212
2016	0,678349
2017	0,485355
2018	0,524322

Table 4 illustrates variable correlation, providing a regression equation for every observed year. The following scatter diagrams provide a graphical representation of data, showing trends as sorted by the county, wherein each dot illustrates the funds and unemployment in the observed county and year. A positive correlation is notable, with lower or higher deviations.

Table following on the next page

Table 4: Regression analysis, authors' own work

<p>2011</p>  <p>5554,1589486 + 0,0114903591 * FS</p>	<p>2012</p>  <p>5483,8784814 + 0,0091967462 * FS</p>
<p>2013</p>  <p>4284,7151257 + 0,0036387916 * FS</p>	<p>2014</p>  <p>3762,8570157 + 0,00236328 * FS</p>
<p>2015</p>  <p>5505,8890362 + 0,0024467358 * FS</p>	<p>2016</p>  <p>2791,2011707 + 0,0032673973 * FS</p>
<p>2017</p>  <p>4516,1822849 + 0,0007856033 * FS</p>	<p>2018</p>  <p>3088,3168859 + 0,0002554123 * FS</p>

In the years 2011, 2012, 2013 and 2014, the highest deviations were noted in Split – Dalmatia County. Another notable deviation was observed in Primorje – Gorski Kotar County in the year 2014. In all the other observed years, the highest deviations were once again noted in Split – Dalmatia County. The provided graphical representation and calculations suggest that it takes time for the effects of self – employment incitement subsidies to become visible and notable. Said subsidies can only incur economic growth and lower the unemployment rate in the long run.

5. CONCLUSION

Self – employment subsidies are a significant part of the Republic of Croatia's active employment policy. The main objective of said subsidy programs is incitement of entrepreneurial activity leading to a decline in the unemployment rate. The objective of this research was to determine the type of correlation between self – employment subsidies and the number of unemployed persons in Republic of Croatia, ergo, to examine the impact of the available subsidy amount on the overall unemployment, observing solely the two aforementioned variables. The average results (total for all counties and City of Zagreb) pertaining to the number of newly included self – employment fund users, as displayed in table 1, show an increase in the number of persons who utilize self – employment subsidies, thusly changing their status on the labor market from unemployed to employed. When comparing the average number of new users to the total number of users in the years 2016, 2017 and 2018, it is possible to detect a significant increase, followed by a double increase in 2018. This occurred as a result of higher subsidy amounts awarded in those years. Results of regression analysis point to a positive correlation between the observed variables, but with ever less significant effects in the years characterized by a significant increase in the amount of available funds. Given the fact that unemployment represents a variable where an inversely proportional relationship with awarded funds is desirable, this effect is best visible in the years 2017 and 2018, as based on the provided regression equations. During the years characterized by high unemployment rates, the total amount of awarded self – employment subsidies was significantly lower. Recognition of this measure's crucial importance and the impacts it has had on entrepreneurship incitement and economic growth leads to better long – term results. Any further research is going to focus on other forms of subsidy programs, with the objective of expanding the analysis provided in this paper.

LITERATURE:

1. Athreya, K., Yasir, A.(2009). Credit and self-employment,*Journal of Economic Dynamics and Control* 35(3), (pp 363-385).
2. Babić, Z. (2003). The role of government policy on the labor market in Croatia, *Financial Theory and Practice* 27,br. 4: (pp 547-566).
3. Botrić, V. (2012). Regional differences in self-employment: evidence from Croatia, *Economic research* No.1 (pp 243-266).
4. Bradley, D. E., Roberts, J. A. (2004.) Self-Employment and Job Satisfaction: Investigating the Role of Self-Efficacy, Depression, and Seniority, *Journal of Small Business Management* 42, br. 1: (pp 37-58).
5. Croatian Bureau of Statistics, Statistical Yearbook (2011-2018)
6. The National Employment Incentive Plan 2011.- 2012. (2011)
7. Government programs for the economy in Croatia 2011.-2015. (2011)
8. <https://statistika.hzz.hr/Statistika.aspx?tipIzvjestaja=1>(15.07.2019)
9. Croatian Employment Service. (2012,) Yearbook 2011
10. Croatian Employment Service. (2013), Yearbook 2012
11. Croatian Employment Service. (2014), Yearbook 2013

12. Croatian Employment Service (2015) Yearbook 2014
13. Croatian Employment Service. (2016) Yearbook 2015
14. Croatian Employment Service.(2017), Yearbook 2016
15. Croatian Employment Service (2018), Yearbook 2017
16. Croatian Employment Service .(2019), Yearbook 2018
17. European Comission (2011). Europe 2020, A strategy for smart, sustainable and inclusive growth, Brussel
18. Grahovac, P.(2003), Novčane naknade i novčani poticaji u Hrvatskoj poljoprivredi,*Zbornik Ekonomskog fakulteta u Zagrebu*, Vol.1,No.1, (pp 79-89)
19. Kralik, I., Tolušić, Z. (2009), Novčani poticaji u funkciji razvitka hrvatske stočarske proizvodnje, *Economic Issues : Review of Contemporary Entrepreneurship, Business, and Economic Issues*, Vol. XXII No. 1, (pp 115-123).
20. Škare, B.,M. (2012): Entrepreneurship and self-employment, examples of goog practise, *Learning for Entre*
21. *preneurship*, Vo2,No. 2., (pp 303-310)
22. Acs, Z.,Audretch,D., Evans,D.,(1994),Why Does the Self-Employment Rate Vary Across Countries and Over Time?,*CEPR Discussion Papers*, No 871
23. Moore, C., S., Muller, R.E.,(2002), The transition from paid to self-employment in Canada: the importance of push factors, *Applied Economics*,Vo 34, No.6, (pp 791-801)
24. Hall, L.,M., Saenz, R.,C.,Solis, F.,A., (2007),Government Incentives to Business: A Comparison of Mérida, Mexico, and South Bend, Indiana,*International Journal of Public Administration*, 30 (8-9), (pp 921-941)
25. Walker, R.,Greenstreet, D., (1990) The Effect of Government Incentives and Assistance on Location and Job Growth in Manufacturing,*Regional Studies*, Vol.1, (pp 13-30)

EMERGENCE OF WINE TOURISM AND ITS DEVELOPMENT IN UKRAINIAN TRANSCARPATHIA

Nazar Kudla

*State School of Higher Education in Zamość, Poland
Lviv University of Trade and Economics, Ukraine
kudlan@ukr.net*

Mykhaylo Hamkalo

*Ivan Franko National University of Lviv, Ukraine
hamkalo.m@gmail.com*

ABSTRACT

Virtually all tourism experts concur that there is no region in Ukraine that could boast a diversity of grape varieties to match that of the Ukrainian Transcarpathia. The unique terrain with a special climate that has evolved there is unique in the country. Mineral springs, rapid rivers, mountain ranges, and rare flora and fauna species represent only a handful of the region's riches. The geography of the Ukrainian Transcarpathia is also unique in that it borders four countries simultaneously, which also contributes to the region's economic and tourist development prospects. The growth of tourist traffic in the Ukrainian Transcarpathia in recent years has generated demand for local foodstuffs, including wine. It is safe to say that tourism has a direct impact on the development of the wine industry and supports the renewal of the cultural and culinary traditions of specific areas. This is especially true of the five administrative districts of Transcarpathian Region: Berehove, Irshava, Mukachevo, Vynohradiv, and Uzhhorod, where small commodity producers are predominant. These areas are pushing for the development of the local economy, and their goal is the preservation of the local traditions and culture associated with wine production rather than competition on a global scale. In this research, the authors offer a comprehensive review of geographical, tourist and recreational, industrial and economic conditions affecting the social and economic situation in Ukrainian Transcarpathia with a focus on the development of wine tourism (enotourism) to provide an evaluation of the potential of wine tourism in specific destinations and a rationale for the modalities of its effective operation. The authors propose a breakdown of enotourism market into segments and identify factors that encourage or discourage the participants of the tourist traffic to visit wine tourism operators.

Keywords: wine tourism, wine, enotourists

1. INTRODUCTION

The purpose of this study is to present the potential of the wine-growing and wine-making industry in the Ukrainian Transcarpathia in terms of the development prospects of wine tourism and to evaluate the demand for its products. Research Methodology: In the course of research, the dialectical method of inquiry was used to evaluate scholarly works dedicated to the development problems of the wine industry in Ukraine in general and in Transcarpathian (Zakarpattia) Region in particular. The method of empirical research was used to analyse the current state of development of the wine tourism offer. To determine the demand for enotourism services, a direct survey of a cohort of 126 select guests of wine festivals in the studied area was conducted.

2. WINE TOURISM: DEFINITIONS AND STRUCTURE OF MARKET ACTORS

The review of available scholarly literature shows that the majority of researchers in this tourist market concur that wine tourism is a new branch of the tourism industry [1, p. 138], which

stands out as one of top priority development areas in wine-growing regions of Ukraine with developed tourism infrastructure, availability of tourism properties, and rich historic and cultural heritage. It should be noted that, in Ukrainian tourism studies, there is no uniform terminological definition of this type of tourism; the terms "wine tourism," "enotourism," "wine-making tourism," "wine-and food tourism," and "enogastronomic tourism" are used interchangeably. Occasionally, the concept of "alcotourism," referring to a trip to temporary accommodations for the purposes of consumption of alcoholic beverages, is used.

Notably, wine tourism covers a fairly extensive range of tourism activities [2], including:

- vineyard visits, tasting of local grape varieties;
- insights into the technology used in the production of various types of alcoholic beverages on production sites;
- exposure to the history of wine-making, visits to industry museums and exhibitions, festivals;
- visits to tasting rooms and wine cellars;
- visits to restaurants offering wine tasting sessions and sommelier workshops;
- participation in wine festivals and themed events;
- attendance and participation in industry-related exhibitions, forums, conferences, contests, auctions.

In L.O. Gorshkova's opinion, wine tourism is a specialised type of the tourism industry, which involves exposure to the history, technology and culture of wine consumption in a specific region and wine tasting events immediately on the producer's site [3, p.69]. Amid existing economic developments, wine tourism is experiencing an intensive development in different wine-growing regions across the world. Since it can be paired with all other types of tourism or serve as a complement of tourist programs and routes, it may generate substantial profits. In addition, the industry's importance is also enhanced by its cultural and gastronomic values. Given that wine-making is an ancient business and ethnic tradition, each country can promote its culture, customs, national business practices, and imports interests through wine tourism. It also stimulates the development of backward agricultural areas and generates cash flow to local budgets, which is highly relevant for some Ukrainian regions, including Transcarpathian Region. In their publications, T.I. Bozhuk and L.A. Prokopchuk define wine tourism as "a specialised type of tourism associated with tasting, consumption and purchase of wine directly from the producer" [4, p.174]. A number of available publications offer a slightly different interpretation of wine tourism as an activity that has a significant impact on the development of a specific region. In many wine-making regions, a close relationship between wine tourism revenues and the growth of profits in other business areas has been demonstrated. Profit growth is directly linked to an increase in the number of tourists interested in wine [5, p. 8]. Thus, it can be stated that the core of wine tourism as a product is not so much wine itself, but also other components of the tourist offer, such as regional cuisine, material and spiritual culture, which overlap to shape a special culture of living, which wine tourists strive to experience. Wine tourism includes travels of a tourist nature motivated by the desire to learn about the history and traditions of localities associated with the cultivation of grapes and the production of wine, a chance to taste and purchase local wines directly from winemakers, participation in cultural activities, and an immersion experience in a special environment, peculiar to territories with a rich tourist and recreational infrastructure.

Irrespective of the above definitions, wine tourism has the below attributes:

- it constitutes a tangible component of material and spiritual culture,
- it enables an immersion experience of a specific lifestyle,
- it is factored in both the offer (owners of wine cellars, tourist businesses, etc.) and factors of demand (consumer behaviours),

- it constitutes an element of the region's tourist offer (most often combined with culinary heritage, culture, arts, and folk crafts),
- it serves as a marketing tool for the promotion of the region and wine producers,
- it enhances economic, cultural and social benefits for the region,
- it may be part of the national and international image of the region.

With due account for the above attributes and with reference to the arguments of a number of Polish scientists [6; 7, p.265], it is possible to argue that wine tourism is a related variety of cultural and food tourism, as can be seen from local folklore or names. For example, one of the largest cities in Transcarpathia is called Vynohradiv, while the commercial designations of many wines derive from their place of origin (Serednyanske, Berehivske, Irshavske, Troyanda Zakarpattia [Rose of the Transcarpathia], etc.). Since wine-making is an integral part of the socio-cultural heritage of each nation and an original asset of a specific ethnic group, the objectives and methods of wine tourism fully align with the social and humanitarian mission of tourism as the key driver in the dialogue between cultures, respect for universal cultural values, tolerance for lifestyles, mind-set and traditions of other peoples [8, p. 60]. The rapid development of wine tourism can be noted in the regions with favourable conditions for the cultivation of grapes, such as the Ukrainian Transcarpathia. The appeal of this type of tourism is down to a number of reasons, including interest in culture, history, architecture and lifestyle of the local population. Wine is perceived as a product associated with the cultural and culinary traditions of the areas inhabited by Ukrainian, Hungarian, Romanian, Slovak or other minority communities. Tourists who take interest in viniculture and wine consumption often discover this beverage in tasting rooms or cellars, at cultural events, festivals, fairs or improvised local events, as well as restaurants. Oftentimes, wine tourists prefer purchasing wine directly from producers, in a place with a unique atmosphere, a relevant infrastructure, and the opportunity to learn more about the product. Consequently, the development of wine tourism is enabled by a number of reasons. First, Transcarpathia is the leading region in terms of the number of visiting tourists: it is here that a vast number of cultural and historic landmarks are concentrated, while the services industry is experiencing a dynamic development. Secondly, historically, due to convergent geographical, climatic, environmental, cultural and socio-political reasons, Transcarpathia is one of Ukraine's largest producers and exporters of high-quality fine wines. Tourists are drawn to the region not only by national cuisine, but also by a selection of local wines, as well as many festivals and national holidays associated with grape harvesting and the maturation of wine as a beverage. Many Transcarpathian wines may be available for tasting only directly from winemakers nurturing a distinct wine culture with its peculiarities and consumption rituals. Tourism professionals and statistical data collected by tourism businesses confirm that the development trend of wine tourism in Transcarpathia is experiencing growth, while remaining a stable and highly promising business area. Wine tourism can generate substantial revenues at local and regional levels. The industry displays a strong potential, which makes it possible to secure competitive advantages for the region that is home to wine businesses and private wine cellars of local Transcarpathian wine-growers. Wine tourism holds a lot of economic appeal not only in terms of supply prospects, but also for companies and organisations involved in the provision of services associated with tourist traffic. In connection with this, many business owners began to engage in wine-making as their core business activity. The development of small-scale wine-making businesses based on farmer properties or private peasant farms can generate synergies in the form of an increase in tourist traffic and scope of services provided to tourists. Such prospects may reverse adverse trends in the local labour market and contribute to an increase in financial revenues to the local budget, which, in turn, will improve the living standards of local communities. Many examples can be identified globally, where the development of wine tourism is included in strategic planning policy

documents. In Austria and Spain, funds are allocated from local budgets for the construction of wine centres under a dedicated expenditure item, and favourable conditions are created for the promotion of internal and external investment in the development of tourist infrastructure (accommodations, catering, development of routes, information centres) [9, p.639]. Wine connoisseurs see wine tours as a chance to come into contact with the traditions and art of wine-making and immerse themselves into a special context of communication about the taste and smell of wine. However, tourists are also encouraged to sample other products, for example, they may choose to be entertained at a thematic Transcarpathian banquet, featuring national cuisine and exclusive dishes, attend festivals, celebrations, academic and business forums, register for workshops and, of course, take a tour of local natural and cultural landmarks. Summing up, wine tourism is an important element of two industries – wine-growing and wine-making, on the one hand, and tourism, on the other hand. According to the authors of the textbook *Wine Tourism for tourist industry professionals*, wine is an essential factor in the appeal of a tour, a reason to take a special trip, and an element of dining, treatment and entertainment [10, pp.107-108]. For wineries, wine tourism is one way to raise the profile of their brand, secure long-term purchaser commitment among consumers who discovered the proposed range of wines, and increase direct sales in tasting rooms and cellars.

3. PERCEPTION OF WINE TOURISM AS A FORM OF EXPOSURE TO LOCAL CULTURAL AND CULINARY HERITAGE

The methodology behind the design of our market research of the wine tourism market is based on the categorisation of factors impacting actual and potential consumers, specifically, external stimulating factors, personal factors, and classical approaches to the segmentation of the tourist market. Our target surveyed group was selected among the guests of wine festivals, as, according to the Transcarpathia Tourist Information Office, about 150,000 tourists come to local wine festivals annually [11]. 82 wine questionnaires were collected at Chervene Vyno (Red Wine) Festival in Mukachevo, while 44 respondents took part in the survey during the Bile Vyno (White Wine) Festival in Berehove. In addition to these two select events, it is necessary to mention two more festivals hosted by the region, specifically, Sonyachny Napiy (Sunny Drink) in Uzhhorod, and Zakarpatske Beaujolais and Ugochanska Loza (Ugocsa Vine) in Berehove, which promote tourism and constitute a tourism product of national importance. Based on the processed materials of the marketing research, we made an attempt to segment surveyed consumers by specific attributes and determine the profile of the rank and file wine tourist. Thus, it was possible to identify three segments of consumers who have already participated in wine festivals or tours or are merely interested in such kind of leisure time. Consequently, Segment 1 comprises actual consumers who have repeatedly participated in organised wine tourism activities. Segment 2 represents wine tourists with little experience and some exposure who have not yet participated in regular wine tours. Segment III are potential tourists who do not yet have the experience of participation in a wine tour and similar events, but are willing to have such an experience in the future. A detailed description of the resultant segments is provided in Table. 1 below. Based on the data shown in Table 1, it may be concluded that Segment 1 is the largest, indicating that most respondents were interested in travelling to wine tourism destinations and learning about wine consumption culture and tend to get involved in a variety of wine-related activities if they have available options. These are mostly middle-aged people, with a university degree and an appropriate income level. Having a prior experience of participation in various wine tasting events and festivals, they are highly motivated to take such trips. A fairly sizeable Segment 2 indicates that the wine tourism industry has quite a few potential consumers who, granted a sufficient purchasing capacity level, will be able to engage in wine-related trips. The backbone of this segment is comprised of people of all age groups, by and large, with a university degree or a university level educational

background. In terms of professional distribution, it should be noted that the respondents employed in the service sector (28.5%) or operating private businesses (19%) were interested in wine tourism the most. A sufficient number of potential and actual consumers of wine tourism products were represented by civil servants, educators and academia members.

Table 1: Segmentation of Wine Tourism Actors by Demographic Descriptors

Demographic descriptors	Number of responses per segment, units			Total responses, units
	Segment 1	Segment 2	Segment 3	
Gender: male	21	33	18	72
female	17	24	13	54
Place of residence: city	43	31	17	91
rural community	17	11	7	35
Age: 18 – 25	13	3	9	25
26 – 35	9	4	5	18
36 – 45	20	9	6	35
46 – 60	31	8	5	44
over 61	3	1	-	4
Education: university degree	42	34	6	82
university-level courses	11	6	3	20
vocational training	15	4	5	24
Employed in:				
– public service	8	2	2	12
– private business	12	9	3	24
– education or science	4	2	-	6
– construction	2	4	4	10
– service industry	21	10	5	36
– industrial operations	4	5	2	11
– agriculture	6	2	-	8
– military	2	-	-	2
– other	9	4	3	16

Source: Independent research

The vast majority of Segment 1 respondents who took advantage of the offer of wine tourism actors said they were satisfied with such offer (57% strongly satisfied and 41% rather satisfied). Only 3% had no opinion on the subject, and 1% expressed their dissatisfaction with such offer. More interestingly, more than 95% of the respondents were in favour of repeated visits to the sites they visited and ordering relevant services, which suggests a positive customer response to the recreational activities offered by the wine tourism industry. In response to the question about the respondents' awareness of the wine-making areas of Transcarpathian Region, they most often mentioned Vynohradiv and Berehove Districts (73%). However, recalling the names of the wineries they preferred proved more difficult for tourists. Most often mentioned were the wine cellars in the village of Serechnye, owned by the well-known agro-industrial company Leanka, producing ten varieties of wines of different flavours. The main reason behind such popularity with visitors is the very infrastructure of the facility with its 4.5 km length of wine cellars, which are recognised as one of the most valuable in Europe and are protected by UNESCO [12]. Second behind Leanka cellars, respondents indicated the winery Chateau Chizay near Berehove. The site may serve as a model wine tourism business and has developed a wealth of innovative offers covering all segments of tourism service consumers, including children, who are offered an animated tour program and a grape juice tasting session. The company is committed to a professional promotion of wine consumption culture and showcases its high-quality products in a newly renovated tasting room with a capacity for more than 50 guests, including a kosher offer [13]. To determine the ratio between the actual and potential markets for wine tourism, it was important to find out to what extent consumers were acquainted

with this type of tourism and whether they had relevant experience and motivation for such trips. Respondents had the opportunity to indicate several reasons, which, in their opinion, motivated them to visit wine tourism sites (Table 2).

Table 2: Wine Tourism Motivators

Tourist motivations	Number of responses, units	Share of responses, %
Discovery of wine varieties, tasting options	36	28.5
Option to buy wine directly from producers	32	25.3
Exposure to the properties of wine and the culture of its consumption	27	21.4
Awareness of local culinary heritage and traditions	28	22.2
Trips on wine routes	8	6.3
Desire to meet and communicate with winegrowers, visit grape plantations	12	9.5
New experiences and organised recreational activities (attendance of the wine and food festivals)	21	16.6

Source: Independent research

Essentially, motivations for involvement in wine tourism are down to options for the consumption of this beverage immediately on production sites. Normally, after tasting sessions, tourists are willing to purchase specific varieties of wine, insofar as it is largely impossible to purchase such products in retail outlets due to the fact that winemakers often do not hold relevant licenses. The smallest percentage of 6.3% was accounted for by the wish to take a trip on wine routes, which indicates low awareness of this opportunity, and an underdeveloped infrastructure and the number of additional travel services on existing routes. All in all, the results of the study of motivations behind wine tourism trips correlated quite closely with the outcomes obtained during a research conducted by scholars from the University of Information Technology and Management in Rzeszów. In their publication, the authors point out that the key motivators for wine tourists are participation in tasting events and the desire to discover new varieties of wines – 21.2%, visits to wineries and wine cellars – 14.2%, and exposure to the traditions associated with wine consumption culture – 26.5%. According to the researchers, a chance to broaden personal knowledge in matters related to the production of wine and its products is also highly important for the development of wine tourism, which was indicated by 23.9% of respondents as a major motivation [7, p.261]. To achieve better efficiency in planning tourist services, it is important to take into account the behavioural patterns of target audiences and consumer preferences in terms of contents of tour programs and come up with products that generate greatest interest among wine tourists. Therefore, different forms of wine tourism were offered to survey participants with an option to opt for the activities that were most appealing to them at their discretion. The collated data based on respondents' choices are shown in Table 3 below.

Table 3: Distribution of Respondents' Answers on Forms of Wine Tourism

Wine tourism form	Frequency	Percentage, %
Tours of vineyards and wineries	11	9,3
Wine tasting event with a presentation by a professional sommelier	63	50,0
Enogastronomic dinner	9	6,8
Visits to wine festivals and exhibitions	27	21,4
Total	126	100

Source: Independent research

During the survey, it was established that the most appealing form of wine tourism is the presentation of the tasting program by experienced wine professionals and experts.

This is why a scheduled, often staged tasting session remains a staple offered to wine tourists by both large- and small-scale wine producers. Most businesses have appropriately equipped tasting rooms, designed to welcome organised tourist groups. Tasting events may be offered as a standalone product or as part of tourist package offers. It should be noted that prices for such services are high, and the wine tourism offer may be considered upscale as compared to gastronomic or rural tourism products. After segmenting the existing market and identifying core motivations for wine tours, we can compile the average profile and outline a number of attributes prevalent among wine tourists. These are as follows:

- young people in their productive prime aged between 25 and 45 (a trend is underway towards a decrease of the age group of young people who take interest in wine tourism);
- mostly people with a university degree and a higher than average income;
- persons employed in in-demand professions, qualified professionals (service sector, entrepreneurs, employees of public institutions);
- groups of young people or young couples looking for non-routine leisure experiences.
- The common needs of wine tourists that they seek to cater to during the trip include:
- they prefer shorter trips or plan stays in several locations where their interest items are concentrated;
- throughout the year, they choose and get actively involved in number of scheduled events;
- they prefer private accommodation services or high standard guest houses;
- they take interest in the culture and traditions of the local community and local cuisine;
- they willingly buy wine tourism products and other local products (grape juice, grape seed oil, cheeses, sweets, honey);
- most often, they use available Internet resources to plan their trip.

Marketing studies have shown a low awareness of existing tourist routes or wine-related routes and other regional products, such as plum *lekvar* or cheeses (*vurda* and *budz*), among wine tourism consumers. Most of the surveyed tourists (68%) have never heard of the existence of such food-themed routes as the Cheese and Wine Tour of Transcarpathia, the Sweet Way, the Transcarpathian Road of Wines and Flavours, and the Transcarpathian Wine Tourist Route, the latter combining 12 wine cellars and tasting rooms of top winemakers to welcome visitors and promote Transcarpathian wines. Each location offers between 6 and 12 varieties of “the drink of the gods,” including famous vintage wines (such as Troyanda Zakarpattia [Rose of Transcarpathia]) and newer varieties that were developed by wine-making professionals recently. Based on the results of the survey, it was established that the respondents could not name any organisation in charge of the promotion of the development of wine tourism, for example, the Regional Association of the Union of Private Grape Producers and Winemakers of Transcarpathia (set up in 2007) or the Transcarpathian Tourist Information Centre. The respondents were asked a question designed to find out their opinion on the comprehensive nature of the services offered by businesses of different organisational and legal forms. Smaller private wineries, which can be described as agritourist and wine tourist operators, showed most flexibility in terms of additional services offer. The flexibility of such operators can be explained by a more personalised approach to their guests. Based on the results of the survey, such in-demand additional services included: an option to sample traditional Transcarpathian meals prepared over open fire (62.8%), transportation services (34.7%), because driving after use of alcoholic beverages may result into legal prosecution for tourists who often travel by car, and availability of accommodation options with their hosts (22.6%). In the course of the survey of festival guests, we found out that about 22% of the respondents did not indicate a wish to continue their trip associated with wine tourism after getting acquainted with the offer of specific sites during the event. We have summarised the rationale for our position in Table 4 below.

Table 4: Reasons for Low Interest in Wine Tourism among Tourists

Factors	Number of responses	Frequency, %
Low awareness of the wine tourism offer in society in general	11	42.8
Absent tradition and culture of wine consumption	17	62.4
High price of services	19	71.2
Low quality of wine	13	46.4
Insufficient number of wine cellars in the region	3	12.4
Lack of cultural immersion program during tours of wine tourism sites	7	24.3
Poor quality of the tasting room infrastructure	5	17.8
Uninteresting tasting (entertainment) program	8	31.2

Source: Independent research

Respondents indicated a number of reasons of objective and subjective nature, which underlay such responses. Wine tourism is perceived by society in ambiguous terms, because awareness of its role and importance as one of the key forms of tourism in Transcarpathia remains insufficient. Furthermore, the culture of wine consumption is based on specific tenets: drinking should be associated with pleasure, occur in a proper context and remain reasonably measured. As pointed out by the respondents, after tasting events, many visitors tended to forget that wine is not only an alcoholic beverage, but also a kind of cultural consumption phenomenon similar to other creative products, such as pictures or books. Meanwhile, as it turned out during the survey, high prices remain a major issue that impedes the development of wine tourism. Therefore, pricing policies and marketing management of businesses and farms offering wine tourism services should meet the hopes and expectations of the guests visiting the Transcarpathia for tourist purposes. Respondents also expressed their dissatisfaction with the low quality of wine and unappealing tasting programs offered by small-scale winemakers. Almost half of the interviewed respondents (47%) expressed the opinion that wine tourism contributes to the development of local and regional culture, while 43% noted a richer and more varied gastronomic offer, while one in ten festival guests saw positive developments in terms of accommodation, and 8% mentioned the availability of sports and recreational infrastructure. Other benefits resulting from this form of tourism include new jobs and growth in the living standards of local residents. Quite a lot of respondents (28%) believe that wine tourism has no impact on local development and only serves the private interests of winemakers. The majority of surveyed respondents (82%) believed that the local government and government policies do not contribute to the development of wine-making and viticulture in the country and wine tourism specifically, while 12% had no opinion on this issue. One in three study participants noted that information on wine tourism can be obtained from mass media (websites, press, television, radio) or directly from winemakers, travel agencies and wine amateurs. Wine tourism in the Ukrainian Transcarpathia has a significant impact on the development of areas of grape and wine production. It creates new profit opportunities for winemakers and other tourism market actors operating in the service sector. From year to year, winemakers strive to improve the quality of services provided through upgrades to the infrastructure of businesses and improvement and expansion of their additional service package. Implementation of relevant steps takes considerable efforts and investment. It is rather safe to argue that small-scale wine-making businesses support and develop the cultural component of wine tourism, which is valuable for participants of this market and constitutes an in-demand product for modern tourists.

4. CONCLUSION

- 1) Wine tourism in the Ukrainian Transcarpathia has a significant potential for development due to natural and climatic conditions, rich historic and cultural heritage, favourable geographical location, and reasonably developed tourist infrastructure and constitutes a

special interest item for tourists, which is indispensable for the discovery of wine and exposure to the culture of grape cultivation and wine consumption.

- 2) The development of wine tourism contributes to the creation of new jobs, resurgence of old professions, folk crafts, preservation of cultural traditions and daily practices, which suggests a potential to improve the living standards of local residents.
- 3) Marketing studies have shown that wine tourism, similarly to other types of tourism in the region, is not promoted to a sufficient extent.
- 4) One way for local winemakers to succeed in the wine tourism industry should be through concerted actions and close cooperation with local and regional authorities, travel agencies, industry institutions and non-governmental organisations in order to develop new wine routes, training and entertainment programs, organise large-scale cultural events, and work towards joint promotion of wine tourism products.
- 5) The quality of services provided should be improved through professional training of staff, hands-on experience and knowledge using a competence-based approach to the training of winemakers.
- 6) In order to achieve solid results in the wine industry, including in terms of development of wine tourism to the standard of developed European countries, it is necessary to build on the historical and cultural experience of the past and use the state-of-the-art technology of the present, while taking care to preserve the centuries-old tradition of growing grapes and making wine in the region.

LITERATURE:

1. Нездоймінов С.Г. 2014, Регіональні контури кластерного розвитку винного туризму, *Наук. вісн. Херсонського держ. ун-ту, серія «Економічні науки»*, Вип.8, Ч.1, сс.136–141
2. Басюк Д.І., Бадещенкова К.С. Дослідження ринку винного туризму в Україні: update 2014, , available at: <https://www.sworld.com.ua/konfer34/435.pdf> (accessed 20 June 2019).
3. Горшкова Л.О. 2018, Розвиток винного туризму як спеціалізованого виду туристичної діяльності, *Наук. вісн. Ужгородського нац. ун-ту, серія «Міжнародні економічні відносини та світове господарство»*, вип., ч.1, сс. 68–71.
4. Божук Т.І., Прокопчук Л.А. 2011, Сучасний стан і перспективи розвитку винного туризму (на прикладі Закарпатської області). *Туристична індустрія: сучасний стан і перспективи розвитку: VI міжнар. наук.-практ. конф. (28–29 квітня 2011 р.)*. Луганськ, т. 2, № 6, сс. 171–177.
5. Carlsen, J. 2004, A Review of Global Wine Tourism Research, *Journal of Wine Research*, vol. 15, no 1, pp. 5–13.
6. Kruczek Z. Enoturystyka w Polsce i na świecie: update 2013, available at: http://www.proksenia.pl/download/Enoturystyka_Wspolczesne_formy_turystyki_kulturowej.pdf (accessed 21 June 2019).
7. Krupa J., Stokłosa Ł. 2015, Winnice oraz imprezy winiarskie atrakcją turystyczną regionu. *Europa Regionum*, Tom XXII, ss. 259–270.
8. Карташова О.Г. 2017, Соціально-економічні умови розвитку туристичних винних кластерів в Україні, *Наук.-вироб. Журн. «Бізнес-навігатор»*, вип. 4-2 (43), сс.58–63.
9. Mazurkiewicz-Pizło A. 2012, Turystyka winiarska (enoturystyka): korzyści i koszty. *Ekonomiczne problemy Usług*, nr 84, ss. 633–645.
10. Іванов С.В., Домарецький В.О., Басюк Д.І. 2012, *Винний туризм*, Кам'янець Подільський, Сисин О.В., 472 с.
11. Винний туризм Закарпаття, available at: <https://tourinform.org.ua/vynnyj-turyzm-zakarpattya/> (accessed 21 June 2019).

12. Леанка. Виробництво вина, available at: <http://www.leanka.com.ua/> (accessed 21 June 2019).
13. Chateau Chizay, available at: <https://chizay.com/tour> (accessed 21 June 2019).

THE PROSPECTS OF SHANGHAI COOPERATION ORGANIZATION TURNING INTO A COUNTERWEIGHT TO THE NATO ALLIANCE

Bostjan Peternelj

*Independent consultant on defence matters,
Faculty of Social Sciences, Slovenia
peternelj.bostjan@gmail.com*

Petar Kurecic

*University North, Department of Economics
Varazdin, Trg 104. brigade 3, Croatia
petar.kurecic@unin.hr*

Lara Kauss

*Independent researcher on discourse analysis,
Fluminense Federal University,
Department of Social Communication, Brazil
larishka.lk@gmail.com*

ABSTRACT

The Shanghai Cooperation Organization (hereafter: the SCO) is a continental-sized organization that could rise up into a political-military alliance. At first it serves as Eurasian political, economic and security treaty under the bilateral alliance between China and Russia. It was created joined by four out of five Central Asian states: Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan, which create a security buffer at the Russia's southern flank. The observer states in the SCO: Turkey, Syria, Afghanistan, Iran, Mongolia, and Belarus, are a part of this international organization. The continental sphere of influence of the SCO's forerunners Russia and China is even broader (Armenia, Bangladesh, Nepal, Sri Lanka, India, Pakistan), and some Gulf states such as Saudi Arabia, Yemen, Oman, Kuwait, Iraq, despite the still dominant US presence in the Gulf. A joint multidimensional cooperation could transform the SCO into a defense union and a counterweight rivalling NATO. Defence, security, logistics, economic market etc. are neuralgic spheres of mutual interests to take into considerations to fuse these states and other MENA states in Africa and sub-Saharan states. The USA has also gained some advantage hence Uzbekistan had abandoned the Shanghai Six. However, since 2017, India and Pakistan had joined with full membership. The geopolitical role of the SCO is widening and deepening dialogue with other regional Asian states. The topic of this paper is dedicated to combat terrorism, separatism, and extremism by implementing further essentials goals, means and resources those are necessary to form a future defense union.

Keywords: *The Shanghai Cooperation Organization (the SCO), Russia, China, Eurasian army, NATO, geostrategy*

1. THE SHANGHAI COOPERATION ORGANIZATION – ON THE ROAD TO BECOMING A DEFENSE ALLIANCE?

The SCO has yet to finalize the expansion of its membership. In September 2014, the SCO cleared all legal hindrance stressors to expansion at the heads of state summit, and India and Pakistan began the accession process at the July 2015 summit in the city of Ufa, Russia. Belarus, a former dialogue partner, was also upgraded to the status of observer state. Armenia, Azerbaijan, Cambodia, and Nepal were introduced as new dialogue partners. As laid out in its charter, the organization functions as a forum to strengthen confidence and neighbourly relations among member countries and promote cooperation in politics, trade, economy, and

culture, to education, energy, and transportation. The SCO has two permanent headquarters, the secretariat in Beijing and the Regional Anti-Terrorist Structure (RATS) in Tashkent, the capital of Uzbekistan. One of the organization's primary objectives is "promoting cooperation on security-related issues, namely to combat the "three evils" – terrorism, separatism, and extremism. The organization adopts decisions made by consensus, and all member states must sustain the core principle of non-aggression and non-interference in internal affairs" (Albert, 2015). Today, the situation in the world economy is still too fragile. The process of economic globalization is under the threat of collapse. States are forcing to implement unilateral and protectionist measures (Joint Communiqué, 2018). Especially negative impact on global economic prospects is associated with international terrorism, but the aggravation of conflict situations in a number of regions decrease security situation into grey zones in African and Asian states. The most important message to the world presents decision by the Council of Heads of State of the Shanghai Cooperation Organisation on approving the Programme of Cooperation between the Member States of the Shanghai Cooperation Organisation in Countering Terrorism, Separatism and Extremism for 2019-2021 (List of Documents, 2018). This decision is the backdrop to transform Shanghai organization into defence pact or union in order to foster own defence capabilities as to protect own geo-economics interest. However, at the beginning, these states need to implement drafted Global strategy to show new military posture to the world tailored from Russia and China as the leading states in the SCO within the organisation's agenda. Russia takes the lead on politico-military affairs. China leads on economic development, investment and infrastructure. The SCO leaders approved a new non-military collective response mechanism for responding to situations that establish peace, security and stability in the region at risk which theoretically allows the SCO members to interfere politically and diplomatically in other SCO members in the case of internal conflicts (Grieger, 2015: 9). The Shanghai Cooperation Organization (SCO) is shaping the Eurasian future of multilateral cooperation through shared progress, neighbourliness, security, and peace in the region. The global struggle against the "three evils", in order to dispel or root out all forms of terrorism, separatism, and extremism physically from the Asian geographic map, is clearly a priority, as all member states have signed the Shanghai Convention on combating against three enemies to national security (Khan, 2018). That convention had shaped the political frame to geostrategic roadmap, goals and tasks how to fight against instigated foreign interventions from island states (the USA and Great Britain). In opposite eccentric aspirations of Russia and China follow geopolitical, geo economic and geo energetic into the world that it revitalizes at most sphere of socialist interest from the late Soviet Union or to reactivate something that resemble the Warsaw pact, on the Asian continent. Protectionist pose into defence posture shall be multi effective from the "five stars pillar", which would consist from Russia, China, India, Iran and Turkey, possible with EU army into future if European community may be constituted after dissolution of NATO alliance. The essential goal of geostrategic plan is interrelated and interconnected Eurasian mainland states via west to far east (from the Atlantic to the South China Sea) and to south (the Indian Ocean), with multilateral integration into multiple aspects. One of them into topic is defence policy, military cooperation on strategic and operative level, compatibility and unity. Challenges and threats will calibrate its mission through following Eurasian states into defence clause to fight against the three evils to national security into future by using more sophisticated tools and mechanisms besides using military power into gun powder diplomacy. What about the Russian geostrategic plan under the SCO is ongoing into the Post-Soviet period of dynamic foreign defence policy as to recognise and revitalize it as a part of the Russia's exclusive interest zone. Undermining Euro-Atlantic unity, promoting disintegration of the EU and NATO as well as empowering contradictions in relations between other world powers and regional states (primarily between the United States and China, the USA and Iran) (Tsarik and Sivitsky, 2015).

Russian priority is dissolving NATO and EU in political fight against anti-Russian sentiment into the western part of Europe that was spread like a hysteria into western propaganda channelled through public media streams despite Russia fully supports those Eurosceptics in the EU member states and policy party wings (Greece, Hungary, Italy, etc.) that did not support dictatorship from Brussels technocracy. What is behind this major Russian strategic objective as to dismantle strained relations between the USA and its European allies under European NATO pillar (primarily France and Germany). Both France and Germany are struggling to protect genuine European interests and national values. China has similar geopolitical aspirations by following maritime strategy of the American strategist Alfred Mahan that had warned to control the Eurasian landmass from maritime power. However, China still has the potential (financial) resources to dominate Eurasia if its resources are integrated into a single political organisation with advanced military capabilities (Sagar, 2017). The model of President Xi Jinping's attempt to make China great again at ancient time back that is based on the old Silk Road, overland from China to Europe, and on ancient maritime trade routes that run to Africa and Europe (Feldman, 2017). In the opposite context of this maritime doctrine, China is raising as economic land power that follows with military power to control Eurasian waterways from the mainland Eurasia ashore. What will happen if China's and Russian military aspirations will converse into defence pact with other Eurasian states those are asking for defence protection to fight against naval states interventionists? A new doctrine for the SCO is needed in order to formulate military missions and super transnational military architecture as main conditions to formulate the Eurasian army under the SCO land mass control on the mainland beneath to include the reinvigorated old Silk Road from the ancient times, under updated connotation.

2. THE INITIAL PHASE – CREATING MILITARY PACT TO RESIST AGAINST HYBRID INTERVENTIONS

One of the primary roles stated by the SCO is cooperation in antiterrorism helping in the Central Asian states. A secondary consequence is preventing any need for such assistance from the US (Boyle, 2018). Sporadic and annually scheduled joint military exercises under Russia's and China's war game scenarios to succumb with possible neither conventional nor unconventional conflicts into region any from those may disrupt this alliance by force into proxy wars. Geo-economics dimension includes proposed free-trade area protection to improve both the goods and joint energy projects secure like new hydrocarbon reserves and share water resources. Member states are going to participate in joint military activities and partake in large scale war games which are open for the media to witness (Vashishth, 2017). Is Shanghai military pact able to create the most stable military force power projection that prevent, eliminate and fight against hegemonic usurpations into internal states of security matters from member states? Could these member states confront against US hegemonic hostile actions to preserve this military pact? It is absolutely an anti-Western and anti US alliance to stop geopolitical penetration into the Russian and China's sphere of influence politically, economically and culturally? The red line is where geopolitical borders are flashed between three superpowers along the CSTO states and abroad from extrapolation struggle policy by the SCO in Syria, Libya, and central African states. Hybrid experiment was implemented both by political experiment that advance into military struggle to win into the gun powder policy. Another widespread perception of the SCO is as a Russian and Chinese-led alliance created to counterbalance the US supremacy both at the regional and global levels. Some analysts speculated, especially compared the SCO with the Warsaw Pact, whether this organization might develop into a counterweight to the North Atlantic Treaty Organization (NATO) and whether the world is witnessing the start of a new Eastern bloc (Tugsbilguun, 2009: 60). SCO maybe presents sleeping beauty that had been awakening again from slumber since the End of

the Cold War and had shadowed global instability that guides back to the war. All SCO member states are nevertheless bounded to common interest, suppressing radical Islamist movements in their respective territories. Each of them has domestic problems with militant Islamist groups: the Chechen separatists in the Northern Caucasus; the East Turkestan Islamic Movement in Chinese Xingjian-Uighur Autonomous Region is fighting to create an independent state; the Islamic Movement of Uzbekistan and Hizb-ut-Tahrir, which were aided by the Taliban are operating in Central Asian states. As these militants have been receiving transnational support, Russia and China deemed it important to develop regional cooperation on counter-terrorism, while the smaller members have sought to eliminate the threat these groups posed to their regimes (Tugsbilguun, 2009: 72). Commercial approach into hybrid interventions were based on soft power regime change that import foreign specialists, mercenaries or fighters to get nibble as rates attacks on whole state strategic infrastructure within isolationist policy support from outside that evolve into currency rate exchange speculations, boycotting commercial goods etc. Western style interventionist policy is focused on specific ethnic groups, opposition clans and NGO fractions those had monetary support from outside of targeted states. Why is multidimensional assistance with (military or security) aid so important from pact or coalition to survive first punch that do not collapse political system which had been attacked from outside. SCO presents solution to prevent intervention into those states do not support western style rules. Polarization of power between regional states is evident toward bipolar global system west – east axis, and reshuffled cards to fulfill vacuum what had left behind from hegemony. The SCO tries to counterbalance against the West, but focused pinpointing against US to withdraw from the SCO sphere of interests too, not only from bordering abroad. What would happen if Turkey would become a full member of the SCO? It might be required to abolish its membership in NATO. It is not only about a merchant deal in fact that Turkey purchased Russia's S-400 long-range, surface-to-air missile defence system in January 2018 (at a time when Turkey is still ostensibly being protected by NATO air and missile defences). The deployment of the S-400 anti-missile system poses problems of interoperability with other NATO members. Russia is also selling the S-400 system to China and is in discussions to do so with India. In other words, Turkey is acquiring a missile defence system that is compatible with those of Russia, China and perhaps India, but not with NATO's (Rowden, 2018: 9). Turkey's geostrategic location is important not only for geo-energetic connection to extensive network of gas pipeline projects but furthermore especially for regional stability on the Middle East. It is the second biggest army in NATO, and its contribution to abandon NATO could play the most important role on the Middle East to form regional operative HQ inside Shanghai defence union. Turkey has strategic military assets to prevent the ISIS incursion into the Caucasus states, and overtake maritime based control above the Black Sea to the full respect of the *Montreux Convention Regarding the Regime of Straits* (1936). The SCO protects its own interests into defence matters but it could broaden security goals to extinguish (military) fire fights as to give protection to Non-Shanghai organization if military aid or assistance can be proposed from legally elected state governments which national security is violated. Examples, Syria government had asked for military help from Russia to fight against interstate opponents supported logistically from some NATO states and general Haftar in Libya had also asked for such support to fight against similar opponents. Iran is isolated even in the Persian Gulf from the US pressure while Iran could catalyse or deter by A2/AD strategy to encounter US navy presents in the Arab peninsula but it needs full support from the defence pact. Yemen presents choke points to NATO fleet sailing from Mediterranean axis of navy route to Indian Ocean. If Syria, Libya, Iran, Yemen and other Arab states would become full members of the Shanghai organization, then the US – NATO interests would be seriously endangered.

3. THE SECOND PHASE – FIGHTING SPECIAL WARS AT THE SOUTHERN FLANK OF THE CSTO

Mutual agreement plays attention to promote guaranty in fight against hostile intention from US interventions into internal affairs. In this case, the ISIS promotes a weapon to carry out proxy wars, and mercenaries formed an illegal terrorist organizations imported into each state for specific purposes. Kazakhstan's former president Nazarbayev has put resignation to speed up transformation of political process for what purpose but it could risk political struggle for power and energetic resources between elites as new point of interstate instability. Russian Federation had provided military and intelligence assistance to Tajik army as member of the CSTO in re-equipping its forces to emanate terrorist transgression from Afghanistan territory. Turkey had been given meddle response in fight against terrorism properly to avoid confrontations with terroristic groups on own soil. The Idlib pocket presents the evident proof how Turkey is fighting against terrorism inside controlled fence around pocket by building up watch dog control points at frontier. The ISIS is awakening again like octopus into Central Asian space to attack energetic grids and installations from Russia to China and India, respectively. Away from sporadic attacks and classical military clashes those we were seen before in Syria and Iraq were transferred to conduct subversions and diversions against economic complexes on energetic junction into Central Asian states as to weakening Russian economy like new military approach strategy to obtain objects. If we imagine when terrorist cells cooperate together with NGO organization to obstruct non-military services into the country of main target from opponents like those subversive activities supported by another form of violence such conduct military coups or civil riots on streets, escalating economic and financial sanctions, sabotage energetic grids, subversion of civil and military institutions into corruption scheme etc. Hybrid warfare was introduced into pre phase to escalate interstate war that cannot be controlled or ruled out successfully from the regular government. All states of the SCO must elaborate security plans according to the collective defence clause. That is an obligation, which may be drafted into the constitution for each state of CSTO and Shanghai defence pact into future. Russia boosted to promote the most advanced weapons used in Syria and conducted on polygon tests. After the test phase some modern weapons will be used into military inventory by improving, nuclear and non-nuclear deterrence measures. Russia is going to adopt modern weapon systems, including some qualitatively new ones. It begins with production of new types of weapons, which are entering into military service. The Avangard and Sarmat, respectively, as well as the latest Peresvet and Kinzhal systems have all showed high combat effectiveness. The Poseidon and Burevestnik systems are successfully undergoing tests. Development of the Tsirkon hypersonic naval missile is progressing as planned. Russia gets ready for war and NATO states would be target by using those set of modern weapons of the fifth generation into deterrence strategy. New types of weapons will allow Russia to take advantage into an arms race with the USA and NATO. While the USA with NATO states are pushed into disadvantage against Russia, they had established a forward presence in Poland, Estonia, Latvia, Lithuania, as well as in Norway. Which game is going to play Europe to transgress Shanghai organization as counterweight at western flank of it? False flag is creating for bad image from imaginable dangerous Russia and China to EU member states, what the United States are now preparing for the "defense" of Europe. US are getting ready to test ground-based ballistic missiles (forbidden by the INF Treaty), that is to say new Euro missiles which will once again make Europe the base and at the same time, the target of a nuclear war (Dinucci, 2019). Russian military priority goal into military strategy for NATO deterrence is to destroy US army arsenal in Europe up to 90 percent to being totally non-operational and useless into the first preventive strike. Russia will not wait for second strike, just first strike will be terminated on US military facilities in Europe by using tactical nuclear warheads if escalation scenario runs into nuclear war in Europe.

European NATO states shall rethink if they need US support to risk own destruction. Collective defence of NATO states exists only on scribbled paper in the contract without any guaranty for Europe from US partners. What is reality? Well, in this case US will risk destruction of US troops in Europe as to minimize or being avoid war damage on own soil.

4. STRATEGIC DEFENCE FORCE PLAN PROJECTIONS

What forces are needed to preserve defence union and are going to be activated for abroad missions? Here were used two peer organization systems to enrol military core on national basis by using framework nation plan where each member state overlay national pool of military capabilities to defence union. Military forces are separated into two essential Echelons, A and B, which the first Echelon A consists of interoperable high trained, mobile, agile and the most advanced equipped battle groups from each member state. The lowest intervention units present brigade formation that could be fused into multinational or one national divisions or corps under national command, while international coordination command centre at joint higher tactical an operative level is needed for better military coordination on the field by using intelligence, supply and logistic maintenance, and transport capabilities to lift troops on remotod battle field locations into crises area of operations. Strategic supreme command post by conducting military decisions belongs to joint General Staff command centre in Moskva to coordinate all operations into defence union or abroad as military assistance to invaded state on the basis of asking permissions to react from defence union. A political decision to use multinational forces would be needed from civil defence body as the Supreme Council of Shanghai (foreign) defence policy. Echelon A could count to four corps based at four axes to react swiftly and be manned until 250 thousand professional solders, each corps consists to four divisions of up to 60 thousand soldiers. Echelon B presents as national pool of army units to fulfill or reinforce units of Echelon A with field rocket artillery, medium long range rocket system, anti-defence systems, army aviation units, strategic nuclear forces etc. and air, land and maritime component to add more forces to Echelon A under joint command staff in Moskva if actually needed for suck military mission to expand military operations or campaigns abroad or inside defence union. It could count to 10 million soldiers' army that would consist of both from professional soldiers (Echelon B1 and B2) and contractual reservists (Echelon C) core under national command units. While Echelon A could be activated into less than 48 hours and transported to versatile battle fields at same time over 1 000 miles away from barracks with the full support from Echelon B at same time from drafted national framework concepts. Echelon B is three staged, while first stage Echelon B1 (consists of one million soldiers) has to enlist or enrol those professional soldiers as reserve unit put on the list of priority to reinforce units of Echelon A into next 15 days on the field or alert unit to react immediately; Echelon B2 (consist of 1.5 million soldiers) could be activated into one month until mobilization plan for activating professional soldiers into the army service from each member states is not accomplished. Echelon C needs more time to activate contracted reservists. Smart logistic grid or platform belongs to part of defence production into military industrial complex that include production, transport, maintains, joint technological standards of defence products, and training and exercising by using most advanced military technology. Full member states could have access to common defence market under Eurasian customs union to purchase the most advanced military technology by offset mode on the shelf of defence storages. That is the right way for new possibility to modernize and transform own national armies under joint command structure and multinational forces are going to supply by pooling and sharing defence capabilities from Russia, China and India to small member states into logistic and maintenance. Multinational military drills in aspects of mutual cooperation and confidence in the domain of defence is imminent to conduct counterterrorism activities, and armament deal was included too to attain interoperability measures.

Although the SCO started as a security organization — extending from confidence-building measures at the borders to antiterrorist activities — the SCO members frequently state that this organization is primarily meant for political and economic cooperation and that military coordination — focusing on domestic security — plays a minor role (de Haas, 2016). It was in the past but security situation had been changing drastically after NATO intervention in Afghanistan. They are worried about enmeshing from Western military deployment in Central Asia. We need military drills and exercising by conducting defence protocols after Eurasian army will be rebuild to prevent NATO access of approach into Central Asia space and abroad. Those military drills convey the international legal connotation of security, there is common understanding within the SCO that non-interference in internal affairs is a leading principle and priority into collective defence. This absence of a common Central Asian posture makes the region weak, more vulnerable toward external threats, e.g., those from Afghanistan, and at risk of being overruled by the two big players, Russia and China who poses nuclear arsenal and defence potential to re-arm what would be a whole real Eurasian army. Both states ought to open plenty barracks and bases along at southern flank to rebuild limes as the Maginot defensive line or the Great (Chinese) Wall. Opening and widening defence cooperation to other states displace this defence line more southward as forward present into the most fragile states those were affected from interstate wars before. While the CSTO is an effective tool to military integration and coordination between Russian and Central Asian states, if the SCO security role will grow up into future and damage to Russian integrationist agenda (Frost, 2009: 92). Rivalry and diverging views insist between Russia and China that have seriously obstructed progress in the SCO's integration. Contrary to China, Russia has been eager to strengthen SCO-CSTO military cooperation, while China has advocated the creation of SCO free trade zone to boost economic integration (Grieger, 2015: 9). Here were no negative effects or rivalry between both organizations. It is simple to describe the misunderstanding. The CSTO presents regional defence organization under Russian umbrella into Central Asia similar to NATO defence cooperation into collective defence, while the SCO is not defence union yet, if is going to form Shanghai defence union then it will play global role, global defence union will be tailored into multi regional defence pillars which could play regional roles under operative HQ from Russia, China, India, Turkey and Iran, (Pakistan) but joined under supreme military command of Eurasian army with strategic HQ in Moskva. Supreme defence secretariat could be stationed in Peking where is the seat of the SCO. All strategic military operation and decisions will be guided from Russian HQ and five regional HQ could implement regional operations formed into multinational corps. All defence decisions into foreign defence policy will be implemented from Peking.

5. CONCLUSIONS

The SCO needs to transform into more stable and connected union to protect own interests against NATO interventions in the world and cut of new world order under hegemonic tyranny toward imposed multipolar world or regional pillars. A benign economic association is not enough, so we need to protect geopolitics and geo-economics interest as been able to rebuild defence union and form joint military forces to protect smart logistic hubs abroad, and most important message to the Shanghai group to prevent such hostile internal states interventions from NATO states. Deterrence policy against NATO could enlarge vital interest by joining more violated states from Asia and Africa to join defence union. The SCO presents more stable and interconnected world as counterweight against chaos and instability from geo-economics aspect. Defence pacts might have a special mission under the clause of mutual or collective defence to protect those geo-economics interests especially from those states of grey zone which are vulnerable from outside interventions from the US and NATO. Geostrategically interconnected plan of Russia and China plays the main role in forming of the future SCO

defence pact and the Eurasian army, which would be capable to resist against the maritime states and offer an effective umbrella to protect other Eurasian states from provoking instability into proxy wars that occurred in Syria, Libya, Iraq, Afghanistan etc. At the same time, China also wants to be more and more present at the blue waterways with the new, maritime Silk Road strategy.

LITERATURE:

1. Albert, E. 2015. The Shanghai Cooperation Organization. Available at: <https://www.cfr.org/backgrounder/shanghai-cooperation-organization>.
2. Boyle, J. 2018. Available at: <https://www.quora.com/Is-Shanghai-Cooperation-Organization-a-military-alliance-sort-of-like-NATO-or-is-it-something-else>.
3. de Haas, M. 2016. War Games of the Shanghai Cooperation Organization and the Collective Security Treaty Organization: Drills on the Move! Available at: <https://www.tandfonline.com/doi/full/10.1080/13518046.2016.1200383>.
4. Dinucci, M. 2019. The American Party within the Institutions of the European Union. Available at: <https://southfront.org/the-american-party-within-the-institutions-of-the-european-union-video/>.
5. Feldman, N. 2017. China aiming for a regional empire. Don't look now but Russia isn't the only threat to U.S. dominance. Available at: <https://www.japantimes.co.jp/opinion/2017/05/18/commentary/world-commentary/china-aiming-regional-empire/#.XQqBMq9R3IU>
6. Frost, A. 2009. The CSTO, the SCO, and Russians Strategic goals in Central Asia. Available at: https://www.academia.edu/6103864/The_Collective_Security_Treaty_Organization_the_Shanghai_Cooperation_Organization_and_Russias_Strategic_Goals_in_Central_Asia_at_BULLET_Central_Asia_at_BULLET_China_at_BULLET_Competition_at_BULLET_CSTO_at_BULLET_Russia_at_BULLET_SCO.
7. Grieger, G. 2015. The Shanghai Cooperation Organisation. Available at: http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/564368/EPRS_BRI%282015%29564368_EN.pdf.
8. Joint Communiqué on the results of the seventeenth meeting of the Council of Heads of Government of the Member States of the Shanghai Cooperation Organization (2018). Available on file:///C:/Users/Bostjan/Downloads/Joint_Communique.pdf
9. Khan, H. 2018. Eurasian History in the Making. Available at: http://www.chinatoday.com.cn/ctenglish/2018/commentaries/201806/t20180610_800132256.html
10. Rowden, R. 2018. The rise and rise of the Shanghai Cooperation Organisation. Available at: <http://speri.dept.shef.ac.uk/wp-content/uploads/2018/11/SPERI-GPE-Brief-No.-11-The-rise-and-rise-of-the-Shanghai-Cooperation-Organisation.pdf>.
11. Sagar, V. 2017. China signals a shift in geostrategic goal. Available at: <https://www.orfonline.org/expert-speak/china-signals-shift-geostrategic-goal/>
12. South Front. 2019. Kazakhstan: Transit of power and threat of destabilization. Available at: <https://southfront.org/kazakhstan-transit-of-power-and-threat-of-destabilization/>.
13. Tsarik, Y. and Sivitsky, A. 2015. Russias new geostrategy: Implications and Challenges for Architecture of International Security. Available at: http://csfps.by/files/Russias_new_geostrategy_EN.pdf
14. Tugsbilguun, T. 2009. Does the Shanghai Cooperation Represent an Example of a Military Alliance? Available at: <https://www.mongoliajol.info/index.php/MJIA/article/view/32>.
15. Vashishth, N. 2017. Available at: <https://www.indiatoday.in/fyi/story/shanghai-cooperation-organisation-pakistan-kashmir-china-sco-981500-2017-06-07>.

BUSINESS VALUATION OF THE STATE-OWNED COMPANIES: THE CASE OF KOSOVO TELECOM

Florin Aliu

*Faculty of Management, Business and Economy (MBE),
University of Business and technology, Prishtina, Kosovo
florin.aliu@uni-ubt.net*

Artor Nuhiu

*Assistant Professor at Department of Financial Law,
Faculty of Law, University of Prishtina, Prishtina, Kosovo
artor.nuhiu@uni-pr.edu*

Emad Attia Mohammed Omran

*Department of Economics, Faculty of Management and Economics,
Tomas Bata University, Zlin, Czech Republic
omran@utb.cz*

Fisnik Aliu

*Student at Faculty of Mathematics & Natural Science,
University of Prishtina, Prishtina, Kosovo
fisnik.aliu@gmail.com*

ABSTRACT

Intrinsic value signifies an expectation for the future cash flows of the company. The value of the company can only be estimated since future outcomes rest on the decisions that are not made by humans, nature, government, etc. The work detects the estimated intrinsic value of the Kosovo Telecom from 2012 till 2017. The study uses the DCF model based on the net cash flow from operations to find out the intrinsic value of the company, not the market price. The Monte Carlo simulation technique was used with 1000, 5000 and 10000 trials to observe the estimated results. The results of the work show that the intrinsic value of the company was constantly declining from 2012 till 2017. The maximum value of the company occurred in 2012 in the range of 617 million euro, while the minimum one was 4.9 million euro, in 2016. Kosovo does not have a stock market that exposes the model to the various limitations during the valuation process of Kosovo Telecom.

Keywords: *intrinsic value, Kosovo Telecom, DCF model, estimated results*

1. INTRODUCTION

Valuating state-owned companies is considered as the most challenging process for financial managers. The present value of the company stands on the capacities of the company to generate cash flow in the future. However, valuation determines solely the intrinsic value of the firm, not the market price. Aliu and Nadirov (2016) consider that the equilibrium price is achieved from the intersection between demand and supply for the financial asset. There is no methodology in place for determining the value of the state-owned companies. The value of the state-owned companies is different from the minimum price agreed for liquidation and even from the pre-negotiated price, named as the reference value (Saurin, 1994). Traditionally, company valuation has been used within private companies for various purposes: mergers and acquisitions, policy management, investment decisions, etc. For decades, valuation has proven to be a powerful instrument that assists business management and decision-making processes (Fernandez, 2002).

The central issue in the valuation of state-owned companies stems from the difficulty to define the appropriate nature of an enterprise. Proper valuation requires a profound knowledge of the specific characteristics of the entity to be valued. Controversies and ambiguities concerning the definition of state-owned companies still exist. Despite the substantial efforts to clarify and articulate better understanding and standardization concerning the definitions of state-owned companies, still, misunderstandings are in place (Fernandes and Sicherl, 1981; OECD, 2003; MacCarthaigh, 2011). Besides, the plurality of terminologies combined with national differences creates further confusion and greater disparities in defining the nature of state-owned companies. The term public enterprise in a large number of developing countries indicates government enterprises, state enterprises, etc. In these countries, being a state-owned company stands for fulfilling certain public functions. The concept and size of the firm are less debated, but the way in which state-owned companies are organized, generate difficulties in the valuation process (Schmidt and Silva, 2017). The valuation of state-owned companies before privatization contain serious differences in contrast to privately held companies. The seller (government) and potential buyers are less informed on the operational challenges of the company which creates space for information asymmetry on both parties. Government need for external advisor originates from the lack of detailed information concerning the companies' problems, business environment and the potential buyers (Gonzalo et al. 2003). The value of a company under privatization is subject to considerable uncertainties, which constitutes necessary steps in determining the liquidation price. Furthermore, the price of state-owned companies is highly influenced by the methods chosen during the valuation process. The privatization plan associated with the valuation report indicates the need for reorganization and financial restructuring prior to liquidation. Aliu et al. (2016) confirm that small changes in the valuation inputs (such as beta coefficient) deliver diverse results on the company value. Valuation prospectus for initial public offerings (IPOs) is a crucial document for setting the offer price. During the IPO process, financial and legal due diligence is conducted to identify certain financial and legal risks that are not covered from the audit reports. Koller et al. (2015) consider that value creation is highly linked with the financial performance of the company. Companies that seriously focus on maximizing shareholder value tend to be healthier and contribute to the creation of a stronger economy. Thus, the focus on increasing company value is beneficial not only for the shareholders but also for overall stakeholders. Damodaran (2012), indicates that in detecting a proper company value, valuation inputs are crucial components to complete an accurate model. Besides, the author considers three valuation methods that correspond to private entities, such as discounted cash flow, multiples technique, and contingent rights. Moreover, Damodaran (2011) indicates three necessary steps for preparing a valuation report, such as: finding comparable assets at the market prices, balancing the price by a common variation and adjusting differences. The most commonly used valuation technique is the Discounted Cash Flow (DCF), with all its numerous alternatives. The main feature of this dynamic model is using the concept of the time value of money. DCF method claims that the final value of the company stands on the present value of its future cash flows. Moreover, the DCF model was seriously criticized by scholars and practitioners since it relies on future cash flows. The major drawback of the DCF technique is that it uses historical data to predict future performance. Moreover, assumptions set up within the valuation stand as the additional constraints within the model (Šperanda, 2012). Risk components play an important role in determining the firm value, where an increase in the risk level lowers the company's value and vice-versa. Based on the discounted cash flow formula defined by Modigliani and Miller (1958), it is possible to develop a model that demonstrates the value of the state-owned companies (Copeland et al. 2000). In this sense, the orientation value is the result of the projected cash flows, growth estimations, and risk exposure (discount rate). The present value of the projected cash flow corresponds to the sum of the cash flows discounted by the cost of

capital. According to Costa et al. (2010), the discounted cash flow method is presented under two essential mechanisms, such as timing and magnitude. Cash flows generated in periods closer to the valuation date have a greater impact on company value than cash flows generated in remote periods. Magnitude represents the proportion of cash flows on the geometric progression and its relationship with the risk level. In addition, the higher the risk level (discount rate), the lower the value of the company. There are numerous cases in which the use of the discounted cash flow model is relevant. Martins (2001) highlights cases in which DCF model is a useful tool for valuation, such as mergers and acquisition, dissolution of companies, liquidation of ventures, privatization and evaluation of shareholders' wealth. Santos (2008) addresses other possible purposes of applying the valuation method, such as: providing business synergy, reducing taxes, ensuring better economies of scale, improving competitive conditions and expanding the investor's market share. In the developed countries, the most frequently applied procedures in determining the value of state-owned companies are competitive bids and negotiated prices, followed by the expected profits and the net asset value (NAV). The net asset value method gained importance in developing countries since they have inefficient stock markets or no reference values (Gonzalo et al. 2003). Kosovo Telecom (KT) is a state-owned company that provides fixed and mobile telephony services. Moreover, Kosovo Telecom is government-owned where the state is represented by the Ministry of Economic Development. The Company is governed based on the Law on Publicly Owned Enterprises, Commercial Law and the Telecommunication Law. The Kosovo government has recognized the need to restructure the Kosovo Telecom before privatization. Moreover, the government has set up the objectives for improving financial performance, operational efficiency, technological innovation, and human resource capacities. The Ministry of Economic Development has requested assistance from the European Bank for Reconstruction and Development (EBRD) to prepare the privatization process. The EBRD has agreed to support the Government in its efforts and will fund an external consulting advisor to advise on designing a process for the privatization of Kosovo Telecom based on a broad range of international experience (EBRD, 2019). The work tends to identify the intrinsic value of Kosovo Telecom based on the cash flow indicators. The study was initiated standing on the huge attention that the Kosovo Telecom gained in the media. The results of the work indicate the intrinsic value of the company from 2012 till 2017 and its deviations from the book value of the company. Since Kosovo does not have a stock market, the value of the state and social owned companies has been always prone to controversial debates among scholars and practitioners. Moreover, the work uses the DCF model not only to detect the current intrinsic value of Kosovo Telecom but also to generate outlook on the historical performance.

2. METHODOLOGY

The work captures the estimated intrinsic value of the state-owned company (Kosovo Telecom) by using the DCF model. Data concerning the financial indicators of the Kosovo Telecom were collected from the audited financial statements. The period of the data collection stands from 2012 till 2017 on an annual basis. The work didn't use free cash flow to the firm (FCFF) since the company was operating with negative cash flow from operations (CFO), from 2015 till 2017. Net cash flow from operations has been used as an input within the DCF model instead of CFO. WACC has been used as a risk component to measure the discount rate of the firm. Capital Asset Pricing Model (CAPM) is used to indicate the cost of equity while inputs were obtained from the US economy. Kosovo does not have a stock market that would enable obtaining CAPM outcomes. Besides, to detect risk-free rate, short term Kosovo government bonds were used. The formula below indicates the Capital Asset Pricing Model:

$$Capm = rfr + \beta(rm - rfr) \quad (1)$$

Capm indicates the capital asset pricing model that measures the cost of equity of the company. *rfr* stands for the risk-free rate and is obtained from the interest rate imposed on the short-term government bonds. β shows the beta coefficient, which measures the sensitivity of the company returns with the market returns. The beta coefficient is obtained from the Damodaran Database that stands as an average metric from 83 European companies operating in the telecom industry. *rm* represents average market returns from 2012 till 2017, generated by the S&P 500. The following formula represents the weighted average cost of capital:

$$wacc = (cost\ of\ equity \times \% \ of\ equity) + (cost\ debt \times \% \ of\ debt) \times (1 - tax\ rate) \quad (2)$$

Cost of equity is determined from the capital asset pricing model (CAPM). The cost of debt stands on the average interest rate that Kosovo commercial banks impose on the domestic economy (CBK, 2017). Average interest rates were collected from the Kosovo Central Bank reports on an annual basis, from 2012 till 2017. The tax rate shows the tax level that companies in Kosovo are obliged to pay from their net profit. The following formula represents the estimated value of the firm based on the DCF model:

$$Value = \sum_{n=1}^t \frac{cf_n}{(1+i)^n} + \frac{tv_t}{(1+i)^n} \quad (3)$$

cf represents cash flow, which in our case is the net cash flow from operations; *i* stands for the discount rate based on the weighted average cost of capital; *n* indicates the period from 1 to *t* while *tv* displays the time interval. Percentage point function (PPF) is used to generate growth rate since it is the only variable that is simulated within the model. Standard deviation at 1% is imposed on growth rates to detect intrinsic value from 2012 till 2017. The growth rate was obtained from the Damodaran Database¹, at the rate of 6.48%. Python 3.5.3 and Jupyter Notebook are two programs that were used to generate the results.

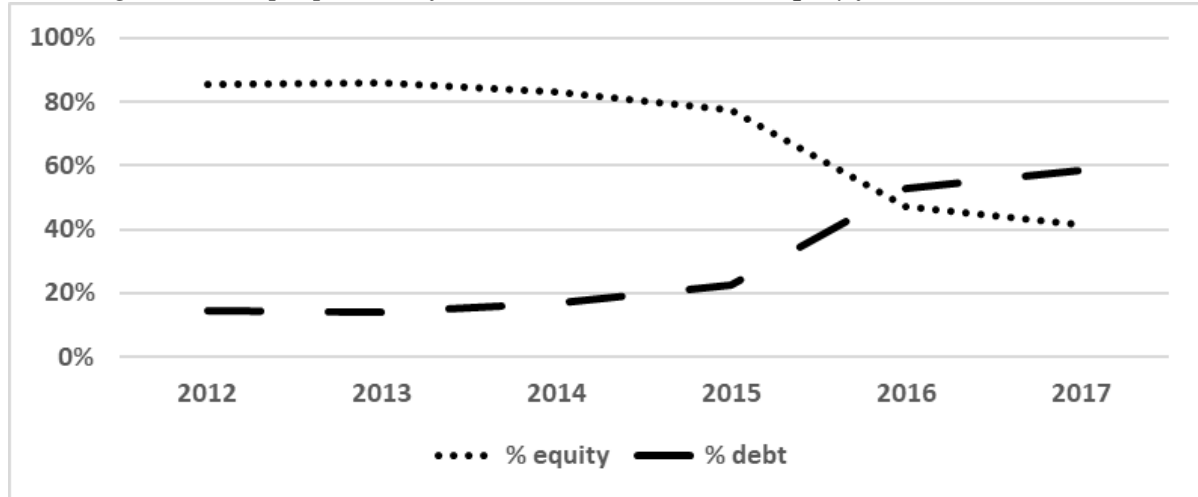
3. RESEARCH RESULTS

Results of the work capture the estimated intrinsic value of the Kosovo Telecom company based on the Monte Carlo simulations. Figure 1 shows the proportion of debt and equity in the total structure of the company. In 2012, 80% of the assets were financed from the equity that indicates government control over the company. By 2017 total equity within the capital structure remained only 40%, while debt contained the biggest part with 60%. Figure 4 in the appendix shows that the total assets of the company dropped from 170 million euro in 2012 to 90 million euro in 2017, a decline of 47%. Standing in Figure 4, net profit was decreased from 38 million euro in 2012 to 16 million euro in 2014, a decline of 137%. Moreover, the company experienced net losses from 2015 till 2017 where the biggest losses occurred in 2016 at the level of 50 million euro. Net losses in the three consecutive years were accompanied by an increase in the debt level that stands as a clear signal that the company is exposed to bankruptcy.

Figure following on the next page

¹ Damodaran Database (2019). Data tools estimators concerning the inputs used for valuation. Available at: <http://pages.stern.nyu.edu/~adamodar/>

Figure 1: The proportion of the total debt to the total equity for Kosovo Telecom



Source: Authors' calculations based on the KT annual financial statements

Table 1 shows estimated company intrinsic values based on minimum cumulative DCF, mean cumulative DCF and maximum cumulative DCF. Each year has been conducted independent simulations of the estimated values based on the inputs generated from financial statements and the Damodaran debate. The estimated intrinsic value of Kosovo Telecom was based on three different cumulative DCFs. DCF max with 1000 trails shows that the value of the company dropped from 2.4 billion euro in 2012 to 308 million euro in 2017, a decline of 700%. However, the DCF means of the company was 8 times lower from 2012 till 2017, a decline from 1.4 billion euro to 158 million euro. Minimum value estimates indicate that the intrinsic value of the company decreased from 617 million euro in 2012 to 37 million euro in 2017. Results concerning the intrinsic value for 2015 are missing since the company was generating negative Net Cash Flows from Operations in that year. However, the book value of the company has declined from 146 million euro in 2012 to 41 million euro in 2017 (Table 2 in the appendix).

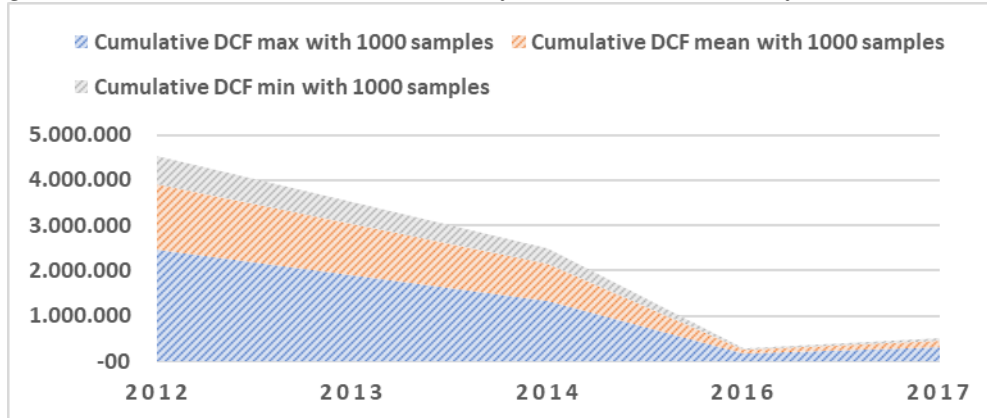
Table 1: Estimated intrinsic values of the Kosovo Telecom with 1000 trials on three different scenarios

In EUR thousand	2012	2013	2014	2016	2017
Cumulative DCF max with 1000 samples	2,462,158	1,908,879	1,344,134	181,341	308,162
Cumulative DCF mean with 1000 samples	1,450,890	1,129,864	805,132	85,444	158,361
Cumulative DCF min with 1000 samples	617,523	463,290	349,998	4,929	37,378
Total liabilities	24,894	23,550	29,150	61,729	58,303

Source: Authors' calculations based on the KT annual financial statements

Figure 2 shows the estimated intrinsic value of Kosovo Telecom from 2012 till 2017. It is clear from Figure 2 that the intrinsic value of the company was constantly falling on three scenarios. The explanations for the decline in the Kosovo Telecom value might stand on the increase in the total liabilities, competitive environment, unprofessional management, etc. Even though Kosovo Telecom is a government-controlled enterprise, it was operating in a rivalry environment with the other private operators. State-owned companies generally tend to be overcrowded with employees, which stands as a crucial obstacle of the SOEs. DCF outcomes were subtracted with the nominal value of the debt that detects an intrinsic value without obligations for debtholders. The real value of the debt equals the nominal value of the debt since the cost of debt is adjusted with the inflation level.

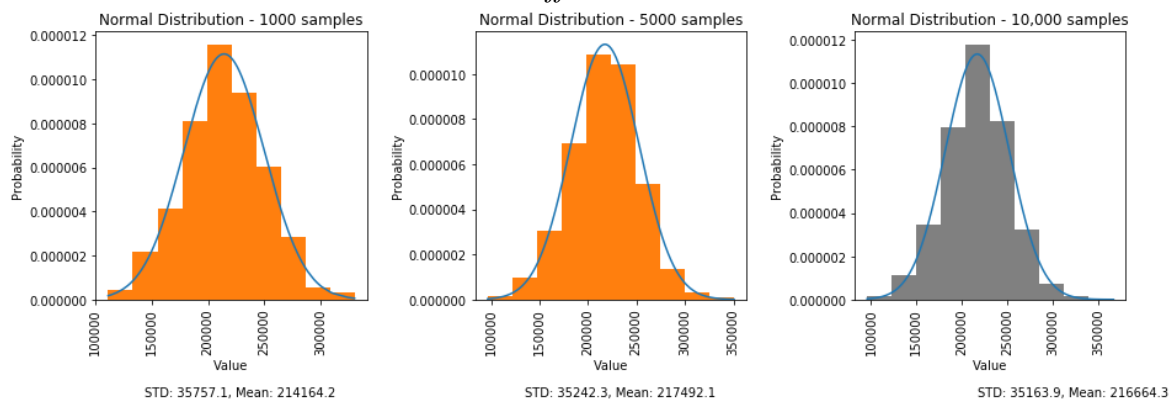
Figure 2: The estimated intrinsic value of the Kosovo Telecom from 2012 till 2017



Source: Authors' calculations based on the KT annual financial statements

Figure 3 shows the normal distributions of the cumulative DCFs with 1000, 5000 and 10000 trials. The distributions have been conducted based on the audited financial statements of the Kosovo Telecom. Simulations have been realized with a 1% standard deviation which considers that the majority of the distributions stand close to the mean values. Simulations with 10000 trials stabilized the mean estimated value on the three different trails. Moreover, simulations with 10000 trials derive a better shape of the normal distributions within the DCF model. The geometric progression of the cash flows was conducted in 20 years in the future. Results indicate that the range between the 19 and 21-year period does not provide additional values in the geometric progression. The program stops adding new values when the two consecutive DCFs give less than 6% extra values on the DCF.

Figure 3: Normal distributions of the cumulative discounted cash flow in 2017 with three different trials



Source: Authors' calculations based on the KT annual financial statements

4. CONCLUSION

The valuation of companies is one of the most complex issues in corporate finance. Moreover, identifying the intrinsic value of the state-owned companies is exposed to additional methodological and practical difficulties. Historically, state-owned companies were mainly controlled by government officials and prone to fraud and mismanagement. Valuing state-owned companies on their existing performance might bring misleading results. However, detecting their potentials in terms of managerial capabilities and financial outcomes stands as a critical issue of the SOE valuation. Current research indicates the estimated intrinsic value of the Kosovo Telecom standing in the past financial performance. The results of the work identify the intrinsic value of Kosovo Telecom under three different scenarios.

Discounted cash flow outcomes indicate that the intrinsic value of the company was continuously declining, from 2012 till 2017. Maximum cumulative DCF with 1000 simulations show that the company value decreased from 2.4 billion euro in 2012 to 308 million euro in 2017 (700% decline). Mean cumulative DCF claims that the decrease in the value during the period 2012 to 2017 was approximately 1.2 billion euro. However, the pessimistic scenario reflected via minimum cumulative DCF represents a decline in the range of 580 million euro. The book value of the Kosovo Telecom dropped from 146 million euro in 2012 to 41 million euro in 2017. The intrinsic value of the Kosovo Telecom shows estimated results, other scholars might capture other outcomes. The model is constrained under certain assumptions since Kosovo does not have a stock market. Recognizing these limitations, the authors consider that serious risk indicators are not well identified in the model. The scenario that corresponds with the financial reality of the Kosovo Telecom matches with minimum cumulative DCF. Results with minimum cumulative DCF show that the estimated intrinsic value of the Kosovo Telecom in 2017 stands in the range of 37 million euro. The deviation in absolute numbers between the book value of the company in 2017 and its estimated intrinsic value was in the range of 4 million euro. The motives for the enormous drop in the Kosovo Telecom value might be studied by the other scholars. The study recognizes its limitations, mainly those linked with valuation inputs, such as beta coefficient, growth rate, market returns. The work used the beta coefficient and growth rate from the Damodaran database that was constructed from the selected companies operating in the European Union. Moreover, market returns are generated from S&P 500 which reflects returns created from the 500 US-listed companies.

ACKNOWLEDGEMENT: *The authors are thankful to the Internal Grant Agency of FaME TBU in Zlín No. IGA/FaME/2019/002 (The role of institutional environment in fostering entrepreneurship) for providing financial support to carry out this research.*

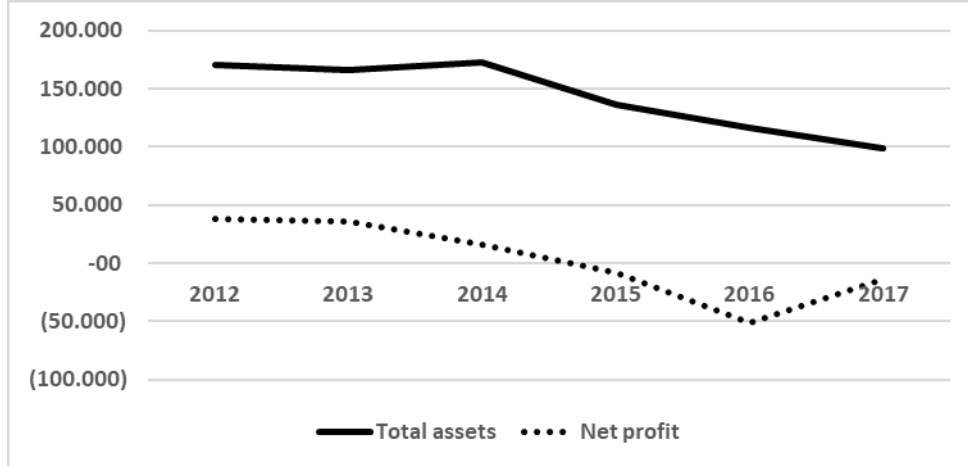
LITERATURE:

1. Aliu, F., & Nadirov, O. (2016). Kosovo banking paradox. *Academic Journal of Economic Studies*, 2 (4), pp. 11–22.
2. Aliu, F., Knápková, A., & Mohammed, H. K. (2016). Future prospects of company valuation. In *Proceedings of the 3rd International Conference on Finance and Economics 2016*. Tomas Bata Univ Zlin.
3. CBK- Central Bank of the Republic of Kosovo (2017). *Annual Report*, Prishtina: CBK. Available at: https://bqk-kos.org/repository/docs/2018/CBK_AR_2017.pdf [Accessed 30 July 2019].
4. Copeland, T., Koller, T., & Murrin, J. (2000). *Valuation: Measuring and Managing the Value of Companies* (3rd Edition). New York: Wiley, p. 154.
5. Costa, L., Costa, L., & Alvim, M. (2010). *Valuation: Manual for Business Evaluation and Economic Restructuring* (1st Edition). São Paulo: Atlas, 2010.
6. Damodaran, A. (2011). *The Little Book of Valuation: How to Value a Company, Pick a Stock and Profit*. New Jersey: John Wiley & Sons, p. 64.
7. Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of any Asset* (3rd Edition), New York: Wiley, p. 115.
8. EBRD- European Bank for Reconstruction and Development (2019). *Privatisation of Kosovo Telecom - Pre-Privatisation Commercialisation*. Available at: <https://www.ebrd.com/work-with-us/projects/tcpsd/privatisation-of-Kosovo-telecom-preprivatisation-commercialisation.html> [Accessed 25 July 2019].
9. Fernandes, P., & Sicherl, P. (1981). *Seeking the personality of public enterprise: an inquiry into the concept, definition, and classification of public enterprises*. Ljubljana: International Center for Public Enterprises in Developing Countries.

10. Fernandez, P. (2002). *Valuation Methods and Shareholder Value Creation* (1st Edition), Academic Press, pp. 48–56.
11. Gonzalo, J. A., Pina, V., & Torres, L. (2003). Objectives, Techniques and Valuation of State-Owned Companies in Privatization Processes, *Public Management Review*, 5 (2), pp. 177–196. <http://dx.doi.org/10.1080/1461667032000066408>.
12. Koller, T., Goedhart, M., & Wessels, D. (2015). *Valuation: Measuring And Managing the Value of Companies* (6th edition). New Jersey: John Wiley & Sons, pp. 17–34.
13. MacCarthaigh, M. (2011). Managing state-owned enterprises in an age of crisis: An analysis of Irish experience, *Policy Studies* 32, pp. 215–230.
14. Martins, E. (2001). Business Valuation: From Accounting To Economic Measurement. *Caderno de Estudos*, n.24, pp. 28–37.
15. Modigliani, F., & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment, *The American economic review*, 48 (3), pp. 261–297. Available at: <http://www.jstor.org/stable/1809766>.
16. OECD- Organization for Economic Co-operation and Development (2003). *Privatizing State-Owned Enterprises: An Overview of Policies and Practices in OECD Countries*, Paris: OECD Publishing.
17. Santos, J. (2008). *Business Valuation: Calculating and Interpreting Business Value - A Practical Guide* (2nd Edition), São Paulo: Saraiva.
18. Saurin, V. (1994). *Privatization of State Companies: Basic Aspects of the Evaluation Process* (PhD thesis), EAESP - School of Business Administration of Sao Paulo, pp. 9–10.
19. Schmidt, A., & Silva, C. (2017). Valuation Of State-Controlled Companies And The Evincement Of Public Expenses' Quality: The Ceb Distribuição S.A.'S Case, *Revista de Gestão e Contabilidade da UFPI*, Vol. 4 (2), pp. 150–168.
20. Šperanda, I. (2012). Firm Valuation - New Methodological Approach, *Economic Research-Ekonomska Istraživanja*, 25 (3), pp. 803–824. <http://dx.doi.org/10.1080/1331677X.2012.11517534>.

APPENDIX

Figure 4: Total assets and net profit of the Kosovo Telecom, from 2012 till 2017



Source: Authors' calculations based on the KT annual financial statements

Table 2: Financial items of the Kosovo Telecom (2012-2017)

in EUR thousand	2012	2013	2014	2015	2016	2017
Interest expenses	(667)	(150)	(213)	(374)	(1,647)	(251)
Property, plant and equipments	187,565	192,438	212,042	205,182	211,387	215,108
Depreciation	(107,451)	(120,621)	(125,105)	(128,875)	(139,584)	(146,872)
Amortization	(30,140)	(34,118)	(34,417)	(31,660)	(41,290)	(48,398)
Total equity	146,101	142,210	143,766	105,862	54,931	41,027
Total liabilities	24,894	23,550	29,150	30,556	61,729	58,303
Cash flow from operations	73,223	58,207	44,213	(2,788)	6,105	9,955
Net cash flow from operations	67,761	52,915	38,406	(6,417)	6,760	9,946
Net profit	38,338	36,109	16,556	(7,904)	(50,931)	(13,904)

Source: Kosovo Telecom annual financial statements

EXPERIENCE ECONOMY AND TOURISM

Aljosa Vitasovic

Faculty of economics and tourism "Dr. Mijo Mirković"

Pula, Croatia

avitasov@unipu.hr

Mauro Dujmovic

Faculty of economics and tourism "Dr. Mijo Mirković"

Pula, Croatia

mdujmov@unipu.hr

ABSTRACT

The development of tourist products based on experience as the key exchange value requires an interdisciplinary approach, which, with applied marketing activities and competitive positioning by means of identity affirmation, leads to the positioning of tourist offer from the aspect of the experience economy. Experience economy facilitates the achievement of competitive advantage on the basis of differentiation by quality. The main goal of this paper is to represent how that concept reflects advantage in (tourist) experiences promotion, based on unique attributes which do not utilise the competitive destination of the area. It is due to the nature of the resource basis itself that the experience dimension of the entire tourist offer should represent a dominant direction in consolidation of the tourist offer elements. Marketing actions must omit the stress from the traditional elements of receptive tourism and focus on the exploitation and promotion of the dominant resources, whose value is exceptionally high and/or on the unrepeatable quality of the local destination identity. The authors are of the opinion that the destination's attractive elements have to be completed with additional activities while the tourist destination's quality is measured solely on the basis of experience, and experience providers in a tourist destination could be tour operators.

Keywords: *Tourist destination, Tourism trends, Experience economy, Tourist, competitiveness*

1. INTRODUCTION

A modern tourist product, which is adjusted to the needs of new tourists, no longer includes a tourist partnership role, but individualisation and personalisation of the experience itself. Should such a base be accepted, it is to be concluded that traditional positioning of destination tourist offers on both macro and micro levels is no longer sufficient, i.e. positioning based on comparative advantages. By traditional positioning, it is not possible to differentiate the tourist offer from the competitors' tourist offer, which ultimately implies a request for competitive tourist offer positioning, enriched by new requirements and needs. Such an approach negates the conventional attitude that the existence and availability of comparative advantages is, in itself, sufficient in order to generate tourist demand and creation of a competitive experience economy. Global tourist trends impose new perceptions of tourism and the emergence of "new" tourists. People who get involved in tourist trends are today becoming increasingly experienced. They are expressing an increased number of needs, not only within the destination, but also during their journey to the destination. Attractive destination elements must be complemented by additional activities and the destination excellence measured by expectations and experiences, i.e. realised experience. It is this very diversification of needs and motives for which people choose visits to, and stays in, a particular tourist destination which leads to a qualitative shift from the standard tourist offer. The accent, therefore, is on tourist product quality, by which a qualitative differential factor in competitive tourist destination positioning is achieved, according to the regional and national level.

If tourism is interpreted as a social phenomenon, it is necessary to consider it not only at economic sciences level, but that consideration needs to be extended also to history, political sciences, sociology, geography and cultural anthropology (Cohen, 1995). Such a wider perception implies a lack of a one-sided perception of tourism where, as an observation base, the category of growth and not of development is taken. From that aspect, the space which represents a tourist base should not, at any time, have an exclusively tourist purpose, although it is the bearer of the tourist function. Therefore, no method of evaluation which is used to assess spaces with a dominant tourist function is applicable, but rather the method of equilibrium between protection and tourist demand, which later also facilitates tourist offer market differentiation and positioning. Taking into account the main, dominant, motive for travel as a need to acquire an unrepeatable, unique experience in parallel with increase in travel, we come across an expansion of an increased number of tourist products based on the experience economy. Following socio-economic trends, i.e. interpreting recorded changes in the form of a demographic societal picture, a better education and a higher standard of living, a change in the structure of demand for products and services can also be noticed. A transition from a service economy to an experience economy occurs and increasingly the purchase of objects and services is exchanged for the purchase of experiences. Such purchases represent specific exchange of values for money, which is characteristic for traditional understanding of the experience economy. This paper contributes a review of the background literature and deals with an innovated approach to the positioning of tourist destinations. The research presented in this paper focuses on the context of the development of tourist products established on experience as the key exchange value and requires an interdisciplinary approach which, together with the applied marketing activities and competitive positioning through identity affirmation, leads to the tourist offer positioning from the point of view of the experience economy. Setting out tourist offer concepts on the principles of experience economy represents also a regulatory phenomenon, which not only protects the resource base but also, by means of the decrease in negative external factors, affects the quality of life of the domestic population. At the global level, the concept of experience economy has still been theoretically insufficiently researched and implemented.

2. LITERATURE REVIEW

The development of tourist products based on experience as the key exchange value requires an interdisciplinary approach. By means of further analysis, distinction imposes between perception of experience as a separate product and the aggregate set of experience economy. The absence of experience economy factors in the creation of a modern tourist product achieves extremely negative results. Historically speaking, the category of national economy competitiveness has suppressed the once dominant category of comparative advantage. The same situation can be noticed in observation of tourism, where added value progressively increases when competitiveness is based on experience economy (Vitasović, 2012). De-regularised tourist offer growth irreversibly decreases the exchange value of the resource base and, accordingly, also the income from tourism (Vitasović, 2012). The realisation of an experience and its qualification depend on motivation, perception, value, significance, satisfaction and life style. Experience represents a psychological category, thus being the subject of psychological studies. Comprehension of experience is linked to the explanation of perception. It is possible to link experience as a psychological process to the process of perception of stimuli. Perception is, therefore, an active process of organising, integrating and interpreting of sensorial information, which facilitates familiarisation with and recognition of the meanings of objects, phenomena and occurrences in the environment. Persons do not have clear senses; they have precepts – as senses are only elements of which a complete experience is made up (lat. *percipere* = adopt).

Perception is not only a sum of elements, but it is also the structure of those elements, active processing of all received and already existing information, their interpretation based on previous knowledge, memory, expectations, attitudes, motives, emotions and personal characteristics (Petz, 2010). A tourist product within the tourist system represents a complex concept, which includes services, people, organisations and ideas with the aim to realise travel, stays and tourist activity away from of their familiar surroundings (Smith, 1994). Tourist product consumption affects experience realisation. Experience, therefore, depends on the type of tourist product. Tourism and expenditure during the course of tourist activity perceives tourism as a form of expenditure. Tourism can, therefore, be observed as a specific form of expenditure in which a change in the structure of expenditure occurs (Laws, 1995). During the course of tourist activity, perception of authenticity, i.e. the authenticity of content (of purchased products and services) affects expenditure. Tourists, therefore, expect authenticity in the destination (MacCannell, 1992) as opposed to pseudo-events (Boorstin, 1964). The search for authenticity in a tourist destination can also have negative impacts and bring pressure on sustainability and local community life. Tourist expenditure pertinent to authenticity is, therefore, observed in relation to modern and post-modern perspectives. In modern perspective, tourists are always in search of authenticity which is perceived through authenticity of the presented content, while tourists in the phase of post-modern perspective are directed to activities, entertainment and enjoyment and do not care about the content authenticity (MacCannell, 1976, Urry, 1990, Cohen, 1995). Consequently, it can be presumed that tourists consume tourist products in relation to previous knowledge, experiences and expectations which, later, in a tourist destination, leads to expenditure driven by emotions and expenditure in the heat of the moment, looking for experiences and entertainment (MacCannell, 1976, Urry, 1990, Cohen, 1995). Tourists expect a temporary escape from their everyday lives through something unrepeatable, spectacular and unique. It can be concluded that activities for the channelling of tourist expenditure structure within a tourist destination should be directed towards tourist expectations and realisation of their desired experiences. Experience economy represents creation of a new value (economic and social), where experience is an integral part and starting point of a product or service and not only their expansion or added benefit. Systematic impacts of the elements of offer, therefore, must enable creation of memory, which then becomes experience, i.e. in fact, becomes a product or a service. Such perceptions emanate from research on the behaviour of consumers themselves or service and product users. Initial papers define purchase as being for the purposes of a meaningful and realistic observation and thinking process (Holbrook, O'Shaughnessy, Bell, 1990). With the emergence of the criticism that cognitive models insufficiently define and explain behaviour (Hoch, 1991; Holbrook and Hirschman, 1982), however, a change in the study starting point occurs. The emphasis is put on the experience and expenditure. Even Levy (1959) states that people do not purchase a specific product because of what it is intended for, but because of what they think it is, i.e., what it represents for them. Thus Holbrook and Hirschman, in 1982, define products as having two fundamental functions and that their indivisible wholeness is needed. They define usable and hedonistic product functions. Usable functions represent what a product or a service is literally intended for and hedonistic values are those which are described by users as entertaining, fantastic and pleasant for perception. The hedonistic function, therefore, illustrates subjectivity and individualisation of both products and services. Dhar and Wertenbroch in 2000 prove that, by the usable function in the goods consumption itself, people retain a neutral position in experience consumption, while hedonistic aspects represent a method for improvement in the experiential component of the expenditure itself. Despite the quoted efforts, academic literature determines a lack of a systematic approach in observation of a realised experience (Gentle et al., 2007). By consumption of a tourist service as opposed to the experience, expectations and realised experience, the importance of the intensity of individual

perception of the said experience and functions of use are noticed. In conclusion, the experience economy therefore is not a generic creation of the experience itself, but it is based on the individualisation of the personal experience by a person in his/her social surroundings. All experiences are individual; some occur more or less within a social construct or are cultural. A common link for all categories is that they are markedly prone to emotional influence and that they affect the realisation of, let us say, a new person, discovery of innovations and research of the unexplored. Kelemen (1974) states that, apart from the emotional category, excitement creates a link and a desire for progress. The main product in a destination, therefore, is experience. The perception of a destination is a combination of factors, comprising a "collection of experiences gained by the traveller" (Gunn, 1997, p. 32). Increase in tourist travel, fast and expansive growth of the tourist industry, globalisation conditions and innovativeness confront the tourist industry with product differentiation. New tourist demand requirements condition the level of profits from tourism and even question market cost-effectiveness. In conditions where competitiveness is extremely important, even crucial, a challenge is set for comprehension and a more detailed definition of the tourist experience, i.e. experience (Perdue, 2002). For a more detailed comprehension of the concept of the experience economy, tourism is clearly the best example of application of the concept. The first applications were implemented at the beginning of the 70's of the 20th century (MacCannell, 1976, Dann, 1977, and Cohen, 1979). It is, therefore, deemed that tourist experience represents a unique, indivisible entity, pronouncedly filled with the emotional factor, containing almost immeasurable personal value. Tourism facilitates realisation of an alternative experience of time i.e. time spent far away from everyday life, usual routines and familiar, usual surroundings (Wang, 2000:216). Tourists wish for and expect a unique, authentic experience (MacCanell, 1976). Tourist experiences cannot be purchased; they can merely be channelled or adjusted. Nobody apart from the tourist himself/herself has direct control over the power of perception and motives and, ultimately, their own value scale of the experience which they had. Tourists, therefore, independently combine elements such as time and skills in pre-expenditure set for experience creation (Rustichini and Siconolfi, 2004). When a tourist joins a tourist activity, nobody knows in advance either the result of the realised expectation, or the intensity of the experience. The complexity of the concept of experience economy and its elements requires more detailed determination. Innovation can be defined as a complex process in which organisations transform an idea into a new or improved product, service or a process of advancement, competition or successful differentiation in the market (Baregheh et al., 2009). Joseph Schumpeter (1961) focuses on the role of innovations in economic and social development, explaining innovation as a process of development in which an individual approach is contained. Innovation in tourism is generally characterised by distancing from the usual practice of tourist sector business, with the emphasis on quality (Hjalager, 2010).

3. TOURIST DESTINATION

Destination, as a part of the tourist system, affects the experience creation. The impact of destination on the realisation of the experience is observed through the perception of tourist supply competitiveness and the phase of stay in the destination. The tourist system is, therefore, simply observed as an interaction between tourists and the tourist destination. Such a perception is based on the production and expenditure of tourist products and services (Gunn, 1994). Tourists represent an element of tourist demand and tourist destinations, an element of tourist supply. Tourists are connected to the destination by means of traffic accessibility, information accessibility and by marketing mix elements. The marketing mix tools are: product, price, promotion, place, people, physical evidence and process (Križman-Pavlović, 2008). Furthermore, tourists are exposed to the influence of destination promotional activities, price-forming strategies and the development of tourist product in the destination.

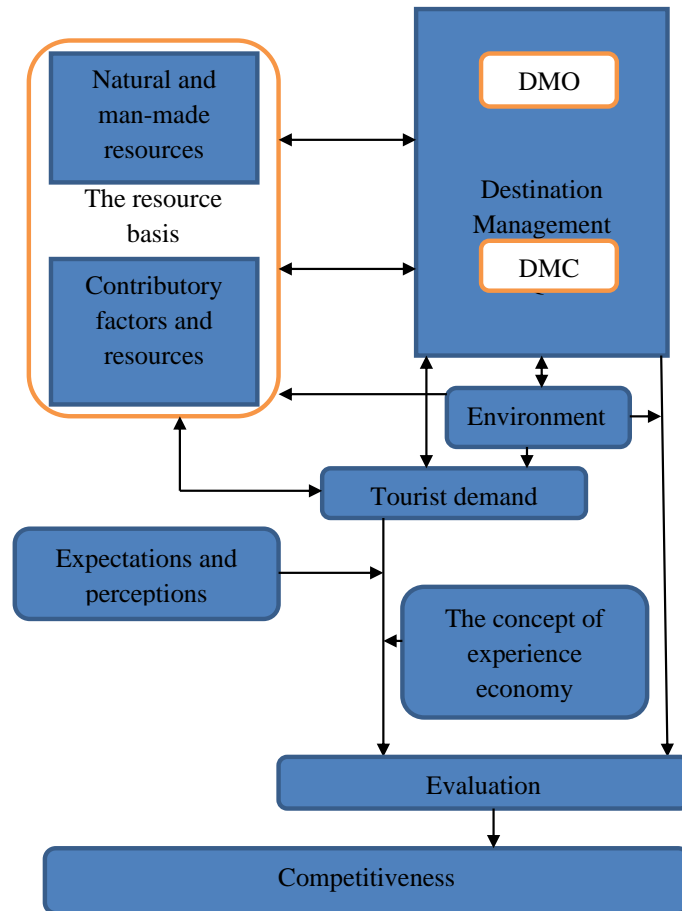
The interaction between tourists and the tourist destination becomes reciprocal and the interaction intensity and content are determined by the willingness of both sides (Formica and Uysal, 2006). In order for destination marketing and management strategies to be fully successful, creative opportunities should be sought to encourage the co-creation of positive, unique, and quality tourist experiences that can attract visitors efficiently (Binkhorst & Dekker, 2009; Jennings & Nickerson, 2006; Mossberg, 2007) and contribute to the competitiveness and sustainability of destinations (Ritchie & Crouch, 2000). The sustainable approach to tourism aims to optimise the use of the local resources and harmonise the needs of local stakeholders and the community, while simultaneously focusing on the high satisfaction of tourists by ensuring a meaningful, authentic experience (Kastenholz, Carneiro, & Marques, 2012). Considering that tourists seek multiple experiences, destinations should articulate their endeavours in facilitating diversified, quality tourist experiences (Lane, 2009; Agapito et al., 2014).

4. TOURIST DESTINATION AND A MODEL OF DESTINATION COMPETITIVENESS

Tourist expenditure products represent products which are predominantly used by tourists during their stay in the destination (accommodation, transport, food and tourist activity services). General consumption products are those products which are mostly used by the local population, but which can also be used by tourists (hospital, post office, hairdressing services, and lotteries). A tourist destination attractive base represents the totality of attractions and, as a rule, is the main motive for travel, being an equal factor in realisation of experience in a destination (Uysal, 1991), by which tourist destination competitiveness is affected. A tourist destination, i.e. a competitive tourist destination, represents the destination which provides a higher level of realised experience qualification (Dwyer and Kim, 2003). In order to perform the positioning of tourist supply, i.e. a tourist destination based on the principle of experience economy, it is supposed that the tourism system takes into consideration competitiveness factors. By positioning, competitors' activities are directly differentiated and a free market niche for a specific tourist product, i.e. destination, is identified (Krupka and Zečević, 2003: 68). Therefore In developing a model of destination competitiveness (Figure 1.), therefore, it can be noted that the area of tourism is under the constant influence of macro-environment of the tourist destination (financial conditions in international markets, changes in the demographic picture, lifestyle change, concern for the environment and the emergence of new requirements of participants of tourist flows). Thus the category of competitiveness is a category that is observed from the viewpoint of tourists, compared to their desires, motivations, needs and preferences. Macro- and micro-environment destination affect the perception of destination competitiveness, which implies a dynamic character of competitiveness and its perception is constantly being changed and updated. Figure 1 shows the model of destination competitiveness. In structuring an optimal model of destination competitiveness, it was noted that different destination tourist products depended on the values of the individual elements of the model. Resources and attractions are certainly important for the competitiveness of tourist destinations, but their existence without the proper infrastructure is insufficient to build a strong competitive position in the market.

Figure following on the next page

Figure 1: A model of destination competitiveness



Source: Prepared by the authors

Tourist demand is a definition of destination competitiveness. The determinant model is a representation of the interaction between the elements of destination competitiveness. This model therefore, represents an integrated approach and, as such, suggests that the goal of tourism policy by destination competitiveness, as the basic unit, achieves economic development at the national level. With contributory factors of synergistic action, natural and man-made resources make an attractive destination for potential tourists and provide a basis for tourism development. The combination of natural and man-made resources, namely newly created means of tourism infrastructure, organisation of special events, tourist activities in the area, entertainment and shopping opportunities are all contributory factors and resources are presented as the necessary required infrastructure (traffic), quality of service, availability and hospitality destinations (home communities and employees). The mentality of host destinations was also observed. The above resource base influences the competitiveness of tourist destinations. It is emphasised that the competitiveness of tourist destinations depends on the ability of destinations to evaluate their resource base along with the achievement of added value. Tourism destination management by the DMO (Destination Management Organisation) requires the connection of all factors in a functional unit. The activity of public tourism policy is reflected in the realisation of the conditions for the improvement of tourist facilities as well as facilities that implement the DMCs (Destination Management Companies) policies. Furthermore, the optimal management model has been identified as IQM (Integrated Quality Management). Tourist demand implies a level of demand for destinations. The same is associated with preferences and expectations. Destination marketing activities, implemented by the DMOs, have a significant influence on the formation of the perceptions of tourist

destinations. The destination image influences the tourists' expectations about the holiday destination, also influencing the choice of holiday destination and the destination with the strongest image has the higher probability of being chosen (Matos, Mendes, Valle, 2012). The model is defined in the way that the differentiation in quality conditions the elements of economy experiences. The environment in the model represents the environment of national economies, such as for example the position of destinations, safety and price level. The role of tour operators is the articulation of demand requirements and the formulation of a competitive tourism product (e.g. agrotourism, heritage tourism, local cuisine, ecotourism, indigenous tourism, sightseeing, etc). The model proposes the concept of competitiveness of tourist offer on the basis of experience. All elements of the model show the interconnectedness and interdependence and competitiveness have been identified as categories of perception by tourists. Planning, development and public tourism policy are not presented by separate elements, but are integrated into the system of tourism destination management. Innovation in tourist service, and also in the destination tourist product itself, can advance its competitiveness level. Goods and services are no longer enough. In order to be competitive on the growing tourism market destinations must differentiate their products by transforming them into 'experiences' for consumers (Amin and Thrift, 2002; Pine and Gilmore, 1999). Competitiveness imposes the need for sale of integral services which, on the other hand, aggregate the entire destination offer quality due to the fear of a fall in prices. In the event that exchange value conditionally becomes an experience with repositioning of the destination, maximisation of foreign currency flow will also be achieved and the level of discretionary expenditure in the destination will be increased. A tourist product should improve the guest's life (Pollock and Benjamin 2001); new technologies should simplify the communication between the destination and the tourist, alleviating fulfilment of tourists' expectations by means of feedback. By applying new interactive technologies, tour operators can considerably contribute to the fulfilment of tourists' expectations. Although the number of individual tourist overnights in relation to the number of organised tourist overnights is on the increase, the advantage of tour operators lies in their market specialisation, as well as in their strong advisory and informative role. They achieve market differentiation by powerful vertical integration, i.e. purchase of principals in the offer chain in order to strengthen the brand and raise the quality of service provision. All affirmed and serious tour operators, therefore, make every effort to include innovations in their business in all phases of integrational relationships, in order to make consumers interested in their offers and contribute to the tourist experience. As the industrialised world is in transition from the service to the experience economy (Dwyer et al., 2008), tour operators need to undertake some changes in their core businesses. Specifically, they should focus on delivering unique experiences that personally engage consumers. Consumer values in major origin countries worldwide are changing towards preferences for more product and experience customisation, authenticity, learning, self- improvement and transformation, implying a role for technological innovations to facilitate interpretation of cultural and natural heritage (Molz, 2013). As travellers become more experienced, they are no longer satisfied by being processed through an impersonal, non-interactive system of 'mass tourism'. Moreover, a larger number of tourists would like to see themselves as 'individuals', even though they are engaging in mass tourism such as group package tours. Therefore, tour operators are becoming more specialised and holidays increasingly include some kind of educational or cultural experience. Tourists are increasingly interested in discovering, experiencing, participating in, learning about and more intimately being included in the everyday life of the destinations they visit (Dwyer et al., 2008). Destination management and tour operators, therefore, should create unique experiences in their destinations that differentiate themselves from other destinations. Tour operators should become 'experience providers' developing personal encounters and authentic experiences in order to create long lasting

memories and customer loyalty (Dwyer, Seetaram, 2013). Therefore, the focus should be on 'experiences' rather than 'products'. The Tourism Development Strategy of the Republic of Croatia is an umbrella developmental document of Croatian tourism, which provides guidelines and offer structure. In other words, the Croatian Tourism Development Strategy until 2020 represents an integral conceptual framework which facilitates:

- Coordinated involvement of tourist policy bearers and a systematic coordination of tourist policy measures,
- Full understanding of key directions of Croatian tourism development as a prerequisite for attracting potential interests of domestic and foreign investors and
- Target orientation of the developmental and investment process and efficient drawing of EU funds.

This facilitates a systematic approach and a balanced involvement of the tourist offer stakeholders for the purpose of refinement of the aggregate tourist offer. Efficient implementation of the Croatian Tourism Development Strategy until 2020 conclusions includes organisational adjustments at the level of the Ministry of Tourism, functioning of the tourist organisation system, but also mutual cooperation among the ministries related to tourist activity to date. In other words, the tourism system needs to be revised and rationalised in order to increase its total effectiveness, especially at regional and local (destination) levels, where tourist activity itself takes place. Through the aforementioned process of system rationalisation and territorial expansion, tourist organisations would be transformed into destination management organisations (DMOs). This includes staffing and additional training for the jobs of destination development management, with the aim of strengthening of destination competitiveness and to coordinate and harmonise often opposed interests of the stakeholders in the destination. For the purposes of overseeing the impacts of the Croatian Tourism Development Strategy until 2020 (and tourism, generally speaking) it is necessary to define the indicators which are monitored and referential starting points for development and that for each of the three indicator groups, namely: economy, environment and society.

5. RESULTS

The competitive positioning of a tourist destination must take into account the concept of the experience economy, communicational attributes and economically rational tourist offer valorisation chain. Taking into consideration the postulates of the experience economy, which facilitates the achievement of competitive advantage on the basis of differentiation by quality, marketing actions must omit the stress from the traditional elements of receptive tourism and focus on the exploitation and promotion of the dominant resources, whose value is exceptionally high and/or on the unrepeatable quality of the local destination identity. In order to provide sustainable tourism development at a destination, in the short term, the quality of tourist sites and landscapes and of the experiences sought by tourists must be maintained and, in the long term, the negative impacts that tourism can have on local communities and the environment must be minimised and positive contributions to the local population and the environment should be maximised. From the above quoted, it can be concluded that the positioning of the tourist offer on the principles of competitiveness and experience economy implied a higher level of achievement of the tourist offer added value, with the conception of a rational valorisation chain of the tourist offer elements where cultural heritage represents the basis.

6. CONCLUSION

The development of tourist products based on experience as the key exchange value requires an interdisciplinary approach, which, with applied marketing activities and competitive

positioning by means of identity affirmation, leads to the positioning of tourist offer from the aspect of the experience economy. The tourist destination positioning should be carried out with consideration for the specific destination recognition and the experience of it, affirming the principle of differentiation by quality. The resource base is evaluated by the destination geographical location, cultural and heritage context which competitive tourist offers cannot evaluate. From the above stated, it can be concluded that tourist offer positioning, based on the principles of competitiveness and the principles of experience economy, implied a higher level of realisation of tourist product added value. The base for creation of experience economy is the experience as a complex category. The experience which a person, i.e. tourist, had in a tourist environment is individual and subjective for each of them. For future research of issues it is suggested that they are focused on the research of attitudes, the process of choosing a destination, the process of creating experiences within the destination and ultimately the formation of a competitive tourism product. Such an approach would allow consideration of the overall process in creating added value and predicting future trends in tourism.

LITERATURE:

1. Amin, A., Thrift, N. (2002), *Cities: Reimagining the urban*, Cambridge: The Polity Press (2nd reprint).
2. Binkhorst, E., Dekker, T. (2009), "Agenda for co-creation tourism experience", *Journal of Hospitality Marketing & Management*, 18(2), 311-327.
3. Cohen, E. (1995), *Contemporary tourism – trends and challenges: sustainable authenticity or contrived post-modernity?* in Butler, R., Pearce, D., *Change in Tourism, People, Places, Processes*, London, New York: Routledge.
4. Čavlek, N. (2006), *Travel and tourism intermediaries* In International handbook on *The economics of tourism* edited by Dwyer, L. and Forsyth, P. Edward Elgar, Cheltenham, UK.
5. Dann, G. (1977), "Anomie, eco-enhancement and tourism", *Annals of Tourism Research*, 4(4): 184-194.
6. Dwyer, L. i Chulwon, K., (2000), *Destination Competitiveness: A Model and Determinants*, University of Western Sydney, Working paper.
7. Dwyer, L., & Edwards, D. (2009), Tourism product and service innovation to avoid 'strategic drift'. *International Journal of Tourism Research*, 11(4): 321-335.
8. Dwyer, L., Edwards, D., Mistilis, N., Scott, N., Roman C. (2008), *Trends Underpinning Tourism to 2020: An analysis of key drivers for change*, Gold Coast, QLD, Australia: CRC for Sustainable Tourism, 2008.
9. Dwyer, L., Seetaram, N. (2013), *Recent Developments in The Economics of Tourism*, Edward Elgar Pub.
10. Formica, S., Uysal, M. (2006), "Destination attractiveness based on supply and demand evaluations: An analytical framework", *Journal of Travel Research*, 44(4): 418-430.
11. Gržinić, J., Brajković, M. (2008), "Development of tour operator specialists in the Croatian tourism", *Annals of the University of Craiova - Economic Science Series*, XXXVII/2009, http://feaa.ucv.ro/annals/v1_2009/037.11.pdf
12. Gunn, C. (1997), *Vacationscape: Designing tourist areas* (3rd ed.). USA: Taylor & Francis.
13. Harvey, D. (1989), *The condition of postmodernity*, Oxford: Basil Blackwell.
14. Hjalager, A. M. (2010), "A review of innovation research in tourism", *Tourism Management*, 31(1): 1-12.
15. Hoch, Stephen J. and George F. Loewenstein (1991), "Time Inconsistent Preferences and Consumer Self-Control," *Journal of Consumer Research*, 17(4): 492–507.
16. Jennings, G., Nickerson, N. (Eds.), (2006), *Quality tourism experiences*, USA: Elsevier.

17. Kastenholz, E., Carneiro, M. J., Marques, C., Lima, J. (2012), "Understanding and managing the rural tourism experience - the case of a historical village in Portugal", *Tourism Management Perspectives*, 4:207-214.
18. Kugytė, R., Sliburytė, L. (2005), "A Methodological Approach to Service Provider Selection Criteria", *Organizacijų vadyba: sisteminiai tyrimai*, <http://etalpykla.lituanistikadb.lt/fedora/get/LT-LDB-0001:J.04~2005~1367182327822/DS.002.1.01.ARTIC>, (12.01.2015.)
19. Lane, B. (2009), *Rural tourism: an overview*. In T. Jamal, & M. Robinson (Eds.), *The SAGE handbook of tourism studies* (pp. 354-370). London: Sage Publications.
20. Križman-Pavlović, D. (2008), *Marketing turističke destinacije*, Zagreb: Mikrorad.
21. Krupka, A., Zečević, B. (2003), *Report on appropriate measure aimed to facilitate and stimulate increased tourism, and to develop the tourism sector*. Beograd: Savetodavni centar za ekonomska i pravna istraživanja.
22. Matos, N., Mendes, J., Valle, P. (2012), „A model development of relationships between tourism experiences and destination image“, 2nd *Advances in Hospitality and Tourism Marketing & Management Conference*, 31 May - 3 June, Tzavros - Kommeno Corfu, Greece.
23. Meng, F. (2010), „Individualism/collectivism and group travel behavior: A cross-cultural perspective“, *International Journal of Culture, Tourism and Hospitality Research*, 4(4): 340-351.
24. Molz, G. J. (2013), Social Networking Technologies and the Moral Economy of Alternative Tourism: The Case of Couchsurfing.Org. *Annals of Tourism Research*, 43(1): 210-230.
25. Mossberg, L. (2007), "A marketing approach to the tourist experience", *Scandinavian Journal of Hospitality and Tourism*, 7(1): 59-74.
26. Nordin, S. (2005), *Tourism of tomorrow – travel trends & forces of change*, ETOUR, European Tourism Research Institute.
27. Perdue, R. (2002), "Perishability, yield management and cross product elasticity", *Journal of travel research*, 41(1): 15-22.
28. Petz, B. (2010), *Uvod u psihologiju*, Zagreb: Naklada slap.
29. Pike, S., Ryan, C. (2004), "Destination positioning analysis through a comparison of cognitive, affective and conative perceptions", *Journal of travel research*, 42(2): 333-342.
30. Pine, B. J., Gilmore, J. H. (1999), *The experience economy*, Boston: Harvard University Press.
31. Pileliene, L., Šimkus, A. (2012), *Tour Operator s Service Quality Evaluation Model*, http://www.academia.edu/7572483/Tour_Operators_Service_QualityEvaluation_Model (12.02.2015).
32. Pollock, A., Benjamin, L. (2001), *Shifting Sands: The Tourism Ecosystem in Transformation*, London: DESTiCORP Limited.
33. Popesku, J. (2002), "Definisanje strategijskog okvira povratka Srbije na međunarodno turističko tržište", *Hotelska kuća*, Zbornik radova IV. Simpozijuma, Beograd: Ugoprogres.
34. Popesku, J. (2004), "Konkurentnost i održivost turističke destinacije-preduslov uspešnosti marketinga hotelske kuće" *Hotelska kuća*, Zbornik radova V. Simpozijuma Beograd: Hores.
35. Relph, E. (1976), *Place and placelessness*, London: Pion.
36. Richards, G., Wilson, J. C. (2004), "The impact of cultural events on city image: Rotterdam cultural capital of Europe 2001", *Urban Studies*, 41(10): 1931–1951.
37. Richards, G., Wilson, J. C. (2006), "Developing creativity in tourist experiences: A solution to the serial reproduction of culture?", *Tourism Management*, 27(6): 1209-1223.
38. Ritchie, J. R. B., Crouch, G. (2000), "The competitive destination: a sustainability perspective", *Tourism Management*, 21(1): 1-7.

39. Ritzer, G., Liska, A. (1997), 'McDisneyization' and 'Post-Tourism: Complementary perspectives on contemporary tourism. In C.Rojek, & J. Urry (Eds.), *Touring cultures: Transformations in travel and theory* (pp. 96–109). London: Routledge.
40. Rustichini, A., Siconolfi, P. (2004), "Growth in economies with non-convexities: Sunspots and lottery equilibria", *Economic Theory*, 24(3): 701-726.
41. UNWTO. (2002), *Tourism 2020. Vol. 7. Vision global forecasts and profiles of market segments*. Madrid: United Nations World Tourism Organization.
42. Urry, J. (1990), *The tourist gaze: leisure and travel in contemporary societies*. Sage, London.
43. Vitasović, A. (2012), *Ekonomija doživljaja i konkurentnost hrvatske turističke ponude*, University of Pula, Pula.
44. Yeoman, I. (2012), *Tomorrow's Tourism*. Bristol, UK: Channel View Publications.
45. Wilson, J. (2002), *A holistic approach to tourist place image and spatial behaviour*, Ph.D. thesis, School of Geography and Environmental Management, University of the West of England, Bristol.
46. Wang, K.C., Hsieh, A.T., Chen, W.Y. (2002), „Is the tour leader an effective endorser for group package tour brochures?“ *Tourism Management*, 23(5): 489-498.
47. Wang, K.C., Hsieh, A.T., Huan, T.C. (2000), „Critical service features in group package tour: An exploratory research“, *Tourism Management*, 21(2): 177-189.
48. Wong, S., Lau, E. (2001), "Understanding the Behaviour of Hong Kong Chinese Tourists on Group Tour Packages", *Journal of Travel Research*, 40(1) 57-67.
<http://www.panacomp.net/households>, Panacomp, travel agency.
<http://incoming.magelan.rs>, Magelan incoming tour operator.

WORKER'S REMMITANCES FROM ABROAD – INCREASINGLY IMPORTANT SOURCE OF DOMESTIC CONSUMPTION GROWTH

Zvonimir Savic

*Director at Financial institutions and economic analyses sector,
Croatian Chamber of Economy, Zagreb, Croatia
zsavic@hgk.hr*

Petar Misevic

*Assistant Professor at University North, Varaždin, Croatia
pmisevic@unin.hr*

Luka Burilovic

*President, Croatian Chamber of Economy, Zagreb, Croatia
lburilovic@hgk.hr*

ABSTRACT

All cashless payment orders related to the diaspora and resident natural persons from abroad are recorded in the balance of payments. They represent an important and stable source of funds, which is sometimes higher than the inflow of foreign direct investments. Those payments can have a significant impact on the reduction of poverty and can finance part of the economic growth of the recipient country. EU Member States with the highest inflows of payments of resident natural persons from abroad (worker's remittances) in comparison with the size of the economy are predominantly "new Europe" countries, which includes Croatia. Namely, Croatia has the highest level of inflows of payments of resident natural persons from abroad among EU Member States in comparison to the size of the economy. Worker's remittances reached EUR 2,4 bn in 2018, an equivalent of 4.7% of the national GDP. Although Croatia has always had a high level of worker's remittances from abroad in comparison to the size of the economy, more dynamic growth has been recorded in the last couple of years. That could be linked to the emigration growth after Croatia became an EU member state and to opening neighbouring labour markets due to the free movement of workers within the EU. Negative effects will be diminished if the emigration trend could be reversed into a trend of return of emigrants. In that respect, the return of a highly educated labour force could be crucial, since they will bring knowledge and experience gained in the more developed markets.

Keywords: *Emigration, labour market, resident natural persons, worker's remittances*

1. INTRODUCTION

The official CBS (Croatian Bureau of Statistics) data show the extent of Croatian emigration according to the Ministry of Interior's data on the deregistration of domicile/permanent residence, which does not give the whole picture, and it is considered that the number of emigrants is being underestimated by these statistics, both now and in earlier years. An additional methodological problem with the issue of monitoring migrations is that persons who had moved abroad by the end of 2012 did not even have to officially de-register from their permanent residence in the Republic of Croatia, so in fact, the exact number of emigrants in those years cannot be determined. From the end of 2012, when the new Residence Act came into force, a person who emigrates from Croatia in order to obtain permanent residence in another country is obliged to deregister his or her residence before relocating, or if s/he temporarily leaves for more than one year, s/he is obliged to inform the police headquarters or the police station located at his/her area of permanent residence. Even though provisions on misdemeanours are foreseen for non-compliance with these measures, it is very difficult to

determine the extent to which they are complied with. Therefore, the CBS data on emigration used in this review should be viewed with caution and it is highly likely that they are underestimated. Likewise, since 2011, the methodology for monitoring external migrations has changed to comply with international standards and the *acquis communautaire*, which further complicates the trends monitoring over longer periods. Notwithstanding these statistical and methodological problems of emigration monitoring, it is indisputable that a sharp increase of Croatian emigration is noticeable after the year 2013 and after Croatia's accession to the EU, which had both favourable and unfavourable effects. In general, the long-term positive effects of migration are reflected in the acquisition and transfer of knowledge and technologies, as well as of social and cultural values, and this is undoubtedly true in this case, in which we will observe a longer period. What we are seeing now are the immediate positive effects that are reflected in reducing the unemployment level and rate (currently unemployment is at a record low in Croatia), since the economically active population is moving out of the country, i.e. the population which, in most cases, cannot find adequate employment in the domicile country. Another positive effect is measurable and it relates to the growth in the value of personal remittances from abroad, which, with a favourable effect on domestic consumption (thus, on the standard of living and economic growth), has a beneficial and harmonising effect on the current account balance of payments. However, the negative effects are much more severe, complex and long-term, which, over time, can, with the current unfavourable demographic trends, destabilize the pension and health care systems and reduce the potential for economic growth.

2. FREE MOVEMENT OF LABOUR (WORKFORCE) WITHIN THE EU

Free movement of labour is one of the four freedoms on which the European Union is founded. It encompasses the right of workers to movement and change of residence, the right of family members to enter the country and place of residence, the right to work in another Member State and the right to be treated equally as nationals of that Member State. Each national of a Member State is entitled to seek work in another Member State following the rules in force that apply to domestic workers. Each Member State national is entitled to receive the same assistance from the national employment service as nationals of the host Member State, without discrimination on grounds of nationality. S/he is entitled to stay in the host country for as long as it is necessary to seek employment, apply for a job advertisement and get hired. This right applies equally to all workers from the other Member States, regardless of whether they have a permanent contract, whether they are seasonally employed or are cross-border workers or workers providing services. Workers should not be discriminated against, for example concerning language requirements, which should not go beyond what is reasonable and necessary for a particular job. For the first three months, every EU citizen has the right to reside on the territory of another EU Member State without any conditions or formalities other than the requirement to hold a valid identity card or passport. For extended periods, the host Member State may require the person to declare his/her residence in the country within a reasonable and non-discriminatory period. Different conditions depending on the citizen's status still apply to the right of migrant workers to remain in the country for more than three months: for EU citizens who are not employed or self-employed, the right of residence depends on whether they have sufficient financial resources so as not to burden the social security system of the host Member State and whether they have health insurance. EU citizens acquire the right of permanent residence in the host Member State after five years of uninterrupted authorised stay. Therefore, labour mobility and its redistribution within the EU, i.e. between EU member states, are expected and valued. According to Eurostat data, in 2018, of the 512 million EU citizens, about 17.5 million had the nationality of EU Member State other than the one in which they lived.

However, as not all markets within the EU share the same position or equal competitiveness of the labour market or equal economic strength, there are stronger emigration flows developing from the direction of the so-called “New Europe” towards the so-called “Old Europe” (more developed) Member States, further fuelled by poor demographic trends in developed economies that result in labour shortages. Therefore, most of the so-called “New Europe”, to which Croatia belongs, is dealing with an increase in emigration. Croatian citizens in 14 Member States (Bulgaria, Czech Republic, Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Hungary, Poland, Portugal, Romania, Slovakia, Sweden) had the right to freedom of employment from the moment of Croatia joining the EU, and other members have exercised their right to an adjustment period. Eight Member States (Belgium, Cyprus, France, Greece, Italy, Luxembourg, Germany, Spain) made use of the two-year adjustment period and on 1 July 2015, they lifted the employment restriction for Croatian nationals. Four Member States have made use of the five-year adjustment period and on 1 July 2018, restrictions on employment for Croatian nationals were abolished by Malta, the Netherlands, Slovenia and the United Kingdom of Great Britain and Northern Ireland.

Table 1: The net migration rate (number of immigrants minus number of emigrants)

	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.
Romania	-163.867	-110.782	-48.100	-47.866	-2.920	-8.109	-36.836	-61.923	-70.123	-64.758
Croatia	6.245	858	-4.171	-4.165	-3.918	-4.884	-10.220	-17.945	-22.451	-31.799
Lithuania	-16.453	-32.013	-77.944	-38.178	-21.257	-16.807	-12.327	-22.403	-30.171	-27.557
Poland	-14.865	-40.154	-62.995	-108.739	-58.057	-56.135	-46.024	-40.690	-28.139	-9.139
Latvia	-22.367	-34.477	-35.640	-20.077	-11.860	-14.262	-8.652	-10.640	-12.229	-7.808
Bulgaria	na	na	na	na	-2.512	-1.108	-2.112	-4.247	-9.329	-5.989
Slovenia	18.584	11.508	-521	2.059	644	487	-490	507	1.051	1.253
Slovakia	7.060	4.367	3.383	2.966	3.416	2.379	1.713	3.127	3.885	3.722
Portugal	9.361	15.408	3.815	-24.331	-37.352	-36.232	-30.056	-10.481	-8.348	4.886
Estonia	-735	-774	-2.484	-2.505	-3.682	-2.631	-733	2.410	1.030	5.258
Cyprus	16.586	17.784	15.913	18.142	-629	-12.078	-14.826	-2.000	2.499	6.201
Greece	23.485	14.927	-1.579	-32.315	-66.494	-59.148	-47.791	-44.905	10.332	8.920
Luxembourg	7.700	6.583	7.660	11.004	10.036	10.348	11.049	11.159	9.446	10.548
Denmark	19.001	11.901	10.780	11.240	10.746	17.002	23.962	33.867	21.729	12.176
Ireland	16.658	-19.068	-25.760	-25.757	-20.473	-11.021	2.412	13.632	23.129	14.431
Malta	2.324	2.293	74	1.659	4.251	6.119	9.346	9.841	8.748	14.656
Finland	15.457	14.548	13.731	16.821	17.433	18.048	16.021	12.441	16.823	14.824
Czechia	56.789	13.838	-12.752	-28.796	-11.769	4.230	1.429	3.918	25.219	24.531
Hungary	28.061	17.411	12.154	12.918	10.822	4.277	12.368	15.119	13.729	28.241
Belgium	na	na	69.268	63.229	35.877	17.421	28.585	56.832	31.231	37.013
Austria	22.209	16.051	19.327	31.033	39.745	47.795	62.771	109.634	65.081	45.657
France	56.812	32.339	37.580	28.222	71.509	98.939	32.280	40.374	57.410	57.410
Netherlands	53.449	30.092	30.806	25.917	14.135	16.803	32.423	54.542	77.755	81.415
Sweden	55.877	63.040	49.948	45.288	51.312	65.130	75.729	78.410	117.127	98.869
Spain	310.643	12.841	-42.672	-37.703	-142.553	-251.531	-94.976	-1.761	87.421	163.272
Italy	453.765	362.343	380.085	303.332	244.556	181.719	141.303	133.123	143.758	188.330
UK	163.035	198.337	251.644	215.341	176.823	209.112	312.905	332.269	248.553	284.544
Germany	-55.743	59.634	151.599	240.377	352.174	433.385	560.672	1.196.686	496.090	356.409

Source: Eurostat, processed by the CCE

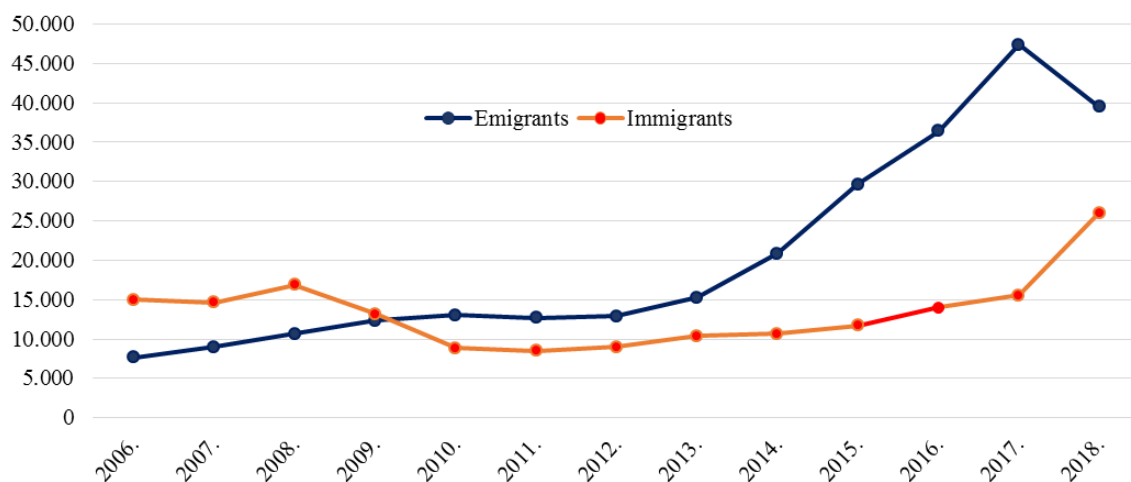
The table 1 above shows that the most persistent negative net migration rate in the last ten years can be found in several EU Member States from Central and Eastern Europe - Romania, Croatia, Lithuania, Poland, Latvia and Bulgaria.

Only Croatia has seen a steady increase in the negative net migration rate in recent years due to the sharp increase in the number of persons emigrating from Croatia following its accession to the EU.

3. EMIGRATION IN CROATIA

The negative net migration rate in Croatia has been recorded since 2009 (see Figure 1), and its sharp rise had been visible from 2014 (shortly after Croatia's accession to the EU) to 2017, due to the strong increase of emigration. In addition to the fact that the last opening of the EU labour market was to the Croatian workers, the very moment of EU accession has created the additional pressure on Croatian emigration in the last decade, during a longer phase of the economic crisis in Croatia, which, at the moment of accession, had lasted for the fifth year, and the unemployment rate was record high (17.3%). But even though Croatia emerged from a multi-annual recession in 2015, the number of emigrants has progressively increased up to 2018, when the trend has slowed.

Figure 1: Fluctuations of emigrants and immigrants



Source: Eurostat, processed by the CCE

Table following on the next page

Table 2: Emigrants according to their age

Age	Emigrated abroad 2012.	Emigrated abroad 2013.	Emigrated abroad 2017.	Emigrated abroad 2018.	Difference in 2018. and in 2013.
total	12.877	15.262	47.352	39.515	24.253
0 – 4	154	333	1.867	1.412	1.079
5 – 9	311	748	2.777	2.250	1.502
10 – 14	331	769	2.183	2.081	1.312
total 0-14	796	1.850	6.827	5.743	3.893
15 – 19	596	586	2.001	2.105	1.519
20 – 24	971	759	4.450	4.073	3.314
25 – 29	1.269	1.295	6.667	5.029	3.734
30 – 34	1.181	1.433	6.286	4.617	3.184
35 – 39	1.180	1.570	5.333	4.279	2.709
40 – 44	1.131	1.393	4.144	3.527	2.134
45 – 49	1.009	1.275	3.601	3.128	1.853
50 – 54	972	1.208	2.794	2.527	1.319
55 – 59	1.039	1.069	1.719	1.575	506
60 – 64	1.019	1.123	1.221	1.037	-86
65 – 69	666	788	1.023	900	112
70 – 74	521	487	655	498	11
75 +	527	426	631	477	51

Source: Eurostat, processed by the CCE

The logic behind economic emigration is the movement of the working-age population (see Table 2), with an emphasis on the economically active population (unemployed people who cannot find work in their home country or employed workers who have found better employment conditions outside their home country). Thus, in 2017, 36.2 thousand persons between the ages of 20 and 64 emigrated (76.5% of the total number of emigrants) from Croatia, and in 2018, 29.8 thousand persons of the same age group (75.4% of the total number of emigrants). A noticeable difference from earlier periods is the increase in the share of underage immigrants, which shows that entire young families with children are moving out. Specifically, the share of expatriates under the age of 10 in 2017 was 9.8%, and in 2018 it was 5.7%, which is significantly higher than in 2012 (3.6%). If we extend this to minors under 14 years of age, the share in 2017 will grow to 14.4% and in 2018 to 14.5% (in 2012 the percentage was much lower, 6.2%). Immediately after Croatia's accession to the EU, it became evident that EU Member States have become more frequent destinations for Croatian emigration (see Table 3).

Table 3: Share of the top five EU Member States in the total Croatian emigration

% out of total number of emigrants					
2012.			2017.		2018.
1.	Germany	15	Germany	61	Germany 55
2.	Austria	4	Austria	6	Austria 7
3.	Italy	3	Ireland	6	Ireland 5
4.	Slovenia	3	Sweden	2	Sweden 2
5.	Netherlands	1	Italy	2	Italy 2
TOTAL		26	76		71

Source: Eurostat, processed by the CCE

Although Germany is traditionally the most popular immigration destination for Croatians among all EU Member States, it has become increasingly attractive since 2014, especially after restrictions for employment of Croatian workers were lifted in 2015. In 2017, out of the total of Croatian emigrants who had immigrated to the EU Member States (55% of Croatian emigrants), 70.8% of them immigrated to Germany. This was followed by Austria, Ireland, and Sweden, as the new major immigration destinations within the EU.

4. PERSONAL REMITTANCES FROM ABROAD

All non-cash transfers related to emigration and work abroad are recorded on the income sub-accounts of the balance of payments. They represent an important and stable source of funds, sometimes greater than the financial inflows of foreign direct investment, and can have a significant impact on poverty reduction and partially finance the economic growth of the recipient economy. As they have the character of foreign non-debt income, they have a greater importance in the Croatian balance of payments in balancing the current account of the balance of payments. Personal remittances represent the income of a resident household, which is earned in foreign economies, and generally results from the temporary or permanent residence of related persons in those economies. The EU Member States with the highest value of personal remittances in relation to the size of the economy are mostly members of the so-called New Europe, in line with migration trends described above. Croatia has the highest value of personal remittances in proportion to the size of its economy out of all EU member states (see Table 4). They totalled 2.4 billion euros in 2018, which is equivalent to 4.7% of national GDP.

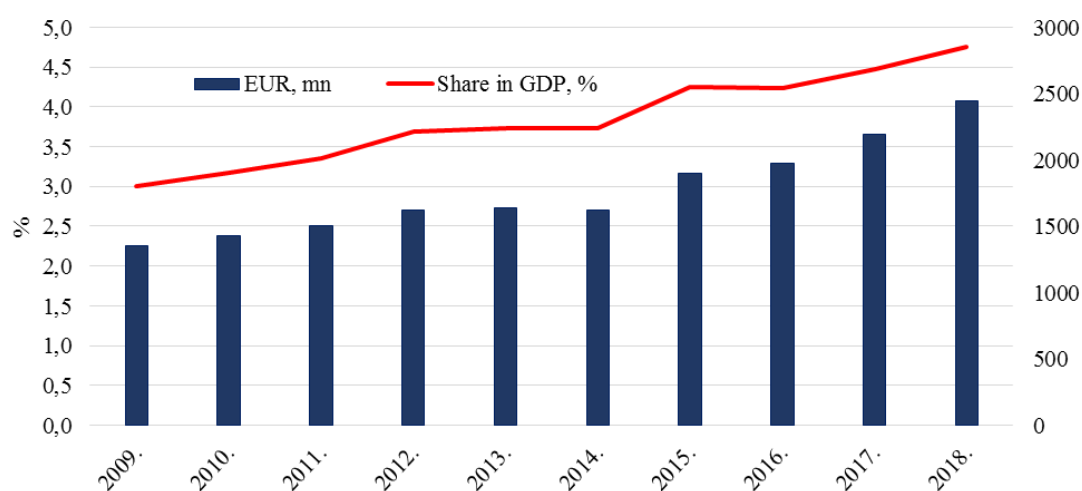
Table 4: Personal remittances, percentage of the national GDP

	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.	2018.
Croatia	3,0	3,2	3,3	3,7	3,7	3,7	4,2	4,2	4,5	4,7
Bulgaria	3,1	2,6	2,6	2,7	3,0	3,0	3,0	3,1	3,8	3,7
Lativa	6,1	5,3	5,4	5,3	5,3	4,9	4,9	4,4	4,1	3,5
Hungary	1,3	1,6	2,0	2,8	3,4	3,4	3,8	3,9	3,5	3,1
Luxembourg	3,3	3,1	3,0	3,0	3,0	2,8	2,9	2,9	2,8	2,9
Lithuania	3,3	4,5	4,5	3,5	4,4	4,3	3,3	3,0	2,7	2,6
Belgium	2,2	2,1	2,1	2,1	2,2	2,2	2,2	2,2	2,1	2,2
Romania	2,8	2,3	2,1	2,1	1,8	1,7	1,7	1,8	2,0	2,0
Slovakia	1,9	1,8	1,8	2,1	2,1	2,4	2,4	2,4	2,3	2,0
Estonia	1,7	1,8	1,9	2,0	2,3	2,0	2,0	2,0	1,9	1,9
Czechia	0,9	0,9	0,9	1,0	1,2	1,3	1,4	1,6	1,7	1,6
Poland	0,0	1,6	1,5	1,4	1,4	1,4	1,4	1,4	1,3	1,2
Cyprus	np	np	2,7	1,9	1,2	1,1	1,3	1,1	1,2	1,2
Slovenia	0,6	0,7	1,0	0,5	0,6	0,7	0,9	0,9	1,0	1,1
France	np	np	0,8	0,8	0,9	0,9	1,0	1,0	1,0	0,9
Austria	0,0	0,0	0,0	0,7	0,8	0,7	0,7	0,7	0,7	0,7
Malta	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,4	0,4	0,6
Sweden	0,9	0,8	0,8	0,8	0,8	0,8	0,7	0,6	0,6	0,6
Italy	0,3	0,4	0,4	0,4	0,4	0,5	0,5	0,5	0,5	0,5
Germany	0,4	0,4	0,5	0,4	0,4	0,4	0,5	0,5	0,5	0,5
Greece	0,6	0,5	0,4	0,3	0,3	0,3	0,2	0,2	0,2	0,2
UK	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2

Source: Eurostat, processed by the CCE

Although Croatia has always had a relatively high value of personal remittances, given the size of the economy, a more dynamic growth of personal remittances has been observed especially in the recent years, what can be linked to a more vibrant emigration after Croatia's accession to the EU and the gradual full opening of the labour market of major Croatian immigration destinations, primarily Germany. Thus, since 2015, when Germany abolished restrictions on Croatian workers, the growth rate of personal remittances has become more pronounced (10.9% annually on average). The highest values of personal remittances come mainly from Germany (in 2017, about 15% of total remittances, or more than EUR 337 million), to which the largest number of Croatian workers emigrate. In the last ten years, the value of personal remittances was increased by 1.7 percentage points compared to the value of national GDP and in 2018 was at a record high (2.4 billion euros) (see Graph 1).

Graph 1: Personal remittances to Croatia



Source: Eurostat, processed by the CCE

Within the framework of personal remittances, compensations of employees and personal transfers can be viewed separately. Compensations of employees or income received from legal entities by residents employed abroad are recorded on the primary income sub-account of the balance of payments. They refer to the income of seafarers on foreign ships, workers on oil rigs, persons living in a border area and working in a neighbouring country, and other temporary workers abroad (seasonal workers, international organizations employees, etc.). Compensations of employees have been growing quite rapidly in recent years, on average about 15% annually since 2015. For the last two years, their value has been higher than the value of personal transfers (which was not the case before), or more than half of the value of personal transfers (53% in 2018). The highest compensations of employees stem from the United Kingdom of Great Britain and Northern Ireland and the United States (probably most associated with seafarers and workers on oil rigs) and Germany. Personal transfers i.e. transfers made by emigrants to their domicile countries cover all current receipts in cash or in-kind received by resident households from non-resident natural persons, whether in the form of workers' remittances (current transfers made by migrants who are employed in other countries and are considered residents there) or other forms of assistance (other transfers) and are credited to the secondary income sub-account of the current account of the balance of payments. Personal transfers (which include workers' remittances and other transfers) exhibit a relatively stable upward trend in the last ten years, without a rapid acceleration after Croatia's accession to the EU in 2013 and a sharp rise in emigration from Croatia. In addition to methodological shortcomings and changes, this may be due to a changed model of

emigration, i.e. emigration of entire families, which results in fewer transfers to the home country. The value of personal transfers since 2016 exceeds EUR 1 billion a year, and in 2018 it was at a record high of EUR 1.2 billion. The highest values of personal transfers came predominantly from Germany (about one fifth), followed by Switzerland, the USA, Italy, Australia and Austria.

Table 5: Personal transfers, percentage of the national GDP

	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.	2018.
Lithuania	2,6	3,5	3,7	3,1	3,9	4,0	3,0	2,8	2,6	2,5
Croatia	1,6	1,7	1,8	2,0	2,0	2,0	2,1	2,2	2,2	2,2
Bulgaria	1,9	1,9	1,9	1,9	2,0	1,9	1,9	1,8	2,2	2,1
Latvia	3,8	2,7	2,9	2,7	2,8	1,9	2,2	2,0	2,0	1,7
Romania	2,4	2,0	1,7	1,7	1,5	1,3	1,4	1,4	1,5	1,5
Cyprus	np	2,9	2,3	1,5	0,8	0,8	0,9	0,8	0,9	0,9
Hungary	0,2	0,2	0,3	0,4	0,5	0,5	0,6	0,7	0,7	0,7
Poland	0,8	0,8	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,6
Estonia	0,5	0,5	0,4	0,5	0,6	0,5	0,5	0,5	0,5	0,6
Malta	np	np	0,0	0,0	np	np	0,3	0,2	0,2	0,5
Czechia	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4	0,4	0,4
Slovakia	0,0	0,0	0,0	0,0	0,0	0,3	0,4	0,3	0,3	0,2
Slovenia	0,1	0,1	0,1	0,1	0,1	0,1	0,2	0,1	0,1	0,1
Italy	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Greece	0,5	0,4	0,3	0,2	0,2	0,2	0,1	0,1	0,1	0,1
Sweden	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
UK	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Austria	np	np	np	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Luxembourg	0,1	0,1	0,1	0,1	0,2	0,1	0,1	0,1	0,1	0,1

Source: Eurostat, processed by the CCE

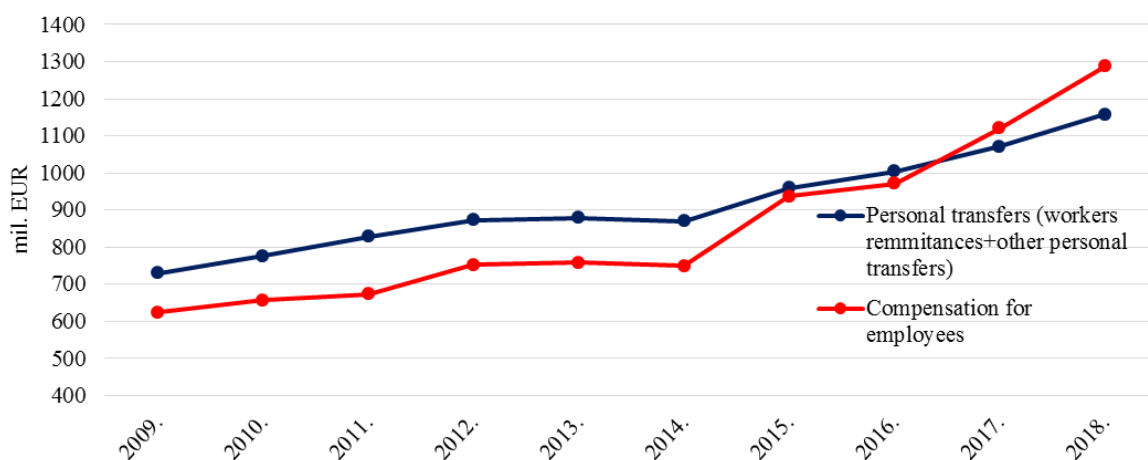
Compared to the other EU Member States, in 2018, Croatia had the second-highest level of personal transfers in relation to the economy size, at the level of the 2.2% of the national GDP (see Table 5). Due to the lower GDP growth than the growth of transfers, the value ratio of personal transfers to GDP in Croatia has increased in the last ten years from 1.6% to 2.2%, thus surpassing Bulgaria, Romania, and Latvia.

5. CONCLUSION

Personal remittances from abroad are an important source of financing domestic consumption (thus indirectly fuelling the economic growth), especially in times of weak economic conditions. Their characteristic is of stable foreign currency inflows that favourably affect the current account of the balance of payments, i.e. reduce the imbalances in the income sub-accounts. The best way to show their importance and size in the Croatian economy by comparing it with an inflow based on direct investments. Since 2011, the annual inflows from personal remittances have been higher than the annual inflows from direct

investments (excluding circular investments), which in the last ten years has meant twice the value of personal remittances than the value of direct investments (17.7 billion EUR to EUR 8.9 billion). Likewise, personal remittances have had a significantly more stable growth, which was continuous for almost the entire period, while the inflow through FDI was highly volatile and varied significantly by year. An increase in the value of personal remittances is visible in the current wave of emigration, which has lasted since Croatia's accession to the EU. Compensations of employees (income received by resident employees working abroad from legal persons) are growing more significantly than personal transfers (workers' remittances and other transfers from natural persons abroad to domestic natural persons) (see Graph 2). The reason for the slower growth of personal transfers, the value of which was higher than the value of employee benefits up to 2017, may also be related to the type of current emigration where entire families move out, so the growth of transfers towards the home country is more moderate.

Graph 2: Values of personal transfers and compensations of employees



Source: Eurostat, processed by the CCE

Although initially, a strong emigration wave had had positive effects in terms of reducing unemployment and increasing personal remittances, its negative effect is now beginning to prevail, resulting in an increasingly serious problem of labour shortage, especially of the young and educated workforce. Lack of workforce puts pressure on wage growth that is above labour productivity growth, thus limiting the economic growth and reducing economic competitiveness. The negative effects would be reduced if the emigration trend is reversed. The most crucial issue would be to return emigrants, especially the highly educated experts, which will bring with them the knowledge gained on the more developed markets.

LITERATURE:

1. Buch C.M., Kuckulenz A. (2010). Worker Remittances and Capital Flows to Developing Countries.
2. Croatia and Latvia are most dependent from international remittances in the EU. Retrieved: 10.10.2019. from: https://ec.europa.eu/eurostat/statistics-explained/index.php/Personal_remittances_statistics#Croatia_and_Latvia_are_most_dependent_from_international_remittances_in_the_EU
3. El-Sakka, M.I.T., and R. McNabb (1999). The macroeconomic determinants of emigrant remittances", *World Development*, 27(8): 1493– 1502.
4. Michael Coon and Rebecca Neumann, Follow the Money: Remittance Responses to FDI Inflows, *Journal of Globalization and Development*, 10.1515/jgd-2017-0023, 8, 2, (2017).

5. Personal remmitances statistics. Retrieved: 10.10.2019. from:
https://ec.europa.eu/eurostat/statistics-explained/index.php/Personal_remittances_statistics
6. Regulation (EC) No 184/2005 of the European Parliament and of the Council of 12 January 2005 on Community statistics concerning balance of payments, international trade in services and foreign direct investment. Retrieved: 10.10.2019. from: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32005R0184>

TAX COMPLIANCE MODEL: AN INTERVENTIONIST STUDY TO ENHANCE FINANCIAL SUSTAINABILITY

Alessandra Segatelli

*Universidade Presbiteriana Mackenzie, Brasil
lesegatelli@yahoo.com.br*

Liliane Cristina Segura

*Universidade Presbiteriana Mackenzie, Brasil
liliane.segura@mackenzie.br*

Henrique Formigoni

*Universidade Presbiteriana Mackenzie, Brasil
henrique.formigoni@mackenzie.br*

Rute Abreu

*Instituto Politécnico da Guarda, Portugal
ra@ipg.pt*

Sandra Raquel Alves

*CIC.DIGITAL, ESTG, Polytechnic Institute of Leiria, Portugal
raquel.alves@ipleiria.pt*

ABSTRACT

The purpose of this paper is to propose the implementation of an applied model of compliance process management for the Tax Compliance area, based on Lean Accounting. This paper presents the results of an interventionist research, using a management model inspired by Lean Thinking, to ensure the mapping of the needs to be met when managing ancillary tax obligations in companies. As a result of this study and contribution to the theory, a Tax Compliance Management Model was developed and applied, focused on the control of the activities and the profile of the professionals in the area that, although it was directed to a specific company, generated a model that can contribute with other companies in general, considering the similarity of the accessory obligations and standards established by the Brazilian Government. The contribution to the scientific area is in the development of an interventionist study, applying already consolidated academic frameworks, in the management of the tax area, a concept still little explored. One can affirm this based on the cataloging of academic journals presented in this work, which shows that there is still a gap to be explored. This study aimed to contribute to the management of the tax area in the companies, through the development of a study of technological and interventionist nature, applying the Lean Thinking framework, resulting in an Applied Model of Tax Conformity Management, focused on the control of activities, automation and profile design of the professionals to the area that, although it was directed to a specific company, also generated a suitable model, that can contribute with other companies in general, considering the similarity of the accessory obligations and standards established by the Government. As a result of this study, the company was able to identify and improve its processes, measured through indicators, as well as implemented an Applied Tax Compliance Management Model. Considering that benchmarking and interviews with experts were used during the process of model development, it is believed that it may be suitable for other companies with similar characteristics, and used in future studies.

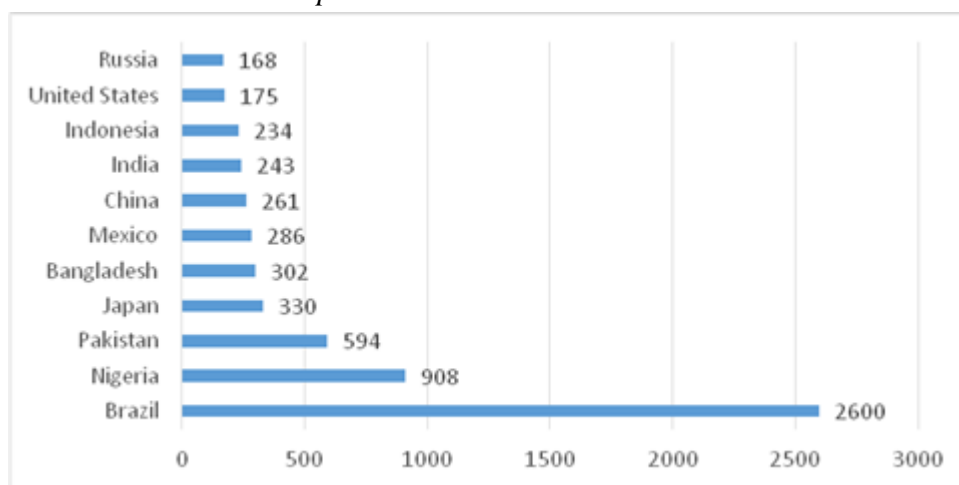
Keywords: *Lean Tax Management, Tax Compliance, Lean Thinking*

1. INTRODUCTION

Comply with all ancillary tax obligations and paying taxes is no easy task for companies around the world. The existence of various types of taxes and contributions, of several taxing bodies and of multiple ancillary fiscal obligations, creates the problem of tax compliance (Blackwell, 1993). The fulfillment of tax obligations has been one of the problems most discussed by governments and one of the biggest points of enforcement in recent years (O'Shaughnessy, 2014). Actions such as Foreign Account Tax Compliance Act (FATCA), in the United States, implemented in 2010, and Common Reporting Standards da OECD, from 2014, showed the worldwide concern in the exchange of information to increase compliance with tax obligations around the world (OECD, 2018). The payment of taxes represents the transfer of a portion of the wealth generated by society to the State. Taxation must be understood as a duty of cooperation that enables state action, in the form of distribution of income and services to the population, in its most diverse areas, especially in the social and economic life of the people (Brasil, 2017). The Brazilian Government determines that, in addition to paying the tax, a number of ancillary obligations (sending additional information) must be fulfilled by the taxpayer, whether individual or legal entity. In Brazil, ancillary obligations are defined as all obligations arising from the government's control of the payment of taxes by taxpayers, such as the delivery of electronic declarations to the Treasury, the correct calculation of the tax to be collected, due retention on behalf of third parties, registration in the relevant books and storage of data for at least five years (Kazuo and Nakao 2012). Understanding taxation is not a simple task, since it involves several fields of knowledge, such as law, economics and accounting, among others. According (Plesko, 2004) tax policy stems from a complex combination of economics and legal theory interpreted in the real world by accountants and lawyers. As a consequence of fulfilling the obligations for the Tax Authorities, companies must invest in structure to fulfill their tax obligations, this being called the cost of tax compliance (Sandford, 1995), whose objective is to mitigate the tax risks that can impact the result of a company (Henderson 2005). The Tax Compliance management comprises the one where all control of the process of document validation in tax books is carried out, calculation and collection of taxes, completion and delivery of ancillary obligations, structuring of files for presentation to the tax authorities (including internal and independent audits). The management of the entire tax chain that involves this area is a complex process, due to the innumerable variables of difficult quantification and its degree of risk (Bertolucci, 2001). Therefore, it is the mission of the company's tax management to identify the main risk factors for the development of processes that allow adequate management, establishing controls, periodic reviews and action plan for the mitigation of tax impacts (Svensson, 2004). Effective tax management enables tax compliance, which mitigates measurable risks, such as punitive fines and other legal and non-measurable charges, such as the company's reputation (Aguiar, 2016). This research is based on the adequacy of the process and control mapping methodology developed for accounting and financial functions using the Lean Thinking concept for the implementation of a tax compliance process management model in the Company. Automation and control in the financial area has many advantages for companies, as it formalizes and accelerates processes, improving quality and verification of data, as well as enabling standardized controls and processes (Fullerton, Kennedy, and Widener, 2013; Maskell, 2006). The concept of Lean is, in essence, a management of the operation focused on efficiency and value creation for the customer (company). The application of some tools of the Lean concept, which started with the Lean Manufacturing or Toyota production system, is feasible and innovative in this study, since it takes into account important concepts of continuous improvement, through a systematic approach, enabling the quality of information and generating value to shareholders and internal customers of the company, as it is an improvement of the process to be effective in the calculation and transmission of information to the tax authorities.

The importance of automation, through the implementation of efficient data preparation and control systems for the Tax Compliance area in Brazil, should be a priority of companies, considering the high complexity of tax management in the country. According to the Portal Tributário (2017), there are currently 92 different types of taxes in Brazil, which indicates the level of complexity of Brazilian tax legislation and, consequently, the risk of non-compliance. According to the World Bank Group and PWC (PWC and World Bank Group, 2015), who study the tax environment in several countries for more than 10 years, when comparing the number of hours invested by companies in fulfilling all tax obligations required by country, Brazil leads the ranking. The summary of the hours invested by the companies for the fulfillment of ancillary obligations, detailed by region, is presented in the Figure 1 (ranking by country), and Table 1 (ranking by continent) the average time (in hours) invested for compliance with tax obligations is presented.

Figure 1: Ranking of hours invested by companies to comply with tax obligations - comparison between 11 countries



Source: PWC and World Bank Group, 2015.

Brazil is the leader in the number of hours invested in tax compliance by companies, where the Brazilian taxpayer needs to invest an average of 2,600 hours per year to meet the tax obligations (principal and accessory) for the Brazilian tax authorities (PWC and World Bank Group, 2015), or 1958 hours per year, according to The World Bank (2018), even after the implementation of electronic tools. It is important to note that the Brazilian Government announced in 2017 reform proposals in order to simplify the tax model, in which it claims that companies will invest no more than 600 hours per year to assist the tax authorities. However, in the same year of 2017 companies have had to meet five additional obligations. In addition, the electronic invoice 4.0 was launched, forcing companies to redesign their layout as well as investing in data interface and acquisition of modules for data control and messaging. As it can be verified by Figure 1, among the eleven countries surveyed, Brazil occupies the last position in the time spent to meet tax obligations.

Table following on the next page

Table 1: Average time (hours) to comply with tax obligations by sub-continent

Continent	Income Tax	Labor Tax	Revenue Tax	Total
South America	138	189	288	615
Africa	87	104	122	313
Central Asia and Central Europe	73	74	100	247
Pacific Asia	70	66	86	222
Central America and Caribbean	41	96	72	209
North America	85	52	60	197
EU & EFTA	37	83	53	173
Middle East	44	90	26	160
Mundial Average	69	93	99	261

Source: PWC and World Bank Group, 2015.

As per Table 1 it can be observed that South America is the region that most demands dedication in working hours for the fulfillment of tax obligations.

2. THEORETICAL FRAMEWORK

The main theoretical framework focused on the process management literature, detailing Lean Thinking and the points that were taken into account for the construction of the model, considering the results of interviews with specialists. However, other important points were considered in the elaboration of the model, such as the complexity of the Brazilian tax system, the important aspects of governance focused on narratives and procedures, without the pretension of covering topics of governance such as tax planning, fraud and tax evasion. Process management in the area of Tax Compliance not only provides process efficiency but also mitigation of tax risks in companies. In this sense, this study addresses the management and efficiency of the Tax Compliance area of a Brazilian company, due to the complexity presented by the Brazilian tax universe and the few studies that have been found on this topic in the literature. We did not identify, in the research carried out, a study focused on the application of a management model in the tax area, nor the use of efficiency models such as Lean, in this area. The literature review was done in 2195 editions of 29 national and international journals, from 2006 to 2016, and no previous study was applied applying the Lean Thinking techniques in the tax area nor suggestions of management models focused on guaranteeing the compliance in this area.

Table 2: Consulted Issues

Theme	Number of issues	Number papers	of %
Tax (Compliance and Governance)/Law	1290	16	1,24%
Lean Thinking & Accounting	1060	16	1,51%
Total	2350	32	1,36%

Table 2 shows the summary of the number of journals consulted and the number of times tax issues were disclosed in them. This survey was carried out using keywords such as: taxes, ancillary obligations, taxes, tax burden, compliance, tax governance, lean, lean thinking, ancillary obligations and tax management. In Table 2 it can be observed that of the 2,350 issues consulted, only 1.36%, corresponding to 32 papers, contained some subject on the subject of tax compliance or lean thinking accounting. However none of them addresses the issue in the form of this study.

Complementing information on the journals consulted in the literature review, Table 3, shown below, presents the name of the journal, the editor and its classification by its impact factor.

Table 3: Journals from 2006 to 2016

Journal	Editor	Impact factor
Accounting, Organization and Society	Elsevier	1,867
Brazilian Adm. Review (BAR)	BAR / ANPAD	0,360
Brazilian Business Review (BBR)	FUCAPE	0,120
Cadernos EBAPE.BR (FGV)	FGV	0,360
California Management Review	University of California, Berkeley	1,109
Contemporary Accounting Research	Wiley / Canadian Academic Accounting Association	1,782
European Accounting Review	EAR	1,098
Gestão e Produção (UFSCar)	UFSCar	0,120
Harvard Business Review	Harvard Business School Publishing	N/A
Journal of Accounting and Economics	Elsevier	2,817
Journal of Corporate Accounting & Finance	Wiley / Canadian Academic Accounting Association	2,090
Journal of Financial and Quantitative Analysis	Cambridge University Press	1,628
Journal of Financial Economics	Elsevier	3,540
Journal of International Business Studies	Palgrave Macmillan / Academy of International Business	3,620
Journal of Operations Management	Elsevier	2,252
MIT Sloan Management Review	MIT Press (Massachusetts Institute of Technology)	1,529
Organizações e Sociedade (O&S)	UFBA	0,360
Production and Operations Management	Wiley / POMS (Production and Operations Management Society)	1,732
Review of Financial Studies	Oxford University Press	3,119
Revista Adm Contemporânea (RAC)	RAC Eletronica / ANPAD	0,360
Revista Adm Empresas (RAE)	FGV	0,311
Revista Adm Mackenzie (RAM)	MACKENZIE	0,120
Revista Eletrônica de Adm (REAd)	UFRGS	0,120

Process management requires knowledge of how the organization works and how its different areas work, so as to ensure transparency and understanding of its interactions. Participants, generally from different areas, should know the process as a whole, understanding how the activities they perform contribute to the achievement of the ultimate goal (Enoki, 2006; Martinho and Rotondaro, 2009). Management of this type requires a model for its implementation and, although this work takes into account the concepts presented by Lean Thinking, it was possible to observe that other models suggested for implementation of management by processes are similar, as proposed by Candido, Silva, and Zuhlke (2008). Porter (2007), defined that a basic structure comprises: process mapping (macro and micro processes); modeling of the processes (proposed model, from the knowledge of the routines through the mapping and evaluation of the necessary results and adjustments and the continuous process. According to Porter (2007), the company is a reunion of activities and they are executed to project, product, commercialize and sustain the product. The value chain basically defines the architecture of the macroprocesses according to the strategic objectives of the company. In Lean Thinking's methodology, this value chain is known as a value map, which seeks to identify all

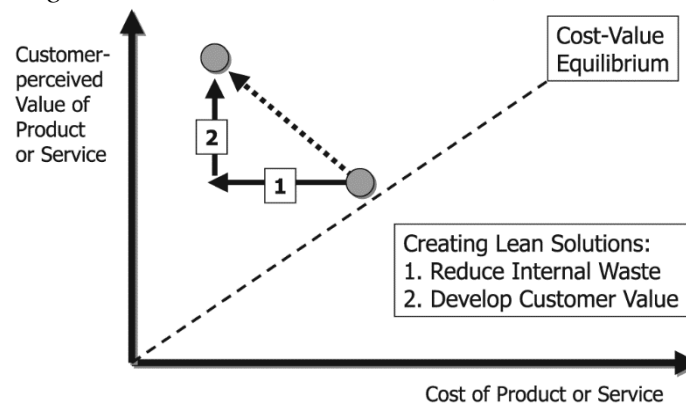
the crucial processes and activities that generate value to customers and shareholders, and activities that need to be improved or even extinguished, eliminating waste and optimizing internal processes of the organization (Fullerton, Kennedy, and Widener, 2013). Mapping a process is doing an initial drawing, noting how a succession of activities are performed and are interrelated. Information collection can be done through interviews with those responsible for the process in the organization, aiming to identify all activities performed by management, their managers and their interactions. We can define that a macroprocess is the representation of all the steps that are part of the process, from its activities to the final process (Womack and Jones, 2004). In the mapping and modeling steps, systems and integrations should be taken into account, allowing the creation of indicators to evaluate results, making process analysis feasible in time for eventual adjustments, incorporating the concept of Lean Thinking for continuous improvement (Womack and Jones, 2004). The origins of Lean Thinking come from Japan and, in particular, Toyota Motor Corporation (Monden 2015; Ohno 1997; Shingo, 1996). The Toyota production system, also known by the acronym TPS (Toyota Production System), was developed in the manufacturing environment in the automobile industry (Katayama and Bennett, 1999). These innovations developed by TPS resulted from a shortage of resources and intense internal competition in the Japanese car market. The innovations were based on the just-in-time production model (JIT), the Kanban method of production, respect for employees and high levels of proof of errors employed in the problem-solving methodology, (Ahakchi et al., 2012). The Lean methodology is focused on eliminating production losses over time and producing correct quantities. This methodology brought Toyota efficiency, internalizing important concepts of the Lean culture and represented an alternative model to that of mass production of intense capital (production of large lots, dedicated and exhaustive resources, study of the process to eliminate "hidden losses"). A study published by Monden, (2015) brought a complete account of the whole system, method, processes and techniques. Much of the early work at Toyota was applied under the leadership of Taiichi Ohno for car engine, during the 1950s and later for the complete assembly of vehicles in the 1960s and the broader supply chain in 1970. It was based on the latter point that vendor manuals were produced and the Lean approach was shared with outside companies for the first time. Vendors came to understand the logic of the Lean approach, since Ohno needed to ensure efficiency outside the company boundaries, quality of materials and services purchased from suppliers. These manuals were written in Japanese and took almost more than a decade before the first English-language literature was available (Monden, 2015; Schonberger, 1982; Shingo, 1996; Sandras, 1989). Still, interest in this methodology was restricted to a small portion of the Western community until the launch of the book "The Machine that Changed the World" when the term "lean production" or Lean manufacturing was created (Womack and Jones, 2004). The exploration of the business model, the infrastructure and practices that support lean production explicitly promoted a thesis that there was transfer of Japanese knowledge, based on the premise that manufacturing problems and technologies were universal problems faced by management (Womack and Jones, 2004). Until the 1980s, the main weaknesses of lean manufacturing were its automotive-based vision and the limited appreciation of how to deal with demand variability. The implementation was entirely focused on the replication of the tool and generally neglected the human aspects of high-performance work, core system with the Lean manufacturing approach (Torres Júnior, 2010). After 1990 there was a gradual expansion of focus on the use of lean manufacturing methodology in other areas, in addition to the factory floor, however, this trend has sometimes failed due to omission or error in the process design. This process of expansion was accelerated by the adaptation of the methodology by Case Western Reserve University, which proposed a new design based on Lean principles (Womack and Jones, 2004), emphasizing the DMAIC concept (Define, Measure, Analyze, Improve and Control). This clarified the principles of Lean with a focus on intelligent problem solving, bringing value to

the company, presenting value flow management using pull mechanisms to support material flow in restricted operations, and also with the pursuit of perfection, by reducing all forms of waste in the production system to zero (Womack and Jones, 2004). This evolution can be summarized as the change of the focus on quality, considering the literature of the 1990s, through quality, cost and delivery metrics (end of 1990), to focus on generating value for the company, starting in 2000.

2.1. The relation between value and cost

A critical point of Lean thinking is the focus on value creation. However, this is perceived as a cost reduction, which represents a common critical gap in the understanding of the Lean concept, since there is still a misinterpretation that Lean only means cost reduction when its concept is much broader focus is on efficiency and value generation for companies. Value is generated if waste reduction occurs, reducing losses and activities that do not add value, making the process as efficient as possible, improving the cost to the customer and making the internal processes more productive and with greater satisfaction of the human resources involved in the process. Value generation increases as services or other functionality are added to the product / service that is offered to the customer, which need to make sense to the customer. As examples, we can mention: reduction of the time of delivery and production of differentiated batches without increase of cost. Figure 2 presents the relation between value, cost and reduction of waste.

Figure 2: Diagram in the relation between value, cost and waste reduction



Source: *Lean Framework* –(McGill and Slocum 1993).

Lean Thinking is quite broad, several are the potential applications of this concept. This paper aims to identify, in a systematic way, the opportunities for applying Lean Thinking in the tax area. To that end, the theoretical reference is based on a quick review of the bases of the lean mentality, identifying fundamental elements between the principles and tools proposed by the concept (McGill and Slocum, 1993). Lean Institute (2009) published an article on the application of the Lean in the area of health, presenting excellent results, such as gains in process safety, elimination of various forms of waste, quicker and simpler clinical journeys, reduced queues and increased service agility, generating a better overall experience of the care provided, as well as reducing errors and indirect costs, such as inventory and logistics management. Womack e Jones (1998) were responsible for the popularization of the Lean concept and are the creators of the term Lean Thinking, extending the concepts of Lean Production to the whole company. They extend the concept of Lean Production, applied in the productive environment, to other areas of the organization, whose purpose is to optimize the value chain management from suppliers to customers. Lean thinking brings the vision that it is possible to do more and less with less and less human effort, less equipment, less time and less

space, and at the same time, getting closer to customers by offering what they they want (Womack and Jones, 2004). It changes how the company, or an area of it, focuses on its customers, recognizes their needs and changes rapidly, and the company needs to adapt flexibly to these changes (Ohno, 1997, Dennis, 2008). Studies in the field of Lean Accounting have also advanced in recent years, where financial executives have recognized the need to update their information control and quality tools. Lean Accounting focuses on achieving high standards of performance, quality and productivity, through management practices (Ahakchi et al., 2012). These may include costing according to the flow of value, inventory level tracking techniques, time and quality control in the generation of financial statements and inclusion of non-financial statements (Broshnahan, 2008). Lean Accounting is consistent with the principles of Lean, in order to eliminate overproduction of information, providing it as the customer needs, generating value to stakeholders, eliminating lead time reduction and waste (Maskell, 2006). A survey conducted by PwC in 2013 shows that companies have made significant improvements, such as reducing hours to generate accounting information at 40% to 60% levels, citing improvements, especially in accounting transaction processing, accounting closure, SEC reports, Budget and Forecast process and management reports. Table 4 shows the result determined by PwC, through the research with companies that have adopted Lean Accounting.

Table 4: Hours of reduction in accounting after Lean application

Process	Before	After	Reduction
Balance Sheet	20	8	-60%
Statement of Income	19	9	-53%
Cash Flow	26	17,5	-33%
Equity	14	5,5	-61%
Impairment	75	15	-80%
Liabilities report	57	14	-75%

Source: PWC, Finance transformation: A Lean approach to increase value, 2013

The application of the Lean concept in Business Accounting brings light to the experimental study of the application of this concept also in the tax area, considering the complexity of the Brazilian tax system, which can generate many inefficiencies for the company (Pereira, 2013). A study in Brazil, at FIAT, also showed positive results in the application of the concept of Lean Accounting, where the company already practiced Lean Manufacturing, recording important savings, through the reduction of losses in the production process and optimization of the hours of line workers of production. In Accounting, we applied the concepts for inventory control (inventory levels) and costing system (Pereira 2013). This demonstrates that the Lean Accounting management model can be adapted and incorporated into other areas, such as the Tax Compliance area, which is the proposal of this applied study.

3. METHODOLOGY

3.1. Situation-Problem Analysis and Intervention Proposal

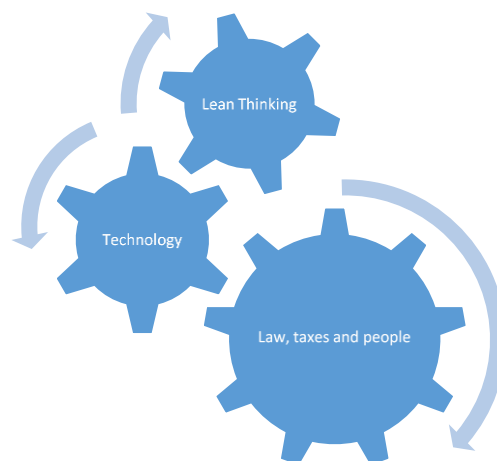
This case study, of a technological nature, proposes the development and implementation of an Applied Tax Compliance Management Model, which is being tested in the Company ABC (the name of the real company was changed), and the monitoring of the indicators used before and after implementation. It is a multinational company, of North American origin, in the segment of consumer products, located in the State of São Paulo, whose accounting and tax model is under the Real Income regime. The company allowed the monitoring of each stage of the development and deployment process, which is described in this research, providing a complete evaluation of the impacts on the environment of the Company and the results obtained, from the identification of fiscal risks and nonconformities until the proposal of solution.

The process was very productive for the company considering the fact that the organization of the tax area was a necessary task, at the same time seeking resource optimization and technological evaluation. The first results obtained are presented in this study and others will be verified later, especially those related to the exchange of systems seeking unification of the tax platform, which is in the planning of the company for timely adoption, considering the necessary investments.

3.2. Lean Thinking

For this study, as already explained, the Womack e Jones (2004), whose Lean Thinking stages are supported on three (3) large project gears: People, Processes and Technology. Thus, the pillars of Lean Tax Management on which this study is based are: people, technology utilization (effort to implement integrated tools, automation and control of tax routines) and continuous process improvement. The gears of Lean Tax Management for the company surveyed are presented in figure 3.

Figure 3: Lean Tax Management



A model built on the basis of Lean Thinking is always evolving - there are always opportunities for cost savings or improvements that make the process more efficient by avoiding mistakes and ensuring high quality in the final product. In this study, the final product is the delivery of ancillary obligations filled in and duly validated, avoiding a fine of default and interest for the company, as well as tax exposure, creating value for the company. Although the concept of Tax Compliance is usually perceived by companies as a cost of compliance, it is important to note that, when activities are carried out with a high level of quality, the Area Cost Avoidance generated by the area is actually an investment for the company. The Lean methodology considers waste as "profit thieves" of the company and, in the case of the tax area, finalized processes without checks and quality generate additional costs, such as rework and hiring consultancies, to correct mistakes, and lawyers, to defend in the case of notifications, generating medium and long-term exposures, without the guarantee of corrections of the current processes. The focus is always the application of best practices, interacting with departments, eliminating waste and generating value to the company (Shook, 2003).

3.3. Principles of Lean Manufacturing that can be extended for application in other processes

Principle 1: Generate value to the customer (company): defining value in a service can be subjective, especially from the perspective of the internal customer. The perception of value also occurs by identifying what is not necessary in the process, or what is rework, or defect; or

unnecessary movement. Separating "customer value" from "waste in the process" not only improves the quality of work, but also reduces costs by eliminating uncritical or disconnected steps from key processes, creating delays, and team discontent;

Principle 2: Mindset for continuous improvement: there are only four reasons for modifying a process: to facilitate, improve, streamline or reduce cost, with priority. The change involves the entire area / organization involved, from the people leading to those who are starting up in the organization. The main tool used in this case study was the "Value Stream Mapping", which will be explored in more detail in this work.

Principle 3: True North: This is a commitment to allocate resources to projects that are considered strategic - the allocation must generate benefits for the area, the company and the team that assists the process, channeling energy in the right way. It is necessary to make clear to all of the organization the benefits of applying the Lean, to generate commitment, being necessary to show the desired results, aligned with the company's strategy. The true north of this study is to ensure good quality of the information provided by the company to the tax authorities, mitigating risks and eliminating waste such as fines and overtime, protecting the legal representatives of the company and the image of the company.

Principle 4: People are important: Designing an efficient process means mitigating mistakes and increasing the quality of the final product / service delivered. In general, process errors occur for a variety of reasons, including human errors caused by the people involved in the process. However, understanding that the error is a consequence of several steps in the process helps to understand the root cause and better train the team for continuous improvement. According to this principle, all employees of the company are important and deserve to receive all the information necessary to perform their work in the best possible way, within a safe environment and positive results should be celebrated, to encourage employees to adopt the principle of improvement to be continued.

Principle 5: Spot management: It proposes that one of the best ways to improve a process, reduce its risks and eliminate its waste is to make problems visible. Identifying the mapped problems and tracking the evolution of the proposed solutions through indicators is another of the pillars of the Lean.

3.4. Interventional Method / Action Research

This case study takes into account the interventionist approach (or Research-Action) that, although recent, has been very adherent to the solution of practical problems in the organizations, applying the knowledge of the artifacts widely studied by the academy with measurement of results. The focus is to generate practical theory to solve the fundamental question of how to improve the work carried out, which allows to advance the knowledge in the researched field and propose improvements through the application of knowledge in a company / object of study (Oyadomari et al., 2012). The Interventionist Research (IVR) has the longitudinal case study approach, with innumerable variations, where the active participation of the researcher is seen as an asset / good for research in the academic world. The researcher intentionally interferes in the decision-making process and seeks alternatives to solve the problem to gain knowledge of the application of the theory, with positive impact for the organization studied (Suomala, Lyly-Yrjänäinen, and Lukka, 2014). The objective in IVR is to make theory and practice go hand in hand, so that the researcher not only analyzes the data, but also takes action on the object searched, generating changes relevant to the organization, bringing new knowledge that will be beneficial for the company (Oyadomari et al., 2012).

The interventionist method emerges as an alternative to the criticism that the academic environment often presents research results that are far from the corporate world, enabling practical applications for solutions to problems faced by corporations. Through this approach, the answers may be relevant, but for this to happen the academy needs to accept the idea that the object of study has an impact on one's studies (Jönsson, 2010). In the Interventionist Survey there is a clear segregation between the concepts "emic" and "etic" (Pike, 1964), where the "emic" or internal point of view refers to the study of human behavior within the organization's system, while the "etic", or external, examines the situation outside the context, the problem of organization. Considering that the interventionist researcher is an active participant ("emic"), in real time, in research, in the field, he is considered part of the team and this acceptance is crucial to the success of the research (Jönsson, 2010). But the researcher also needs to act as an observer of the process ("etic"), always seeking frameworks that can help the organization in the solution of the case, contributing with knowledge from outside the organization, which represents one of the great contributions of the method. Balancing this internal and external view is essential to the success of the research (Suomala, Lyly-Yrjänäinen, and Lukka, 2014). The critical point of the method is the researcher's own intervention, where he interacts with several situations, such as conflicts of interests in the organization and the acceptance of the organization regarding the application of frameworks. The researcher needs to efficiently intercalate the internal and external vision, and the solutions found in the field must be significant and generate knowledge to the academic world, helping other organizations to solve similar problems. Although in Brazil there are still not many studies in the interventionist line, not only in Management Accounting, but also in other areas of study, such as Administration, this type of research should be considered, above all, for the benefits it brings (Oyadomari et al., 2012). Some benefits of this approach can be mentioned:

- The construction of an experiment in the field, generating the opportunity to collect material that would not be available through the traditional methods of research;
- It mitigates the view that academic researchers are not partners in the development of managerial accounting practices, because this approach generates knowledge exchange, besides generating new knowledge, benefiting both academia and the corporate world;
- It contributes to the advancement of the knowledge of the field studied, improving the system as a whole and the life of the community, involving a coordinated effort of the participants who are experiencing the studied problem, both in the academic and in the organizational context, resulting in the generation of knowledge for researchers and practical.

In this case study, the university and the supervisor worked as a balance point, contributing to the external vision of the processes and problems encountered throughout the research development, helping not only with knowledge and orientation regarding the frameworks, but also with possible solutions found during the process.

3.5. Interviews with experts

As the application of the concept of Lean Thinking in the area of Tax Compliance is recent (there was evidence about the absence of articles in academic journals on the subject), it is understood that interviews with specialists become quite relevant, in order to understand, from the point of view of experts, what are the critical points in the management of the Tax Compliance area. This procedure is widely used in education research, where semi-structured interviews are conducted with managers, using a script of questions pre-defined by the researcher, allowing him to approach the themes that will help in understanding the phenomenon studied (Weller and Zardo, 2013).

The expert attribution is given by the fact that the interviewee has a relational status with the topic discussed and not necessarily by the position that occupies. However, it is interesting to seek experts on the subject respected in the market. According Weller e Zardo (2013) define that:

- Creators of a program or concept, which also involves its implementation and control;
- People with privileged access to the information and decision processes of the subject studied.

It was decided to choose specialists who take a central position in the research, because they will contribute with direct opinions on the following context: what they consider ideal in the design of an Applied Model of Tax Conformity Management for large companies that operate in Brazil. The interviews were conducted in person, separately with each interviewee, with open questions, for a total of 12 questions. The questionnaire is presented in the appendix of this study. The interviews were recorded, transcribed and the common points were selected as critics in the management of the Tax Compliance area of the companies. We did not address issues such as the age of the interviewees, only the function and the time of experience. As only members and leaders of organizations were selected, the minimum experience considered was at least 12 years and a maximum of 23 years of career. The goal in this stage is to assess whether the solutions in this case study meet the concerns and recommendations of opinion makers, overcoming the shortcoming of the interventionist approach. For this, two groups of interviewees were considered:

- a) Partners and managers of audit and consulting companies (companies relevant to the market - "Big 4") - three partners were interviewed;
 - b) Leaders of the Tax Compliance area in other companies - 3 professionals were interviewed.
- As a result of the interviews, the points that the experts pointed out as relevant in the implementation of an efficient model of tax governance in the area of Tax Compliance were:
- As a result of the interviews, the points that the experts pointed out as relevant in the implementation of an efficient model of tax governance in the area of Tax Compliance were:
1. Ensuring efficient management of the generation of ancillary obligations and cross-checking of data before shipment;
 2. Massive use of technology as an ally in controlling the high number of accessory obligations to be prepared and sent by the company;
 3. Staff training: specialists in sub-areas, ensuring correct application of current legislation (strong recommendation of segregation between direct and indirect taxes);
 4. Good integration between Compliance and Planning.

The result of the interviews with experts contributed a lot to the construction of the Applied Model of Tax Conformity Management, since all the points mentioned by the interviewees were considered in the elaboration of the model, especially since a similar study of the management model was not found in the literature tax area.

4. DATA ANALYSIS

4.1. Context and Investigated Reality of the Investigated Company

This study had its origin in the need to solve the management challenges of the Tax Compliance area found in the Company of North American origin in the segment of consumer products, present in the country for more than 20 years, taxed under the Profit regime Real, with more than 20 branches, serving all Brazilian states. The general model of organization, segregation of departments and policies applied in the company was based on the model in the matrix, United States, that considered a context of "perfect Tax Compliance Area", through the preparation and delivery of ancillary obligations with quality, in an agile and efficient manner,

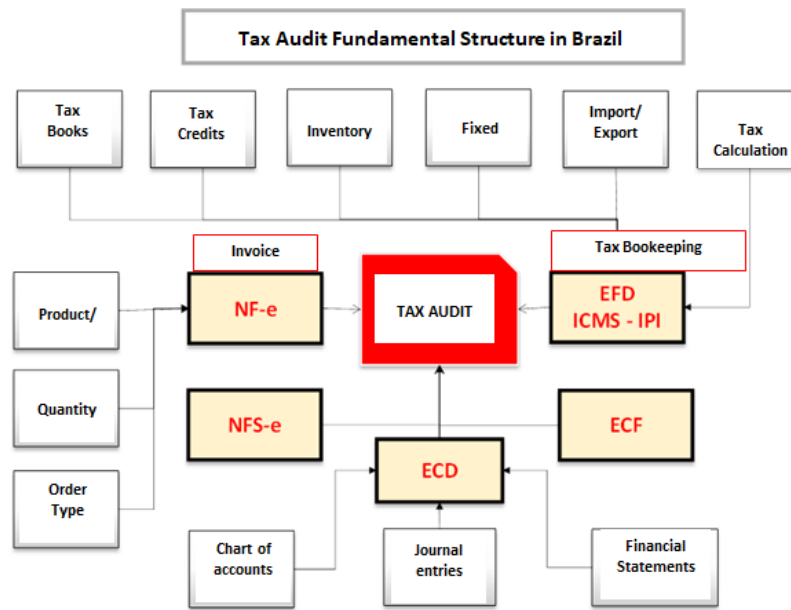
focused on risk mitigation for the internal customer (legal representatives of the Company). The company had a segregation between the Controllershship and Tax areas, which were independently managed. The World Bank and PwC survey (year) points out that there are differences in the relevance of taxes between countries and so we focus on understanding the tax aspects of the US. It was understood that the main difference in relation to Brazil is the inexistence of a complex tax model with respect to the universe of indirect taxes and their respective ancillary obligations, since the greater focus of the tax burden in the USA occurs in direct taxes, especially income tax. This allowed us to understand the origin of the model initially applied in the Company. The main point initially identified was that the Tax Compliance area walked without any commitment to the demands of the Controllershship area, such as accounting reconciliations and IFRS and USGAAP rules, not adequately sharing the decisions made regarding the rules and tax model adopted, impacting business management locally. It was possible to validate this on the basis of the outstanding accounting reconciliations over a long period, as well as in the models adopted in the tax systems not aligned with the company's ERP. However, many of these issues have become relevant to the company due to the accumulated amounts, mainly open reconciliations of ICMS (Tax on operations related to the movement of goods and on services of interstate, intermunicipal and communication services), fulfillment of the obligations of Pis / Pasep (Social Integration and Training Program for Civil Servants) and Cofins (Contribution to Social Security Financing) and differences between the balances recorded in the accounting books, by comparing the incoming invoices and exit and fiscal books, as well as credits calculated by specific regulations, such as CAT Administrative Orders (Tax Administration Coordinator). The company needed to invest in consultancies to prepare credit calculations and its records in fiscal books, and, whenever the past was corrected, it was not possible to guarantee the alteration of the present processes and it returned to the scene of backlogs and delays in the obligations, incurring fines and tax notifications. Finally, the company decided to include the Tax Compliance area in the Controllershship structure. This challenge of managing the area and understanding the processes, as well as organizing them, with the mission to regularize and mitigate the problems encountered, gave rise to this study. As it was observed the lack of a Tax Management vision in the area of Tax Compliance of the Investigated Company, this became the focus of the management, with the objective of identifying the existing risks and methods that guarantee their improvement and mitigation.

4.2. Diagnosis of the Situation-Problem researched company

Faced with a constantly changing fiscal scenario like that of Brazil, efficiently managing the Tax Compliance area is a challenge. In recent years, the amount of information required by legislation has increased considerably, along with the modernization of tax standardization and inspection systems, such as the Integrated Information System for Interstate Operations with Goods and Services (SINTEGRA) and the Public Bookkeeping System (SPED), thus causing major changes in the way taxes are administered in companies (Aguiar, 2016). In view of the multiplicity of taxes existing in Brazil, of the various spheres of government (municipal, state and federal) and the frequent alteration of tax laws and regulations, it is in compliance, which means to comply with laws and regulations, external and internal, in Brazil, it is an arduous task (Aguiar, 2016). The state and federal governments have a basic structure of fiscal audit, as presented in the figure 4.

Figure following on the next page

Figure 4: Basic Structure to Fiscal Auditing



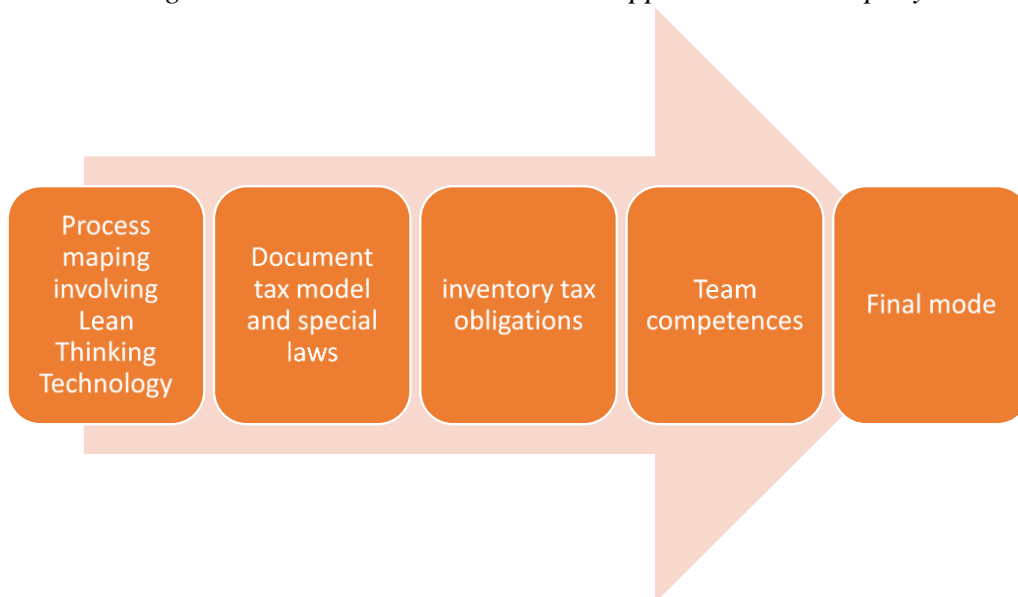
Source: Henrique, 2015

Since the creation of the NF-e (Electronic Invoice) since 2005, the Government has evolved its control and audit system, requiring companies to report all economic-financial transactions, as well as ensuring accuracy in the various statements and layouts implemented (Monteiro, 2014). The legal tax system establishes the legal-tax relationship between the State and the private party, in this study, called the Company ABC, whose responsibility is not limited to the payment of the tax, since it is also subject to other duties such as bookkeeping, filling of the required forms, attendance to supervision among others (Schoueri, 2017).

4.3. Detail of the processes carried out

Considering the gears of the project applied to the Company ABC, figure 5 presents the stages of the work development.

Figure 5: Processes and Procedures applied on the Company ABC



In the case of Lean Tax Management, stock charts are geared to:

- Ensure the preparation and delivery of accessory obligations with quality and accuracy;
- Ensure good governance of data and processes, performing the analysis of the systems involved and potential automation, to ensure greater dedication to data analysis and validation;
- Ensure the qualification of the team, with knowledge exchange and aligned procedures, in addition to its constant updating on laws;
- Use human (people) and technological resources appropriately.

Lean adopts important principles, the focus being on value creation for the shareholder - standardization is an important step because it ensures that all processes are mapped and documented, guaranteeing the efficient "production line", eliminating waste and at the same time dedicating attention to the teams of collaborators, through continuous learning, not centralizing tasks in few individuals. Figure 6 summarizes the principles of the Lean mentality, where the "Value" table refers exactly to the Value Stream Map, since it is the starting point for the application of Lean Thinking, that is, the goal to be achieved.

Figure 6: Lean Thinking principles applied to Lean Tax Management

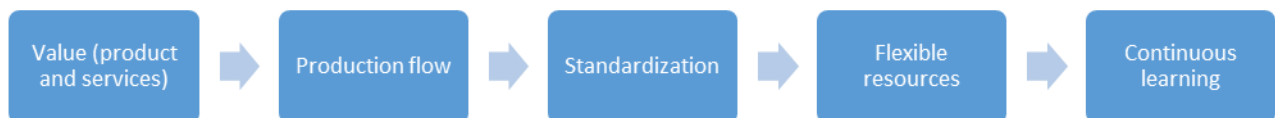
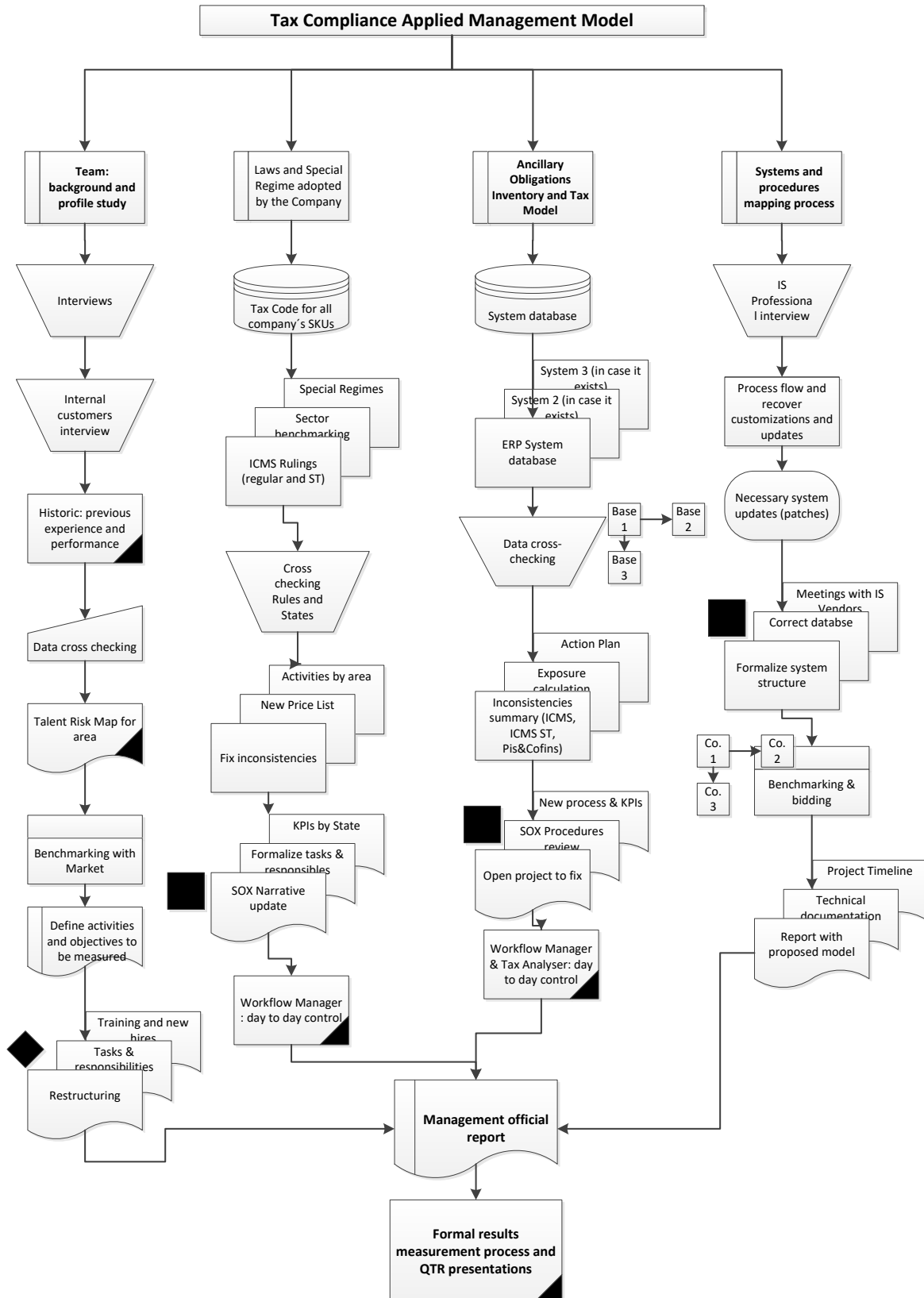


Figure 7 presents the Applied Tax Compliance Management Model, which shows all stages of the process, using elements of the Lean methodology that not only provided the company with the understanding of the current processes as well as provided the basis for the implemented changes. In the chapter on contributions, the Applied Tax Compliance Management Applied model can be used, which can be used in other companies with similar characteristics to the Company.

Figure following on the next page

Figure 7: Applied Model to the Company ABC Tax Compliance



The model presented in figure 7 involves the detailed drawing of each step, which will be presented next. By understanding the current process of each pillar, one can understand gaps and propose improvements that can be tested and validated or reformulated.

The pillars of the model guarantee a complete management model, since they comprise:

- Complete understanding of current systems and procedures, including detailing of possible customizations, systemic updates that comply with the laws and comparison with the technology available in the market and / or good practices in the market;
- Control of ancillary obligations, which includes cross-checking of accuracy data, validation of existing controls and support tools for routine administration of the tax area;
- Control and understanding of the laws and tax systems valid for the company, respecting the segment, products and tax systems negotiated by the company. These tax regimes have expiration date and their control for renewal, or even cancellation, requires procedures and administration;
- People: very important pillar; includes the mapping of the team's competencies, gaps identified in the competencies and risk matrix, for job adequacy and talent retention.
- Value: understand the value of each activity for the company, prioritizing the delivery of what is essential within this concept of value, eliminating waste, that is, anything that does not generate added value or does not interfere in the final quality of the product;
- Value Stream Mapping: Carry out the mapping and analysis of the entire chain, the end to end process that, in the manufacturing process, goes from the raw material to the final product. In the case of the Tax Compliance area, we are dealing with the entry and issuance of each document that has an impact on the registration, calculation of taxes and finally on the preparation and delivery of the accessory obligations of the company;
- Flow: flow production, that is, process design that allows the accomplishment of activities with fluidity, without interruptions, where the processes are aligned and in harmony;
- Production "Pulled": produce only when demanded - in this case, we try to understand each step of the process of the Tax Compliance area and each analyst and stage are only activated when the previous one is implemented, avoiding rework;
- Perfection: it brings the concept of continuous improvement, where we are always questioning the model and analyzing the steps in search of automations and improvements.

5. FINAL CONSIDERATIONS

In relation to the results obtained, the evolution of the seven (7) main performance indicators used during the development of the Applied Model of Tax Compliance Management in the company is presented below, listed below from "a" to "g".

a) Correction of the tax model of the company, evaluation and correction of special negotiated regimes, as well as monitoring of dates and price adjustments: There was important learning at this stage of the project, as there was no clear division of tasks between the experts, nor was there control of the process of systemic changes (changes in taxation in states or SKUs). In the discussion of results are presented the procedures and technological solutions implemented to correct this process failure. The correct application of the tax laws and the control of the special regimes is crucial to guarantee value to the shareholders, through the correct calculation of the main obligation, avoiding exposure of the company with the fiscal authorities of the States.

b) Evolution of the company's tax fines: when the project started, an important step was to identify, through the flow of value, critical steps and improvements that the company would like to achieve. To do so, the mapping allowed the researcher and the company to survey their current situation, as well as the last 5 (five) years, in the case of ancillary obligations. At this stage, fines and interest payments were collected by the company, due to the delay in the delivery of the subsidiary obligations of the parent company and subsidiaries. This survey allowed, above all, the visibility, for the administrators of the company, of a portion of the cost of inefficiency and absence of adequately established processes.

Through the implementation of processes to control the preparation, review and delivery of ancillary obligations of the company, there was a significant reduction in the disbursement for payments of fines and specific interest due to the fulfillment of ancillary obligations. Compared to the first year, considered as the base year to control these variations, the year 2016 showed a reduction of 85% in fines and interest, as presented in Table 5, exclusively for delay in compliance with ancillary obligations within the legal term, representing a cash savings of R\$ 946,000.00.

Table 5: Variation, year by year (YoY) of penalties and interest paid by the Company ABC regarding delays in complying with ancillary obligations

Description	2013	2014	2015	2016	2017
Variation (YoY)		-38%	-16%	-57%	-97%
Penalties and interests		-36%	-73%	-12%	-95%
2016 vs 2013				-85%	

With this economy, the company managed to improve its profitability and the area was able to negotiate the implementation of support management systems for company documents.

c) Control of the delivery of ancillary obligations of indirect taxes of the company: the first step was precisely the lifting of all tax obligations and the potential fine in the delay of compliance with them, as well as the final date of delivery of the digital files, according to with the legislation of each State. This is presented in more detail in the study results step. The company did not have any control over the periodicity of delivery of the digital files and, as this is done on a monthly basis, the mapping prioritized the lifting of divergences, as presented in the chapter on Methodology. However, the starting point was the average delivery of 2015, in order to establish a goal and its evolution. The initial target was 95% of ancillary obligations met in the legal deadline for 2016, so that the target of 100% was feasible as a goal in 2017. Table 6 shows the evolution in compliance with the subsidiary obligations of indirect taxes of the company, in percentage (%), evidencing the quarterly information of the Company ABC being investigated, including the indication that nothing was left after the model implementation.

Table 6: Evolution of the tax compliance on time

Ancillary obligations 2016	Q1	Q2	Q3	Q4
Delayed	33%	12%	4%	3%
On time	67%	88%	96%	97%
Not fulfilled	0%	0%	0%	0%

The Company ABC, through the controls of implemented processes, was able to show a good evolution, especially in comparison to the previous year - the evolution at the end of 2016 was 55% in comparison to the previous year, and the company did not fail to comply with any tax liability, even though it still has a late percentage. The year-end target (95%) was reached as early as the third quarter.

d) Control of disputes with Sefaz - Secretary of the Treasury each state, at the request of the CND (Negative Certificate of Debit) - control of debts and tax debts of the company began in 2016 and is very important, since in some cases are notifications that take a substantial time to have the tax pending settlement, due to judgments in administrative proceedings, and may even be declared by the government as active debts of the company. The Tax Compliance area began to segregate the pending issues between what it was supposed to solve and what needed the

support of the tax planning lawyers of the company. Figure 8 shows this evolution, where the area begins the period with 51 cases and ends 2016 with only 5 (five). Often the settlement of pending issues takes a relevant time for approval by the government of each state, and depends on the level of automation and the type of pending. The evolution of the pending solutions was 90% and this provides greater agility for the company in meeting the requests made to the governments of each state, as well as in mitigating the risks of notifications and audits by the state tax authorities.

Figure 8: Tax Compliance X Tax Planning



e) Automatic integration of invoices of products and services received by the Company ABC: one of the identified problems was the manual inclusion of invoices of services and products purchased by the Researcher (XMLs), since the module of receipts of notes, of the Oracle ERP was not updated and the XML integration tool was also inefficient due to systemic set ups adjustments and procedures adjusted to the areas and suppliers, especially raw materials and industrialized products. We may compare the fourth quarter (Q4), the Company ABC had a total of 58% of the notes automatically received in 2015, and in 2016 this number rose to 77% percentage points. In the year average, 2016 showed an improvement of 21 percentage points in relation to the previous year (2015). Some automations are still being developed, especially in the integration of transportation invoices, for the bookkeeping of Pis and Cofins.

f) Changes / New area design, generating process optimization and reduction of overtime: in this stage the focus was to work on the complete mapping of the team's competences, seeking to understand the history of each employee, as well as their main skills and previous assessments, and benchmarking with the market, in order to identify the best market practices and apply them in the Company ABC.

The mapping of the area involved its design before changes, including positions and activities, as well as the crossing of this design with the benchmarking and risks identified in previous steps. It was identified that few people were responsible for critical processes and that there was no control of activities and monitoring or concern about the development of professionals - they did not receive adequate feedback on the necessary improvements, since the area did not have this control, did not know where to identify the largest gaps in processes and empowerment of people.

In the Company ABC there was no segregation between tax activities and compliance and planning, as already mentioned. When we referred to segregation, there were no teams dedicated to types of taxes, which made it difficult and very much the control and updating of professionals regarding the routines and deliveries of the digital archives of ancillary obligations. After implementing the Applied Tax Compliance Management Model, with the consolidation of activities and use of performance indicators, support tools, employee training and better division of tasks, the area is able to attend to all routines with a total of 13 headcounts, representing a reduction of 18.8% in the size of the area and, consequently, reduction of payroll expenses and overtime. It is worth noting that the Lean methodology seeks, above all, the efficiency in the processes and guarantee of control of the activities for the generation of value to the company. In the case of the Company ABC, there was reduction of headcount due to the lack of organization of the processes and the need to choose quantity versus quality. The reduction of overtime was positive, since it represents an increase in the quality of life of the employees of the Company ABC, who had training to improve and improve the routines under their responsibility. The mission of leadership is to improve processes, ensuring quality, not only in the final product, but also quality of life for employees. Table 7 shows the evolution of the overtime of the area in the Company ABC.

Table 7: Evolution of the Extra-Hours paid for the employees

Year	2014	2015	2016	April/2016	April/2017
Extra-Hours	112.886,24	104.524,30	86.104,75	39.646,93	28.456,00
Variation		-0,07	-0,18		-0,28
Economy			-18.419,55		-11.190,93

It is important to mention that the tax area has not lost any talent since then, since meritocracy was applied. Employees who were previously not properly utilized, were even promoted, assuming positions of leadership in the area. In short, with the use of the model and consequently the new design of the area, the team was able to show quality improvement in the delivery of the final product, with a better organizational climate, where the main products delivered are:

- Correct reception of approximately 17,000 notes / year (average of 1,400 / month);
- Issuance of approximately 10,000 transfer notes / year (average of 830 / month);
- Preparation and delivery of digital files of 2,700 ancillary obligations / year (average of 225 / month).

g) Implementation of tools to assist in the control and effectiveness of Workflow Manager and Tax Analyzer activities. In this stage, we sought to identify technological artifacts in the market that could assist in the daily management of the Tax Compliance area, from two perspectives:

- g.1) Control of the tax agenda and activities of each member of the area, considering the complexity in number of establishments and necessary revisions in the preparation, revision and delivery of the principal and accessory obligations of indirect taxes of the Company ABC. This was fundamental because this control of dates, by state and by fiscal obligation, as well as the defined step-by-step and its due monitoring, guarantees the efficiency in the process and supports not only the management but also the employees in the performance of their daily activities;
- g.2) Analysis of the information of the tax obligations generated, before sending them to the tax authorities - there are more than 7,000 possible cross-references of ancillary obligations. The proper conference, in an automated way, facilitates the work of the correction before sending, guaranteeing security and mitigating risks for the company.

The implementation of support tools, the correction and automation of processes helped the team of collaborators in the performance of their tax routines, causing it to devote more time to analysis, something that was not previously possible, the number of manual processes and without division that the Company ABC.

6. CONTRIBUTIONS

The purpose of this study was to develop an Applied Tax Compliance Management Model for the company, mitigating fiscal risks in relation to compliance with its ancillary tax obligations.

6.1. Contributions to professional practice

The contribution to professional practice lies in the innovation in applying the concepts of Lean Thinking in the tax area, contributing to the company reduce fines and charges on delays and / or failures in the process of preparation and fulfillment of ancillary tax obligations, as well as eliminating waste, bringing the concept of "efficient production line" to the tax universe. As a result of this study, an Applied Tax Compliance Management Model was developed for the Company ABC, focused on the control of the activities and profile design of the professionals for the area that, although it was directed to a specific company, can contribute with other companies in general, in view of the similarity of the ancillary obligations and standards established by the Government - being able to contribute as benchmarking of good Tax Management practices. Contributions generated at each stage of the study - professional practice can be observed at each stage of the project brought contributions, as described below: Mapping: at this stage, the managers of the Company ABC were able to understand the entire process involved in the procedures for receipt of goods until the end of the subsidiary obligations of the parent company and its 19 branches in the country. The mapping ranged from the entry of an invoice for the purchase of goods or services, the issuance of invoices series 1 and 2 (sales, transfers and other exits), its registration in the fiscal book, the determination of taxes, forms (tax returns) until the completion of ancillary obligations. Written procedures and flow diagrams of the process were prepared, identifying the average time invested in each step. The mapping contributed to a clear view of the process gaps and identification of which steps took more time to accomplish what was needed, as well as where inefficiencies and rework were. In some cases, the mapping has already generated benefits in reducing hours precisely by correcting basic routines, as happened with the issue of invoices series 2 for return processes, where the system was corrected to load original information of the notes, avoiding errors and rework. It was also the basis for the elaboration of SOX procedures, since until then the tax area was not in scope. Design of the new tax area process: through the detailed mapping it was possible to understand the current scenario and redesign the process of issuing or receiving invoices until the completion of ancillary obligations, seeking to mitigate the gaps found and increasing the efficiency of the area, through division between labor cells and taxes (direct and indirect). This is the phase where the contribution of the Lean concept is shown, since an area was designed applying automation and resources, seeking efficiency in the generation of information, quality in the processing and sending of data to the government and elaboration of performance indicators, with management. The management in sight, in the Lean concept, deals with the importance of an effective management, capable of integrating all work teams towards the same objectives, through a reliable and transparent communication. Through it, relevant information is made available to employees and managers, allowing the monitoring of area indicators, project status and trends, for example. This possibility of visualizing the updated data in a broad way favors the making of sound decisions, minimizing problems and losses. It is important to realize that demand management needs clear and easy-to-understand visual

standards so that the correct interpretation of information is assured. The adoption of cash management in the tax area can bring many benefits, such as:

- Constant updating of data: this allows an accurate view of what is happening in the area and even the company, as well as what are the critical processes, positive and negative trends and control points. In this case study, the tax indicators are in the chosen system that is updated in real time, a system called WorkFlow Manager.
- Monitoring the results and performance of the teams themselves by the employees, understanding the importance of the work and dedication of all to achieve goals and also overcome challenges;
- Making decisions based on information and facts, eliminating risks related to lack of knowledge. In this way, the decision-making process gains tools that guarantee greater efficiency;
- Mitigation of negative impacts: with the analysis of indicators trends and their variables. It is possible to act in the correction of deviations, adjustments of processes, failures in the operation and, thus, to mitigate the negative impacts, in the case of taxes, fines or other penalties provided by law.

The contribution in this phase was the correction, with prioritization by region, of all errors in filling out forms and tax payments to the Brazilian Government, avoiding errors and impacts to the business, as a ban on the marketing of products in any state where the company is present. It also made the process clear to shareholders and legal representatives of the company, bringing to light the importance of developing a management process in this area, as well as automation and more integrated processes, considering that until then the company worked with several systems parallel to the ERP, including legacy systems. The company still obtained savings in fines, since, in some cases, the company reduced the notice through spontaneous denunciation.

6.2. Contributions to the scientific / academic area

The contribution to the scientific area is in the development of an interventionist study, applying already consolidated academic frameworks, in the management of the tax area, a concept still little explored. One can affirm this based on the cataloging of academic journals presented in this work, which shows that there is still a gap to be explored. Given this gap, as a contribution, a series of interviews were conducted with tax specialists, formed exclusively by consulting partners of the Big4 group and leaders of the tax areas of large companies, which made it possible to understand the main points to be considered for an efficient management of the tax area, being crucial for the design of the Applied Model of Tax Conformity Management presented in this study.

As a result of the interviews with experts, the main points pointed out as relevant in an efficient management of the tax area in Brazil are:

- Ensuring an efficient management of the control of the ancillary obligations generation and the crossing of data before sending - the experts explained that, in the face of the advance of fiscal intelligence, where the treasury has a greater capacity for crossing information, in their opinion, most companies failed to ensure correct control and cross-checking of data prior to the sending of ancillary tax obligations, generating much rework and subsequent fines and problems for companies;
- Massive use of technology as an ally in the control of the high number of accessory obligations to be prepared and sent by the company - specialists have brought here the need to update management on the tools available in the market, so that results can be maximized, avoiding errors and manual controls. At this point, they emphasized that the manager of the tax area, increasingly, needs to present systemic knowledge and that, in their view, this is an important differential;

- Staff training: specialists in subareas, ensuring correct application of current legislation (strong recommendation of segregation between direct and indirect taxes) - laws and tax rules are complex in Brazil and, according to experts, it is an illusion to understand that a professional can specialize in direct and indirect taxes. Professionals in this area need to seek constant updating and direct and indirect taxes have different rules and models. The good training of professionals, according to their opinion, in the area of Compliance is insufficient for the reality presented by the Government and fiscal requirements. In general, the best professionals prefer to migrate to the planning area, because Compliance is considered to be more operational;
- Good integration between Compliance and Planning - the experts pointed out that the company often invests in tax planning studies, but misses the execution / implementation, due to the lack of integration of the areas, generating risks and exposure to the companies.

Finally, as a result of this study, the company was able to identify and improve its processes, measured through indicators, as well as implemented an Applied Tax Compliance Management Model. Considering that benchmarking and interviews with experts were used during the process of model development, it is believed that it may be suitable for other companies with similar characteristics, and used in future studies. This study aimed to contribute to the management of the tax area in the companies, through the development of a study of technological and interventionist nature, applying the Lean Thinking framework, resulting in an Applied Model of Tax Conformity Management, focused on the control of activities, automation and profile design of the professionals to the area that, although it was directed to a specific company, also generated a suitable model, that can contribute with other companies in general, considering the similarity of the accessory obligations and standards established by the Government. Indeed, the paper may also be useful to the scientific community, through the insights identified in the interviews with specialists and the use of the interventionist approach, thus, transferring knowledge to society, the mission of the Professional Masters.

LITERATURE:

1. Aguiar, Luciana Ibiapina Lira. 2016. *Governança Corporativa Tributária - Aspectos Essenciais*. 1st ed. ed. PwC/FGV/Quartier Latin. São Paulo: Latin, PwC/FGV/Quartier.
2. Ahakchi, Roya, Rana Ahakchi, Batol Sattari Yangjeh, and Mansour Alilou. 2012. "Lean Accounting, Adaptation Tool Lean Thinking and Lean Production." *World Applied Sciences Journal*.
3. Bertolucci, Aldo Vincenzo. 2001. "Uma Contribuição ao Estudo da Incidência dos Custos de Conformidade às Leis e Disposições Tributárias: Um Panorama Mundial e Pesquisa dos Custos das Companhias de Capital Aberto no Brasil." : 178.
4. Brasil), Government Tax Bureau (Receita Federal do. 2017. "Receita Federal do Brasil (Brazilian Official Tax Bureau)."
5. Broshnahan, J. P. 2008. "Unleash the Power of Lean Accounting". *Journal of Accountancy* (July): 60-66.
6. Candido, Rafael Monteiro, Michele da Trindade Ferreira Machado e Silva, and Rodrigo Figueira Zuhlke. 2008. "Implantação de Gestão Por Processos: Estudos de Caso Numa Gerência de Um Centro de Pesquisas." *Xxviii Encontro Nacional De Engenharia De Produção*. (i): 1-11.
7. Compliance, Tax, Costs Measurement, Policy De Cedric Sandford, and Cedric Sandford. 2017. "Tax Compliance Costs : Measurement And Policy by C . T Sandford Institute for Fiscal Studies (Great Britain)." (1935).
8. Dennis, Pascal. 2008. *Lean Production Simplified A Plain-Language Guide to the World's Most Powerful Production System*. ed. Bookman. Bookman.

9. Enoki, Cesar Hidetoshi. 2006. "Gestão de Processos de Negócio: Uma Contribuição Para a Avaliação de Soluções de Business Process Management (BPM) Sob a Ótica Da Estratégia de Operações." *Escola Politécnica da Universidade de São Paulo*: 213.
10. Fullerton, Rosemary R., Frances A. Kennedy, and Sally K. Widener. 2013. "Management Accounting and Control Practices in a Lean Manufacturing Environment." *Accounting, Organizations and Society* 38(1): 50–71.
11. Henderson. 2005. "Tax, Risk and Corporate Governance."
12. Henrique, Manoel de Almeida. 2015. "Auditoria Fiscal: Conformidade x Evasão." *I Workshop de Contabilidade e Tributação* 1: 1–25.
13. Jönsson, Sten. 2010. "Interventionism – an Approach for the Future?" *Emerald Group Publishing Limited*.
14. Katayama, Hiroshi, and David Bennett. 1999. "Agility, Adaptability and Leanness: A Comparison of Concepts and a Study of Practice." *International Journal of Production Economics* 60: 43–51.
15. Kazuo, Roberto, and Silvio Hiroshi Nakao. 2012. "Riscos de Conformidade Tributária: Um Estudo de Caso No Estado de São Paulo." *Revista de Contabilidade e Organizações* 6(14): 46–76.
16. Lean Institute Brasil. 2009. Os 5 princípios do Lean Thinking. Available at: <www.lean.org.br>.
17. Martinho, Gabriel Bassetti, and Roberto Gilioli Rotondaro. 2009. "Processos Em Empresa Do Setor De Varejo De Supermercados :." *Encontro Nacional de Engenharia de Produção*.
18. Maskell, Bh. 2006. "Lean Accounting: What s It All About?" *TWG Finance Magazine* 22(1): 35–43.
19. McGill, Michael E., and John W. Slocum. 1993. "Unlearning the Organization." *Organizational Dynamics* 22(2): 67–79.
20. Monden, Yasuhiro. 2015. *Sistema Toyota de Produção - Uma Abordagem Integrada Ao Just-In-Time - 4ª Ed. 2015*. 4a. ed. bookman.
21. Monteiro, Augusto De Oliveira;e Helder Uzeda. 2014. "Gestão De Tributos E Governança Corporativa No Setor De Petróleo : O Caso da Petrobras Taxes Management and Corporate Governance at the Oil Sector : The Case of Petrobras." *Gestão e Planejamento Salvador*, v15 1: 466–86.
22. OECD, Relatórios Econômicos OCDE: Brasil, 2018. Accessed at: <https://www.oecd.org/eco/surveys/Brazil-2018-OECD-economic-survey-overview-Portuguese>.
23. Ohno, Taiichi. 1997. *O Sistema Toyota de Produção. Além Da Produção Em Larga Escala*. ed. BOOKMAN. USA: BOOKMAN.
24. O'shaughnessy, Denise Bowen, "Tax Compliance Determinants: A Proposed Model For Cross-Country Analysis" (2014). Open Access Theses & Dissertations. 1315.
25. Oyadomari, José Carlos Tiomatsu et al. 2012. "Pesquisa Intervencionista: Análise Dos Estudos Empíricos Internacionais Em Gestão Estratégica de Custos." *Enfoque: Reflexão Contábil* 31(2): 63–74.
26. Pereira, Tiago Nascimento Borges Slavov; Ana Cristina de Faria; Luiz Carlos Di Serio; Antonio Nunes. 2013. "Lean Accounting in Automotive Industry : The Case of Fiat." *Produção* 29: 88–103.
27. Pike, Kenneth L. 1964. *Language in Relation to a Unified Theory of the Structure of Human Behavior (Janua Linguarum; Series Maior)*. 24TH ed. ed. 1967) De Gruyter Mouton; Reprint edition (April 1. De Gruyter Mouton; Reprint edition (April 1, 1967).
28. Plesko, GA. 2004. "Corporate Tax Avoidance and the Properties of Corporate Earnings." *National Tax Journal* 57(3): 729–37.
29. Portal Tributário. 2017. "Portal Tributário." <http://www.portaltributario.com.br/>.

30. Porter, Michael E. 2007. *Estratégia Competitiva Técnicas Para Análise de Indústrias e Da Concorrência*. 2. ed. Campus.
31. PWC, and World Bank Group. 2015. "Predictions and Insights." (June).
32. Sandford, Cedric. *Tax Compliance Costs: Measurement and Policy*. Birmingham, United Kingdom,. Fiscal Publications. 1995.
33. Sandras, W, 1989. "Just-in-Time: Making It Happen: Unleashing the Power of Continuous Improvement 1st Edition.". Wiley; 1st edition.
34. Santos, Roberto Vatan dos. 2010. "Evidências de Lean Accounting Em Empresas Enxutas : Um Estudo de Caso Exploratório." *Congresso Brasileiro de Custos* (2006).
35. Schonberger, Richard. 1982. *Japanese Manufacturing Techniques: Nine Hidden Lessons in Simplicity*.
36. Schoueri, Luiz Eduardo. 2017. *Direito Tributário*. 8A. ed. Saraiva.
37. Shingo, Shigeo. 1996. *O Sistema Toyota de Produção: Do Ponto de Vista Da Engenharia de Produção*. ed. Bookman. USA: Bookman.
38. Shook, Mike Rother; John. 2003. *Aprendendo a Enxergar: Mapeando o Fluxo de Valor Para Agregar Valor e Eliminar o Desperdício*. 1.3. The Lean Enterprise Institute.
39. Suomala, Petri, Jouni Lyly-Yrjänäinen, and Kari Lukka. 2014. "Battlefield around Interventions: A Reflective Analysis of Conducting Interventionist Research in Management Accounting." *Management Accounting Research* 25(4): 304–14.
40. Svensson, Göran. 2004. "Interactive Service Quality in Service Encounters: Empirical Illustration and Models." *Managing Service Quality: An International Journal* 14(4): 278–87.
41. The World Bank. Doing Business 2018. Accessed: 22/01/2019. Available at: <http://portugues.doingbusiness.org/pt/data/exploretopics/paying-taxes>.
42. Torres Júnior, Alvaír Silveira. 2010. "Metadecisão No Modelo de Gestão Toyotista." *RAM. Revista de Administração Mackenzie (Online)* 11(6): 6–30.
43. Weller, Wivian, and Sinara Pollom Zardo. 2013. "Entrevista Narrativa Com Especialistas: Aportes Metodológicos e Exemplificação." *Revista da FAEBA – Educação e Contemporaneidade* 22(40): 131–43.
44. Wicks, Patricia Gayá, and Peter Reason. 2009. "Living inquiry: personal , political and philosophical groundings for action. University of Exeter Discussion Papers in Management Paper Number 06 / 05 ISSN 1472-2939." : 1–31.
45. William A. Sandras. 1989. "Just-in-Time: Making It Happen: Unleashing the Power of Continuous Improvement 1st Edition."
46. Womack, James P., and Daniel T. Jones. 2004. *A Máquina Que Mudou o Mundo - Nova Edição (Cód: 154340)*. ed. Campus. USA: Campus.

DIGITAL TRANSFORMATION - THE IMPLEMENTATION PROCESS IN THE CASE OF THE CROATIAN CHAMBER OF ECONOMY (CCE)

Tomislav Rados

*The Croatian Chamber of Economy, Croatia
trados@hgk.hr*

Sanja Simic

*The Croatian Chamber of Economy, Croatia
ssimic@hgk.hr*

Petar Misevic

*Assistant professor at University North, Varaždin, Croatia
pmisevic@unin.hr*

ABSTRACT

The term digital transformation means structural changes in an organization with the help of modern digital technologies and their integration into all areas of business by applying new business models. The main goal of digital transformation is to adapt more quickly to high-frequency change in the environment while maintaining and improving business competitiveness. While there is a clear understanding in the global market that digital transformation is not a matter of choice but a necessity, most companies in Croatia have not yet defined digital transformation as a strategic benchmark, but mainly use the digitalization of existing processes and / or raise the level of technical and technological equipment as a defensive strategy for retention of the existing market position or for survival on the market. The Croatian Chamber of Economy, as the umbrella institution of the Croatian economy, very clearly understands its role in raising awareness of the need for both its own digital transformation and the digital transformation of economic operators. Therefore, the Digital Chamber project was launched, which is an information and communication platform for businesses, public administration, and citizens. The main objectives of this project are the establishment of a management model and application-data infrastructure, digitalization of public services and internal business processes to support work with the CCE members, with the design and formation of new e-services to increase the competitiveness of the Croatian economy, in line with the e-Croatia 2020 strategy. It will modernize the organization and further strengthen human resources. A prerequisite for the implementation of the digital transformation process is the drafting of a development strategy that defines the vision, mission and strategic goals of the organization, proposes activities and tools, and an appropriate organizational structure to achieve the strategic goals. The Chamber's experiences from its own digital transformation process, preceded by the process of drafting a development strategy, apply in the context of professional support to Croatian businessmen across all implementation segments, taking into account the similarities of problems and challenges encountered during the process as well as the specificities of individual industries. Upon completion of the project, the Chamber will achieve greater efficiency with better utilization of its own human resources through more flexible and effective communication with members, which will, in the long run, contribute to strengthening the institutional position.

Keywords: digital transformation, development strategy, digital chamber, E-platform, E-services, competitiveness

1. INTRODUCTION

The world we live in is changing exponentially, with technology and digitalization affecting all industries and business functions. In business terms, this involves changing the foundations of every organization with the use of digital technologies, aimed at adopting better business models, which ultimately contributes to the creation of an innovative and agile corporate culture. A lot of emphases is placed on information and communication technology because of the impact it has on accelerated social development, and it covers the areas of research, development, implementation and management of information systems. Modern information systems provide quick and selective access to relevant information, which is direct and qualitative support in the managerial decision-making process. However, it should be emphasized that the digital transformation process is much more about the introduction of digital practices and technologies. The process of digital transformation involves optimizing the business and organizational efficiency, along with changing the business models, ways of communicating with service users and the target public and changing organizational culture. There are no pre-made models and patterns, but each organization adapts them to their needs and capabilities, taking into account trends in the environment and anticipating future ones. Therefore, the digital transformation process is a great challenge for every business entity and institution, but also imperative if it is to ensure the long-term sustainability of the business.

2. DIGITAL ECONOMY AND DIGITAL TRANSFORMATION

"The term digital economy serves as an umbrella term to denote new business models, products, services, markets and fast-growing sectors of the economy, especially those based on digital technologies as the core business infrastructure."¹ It is based on intensive application of information and communication technologies in business, which implies radical changes in the understanding of all business resources. In simpler terms, it is a new form of digital-based economy characterized by continuity of development. "In scientific and professional literature, terms such as Post-Industrial Economy, Information Economy, Knowledge Economy, Internet or Web Economy, Virtual Economy, New Economy, etc. are also used."² The first wave of digital transformation has made possible the "five key, i.e. primary digital technologies that shape the digital economy, namely: mobile technologies, social networks, cloud computing, the big data, that is, advanced data analytics and the rapid discovery of knowledge from the vast array of disparate data (Big Data) and the Internet of Things (IoT)."³ The new wave of transformation is arriving under the influence of the fourth industrial revolution's technologies (Industry 4.0), therefore, "in addition to the basic, secondary digital technologies are often used, such as 3D printers, robotics, drones, wearable technology, virtual and augmented reality, AI – Artificial Intelligence - and many others that provide a number of innovative services and applications."⁴ Modern technologies are shaping the digital economy and enabling the creation of new disruptive business models and new ways of interacting, which has not existed in the past. "One of the most important features of digitalization is the ability to transform, or change the way we do business and create brand new digital business models that fundamentally change the way business processes are carried out in an industry."⁵ Just as Adam Smith, in his day, had built economy on the foundations laid down by Newton and Bacon, now is the time to lay new foundations for the economy, based on a new paradigm."⁶ "Business models in the traditional economy have followed the logic of linear value creation between the supply and demand sides.

¹ Spremić, M., *Digitalna transformacija poslovanja*, Ekonomski fakultet, Zagreb, 2017., page 20.

² Kolaković, M., *Virtualna ekonomija, Strategija*, 2010., page 7.

³ Spremić, M., op. cit., page 21.

⁴ Ibidem

⁵ Ibidem, page 38.

⁶ Pulić, A., *Elementi informacijske ekonomije*, Bureau for Education and Organization "Birotehnika" in cooperation with the Faculty of Law in Zagreb, Zagreb, 1992., page 16.

They have more or less consistently followed production phases or normal business process phases that were linear and sequential and, as such, supported the static and rarely changing market conditions. In a new economy, such concepts are unsustainable, and their dynamics and restructuring are indispensable."⁷ "The business models of the new economy are network-based, i.e. based on an open global computer network through which partners can conduct business operations quickly and cost-effectively."⁸ The expansion of digital economy helps businesses, especially the smaller ones that are also more flexible in the process of transforming their operations, to find the opportunity for growth by reaching distant markets and more clients in real-time. "Today's businesses are increasingly replacing their physical presence with the virtual, which helps them overcome obstacles such as geographical distance and time zones. Business virtualization is emerging as a result of the need for the new know-how and the information and communication technology."⁹ The most valuable commodity of today is a timely, high-quality and accessible information, and it is also a key element of economic development. In order for businesses to successfully operate, but also to survive in globally competitive markets, it is necessary to apply modern information and communication technologies in order to ensure competitiveness and long-term sustainability. Otherwise, they can face the challenges which are faced by the entire industry as new players enter the market.

2.1. Digital economy and society

The digital economy is one of the most important features for the future of society. Basic assumptions for the development of the digital society have just been launched in Croatia, certain parts of solutions and technologies have been developed and implemented for years and have not significantly contributed to the development of a platform for building a digital economy. It is a job that seeks unity and joint engagement of various structures, ranging from the state institutions and city governments, through the scientific community to economic operators. The common interest is the integration of digital technologies for the purpose of better connectivity and utilization of human capital, as well as improvement of public services. The current indicators are shown in Figure 1. According to the Digital Economy and Society Index (DESI¹⁰) for 2019, which measures and compares Member States' progress, Croatia is ranked 20th out of 28 Member States of the European Union (EU).

Figure following on the next page

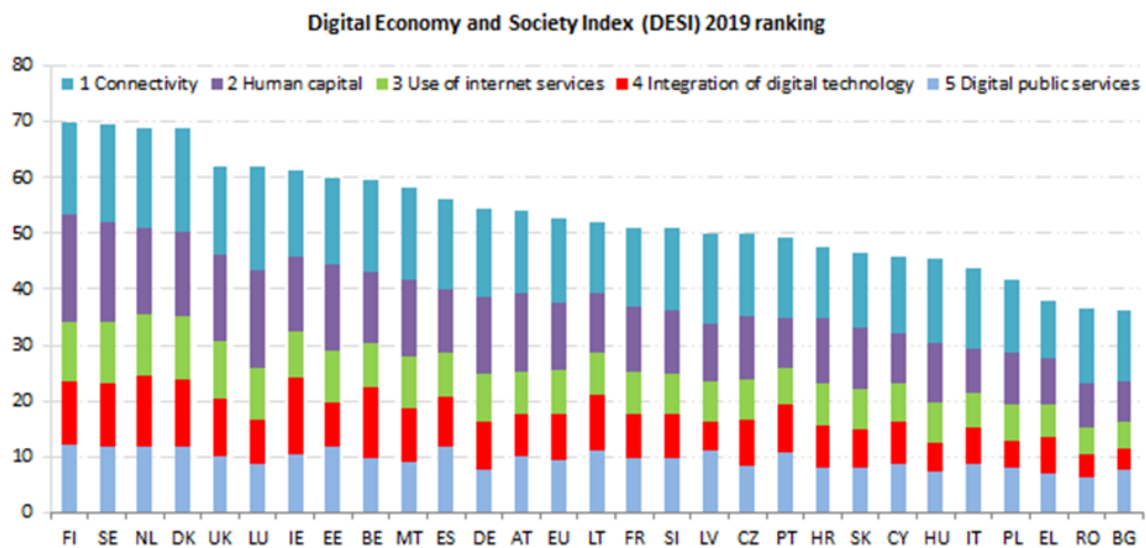
⁷ Srića, V., Spremić, M., *Informacijskom tehnologijom do poslovnog uspjeha*, Sinergija, Zagreb, 2000., pages 175-177.

⁸ Spremić, M., *Menadžment i elektroničko poslovanje*, Official Gazette Zagreb, 2004., pages 16-17.

⁹ Kolaković, M. (2005). *Novi poslovni modeli u virtualnoj ekonomiji i njihov utjecaj na promjene u transportnoj logistici i upravljanju lancem opskrbe. Proceedings of the Faculty of Economics and Business in Zagreb*, 3 (1), page 197. (Uploaded from: <https://hrcak.srce.hr/26221>, 09 October 2019)

¹⁰ The Digital Economy and Society Index (DESI) is a complex index that measures digital progress based on five indicators: 1. Connectivity, 2. Human capital, 3. Use of internet services, 4. Integration of digital technology, 5. Digital public services. More about the DESI Indeks can be found at the following link: <https://ec.europa.eu/digital-single-market/en/desi>, accessed on 10 October 2019.

Figure 1: DESI Digital Economy and Society Index for 2019



Source: European Commission, 2019, <https://ec.europa.eu/digital-single-market/en/desi>, accessed on 10 October 2019

Good results have been achieved in the area of broadband Internet coverage, and the results in terms of 4G network coverage have improved. Weaker results remain in the area of connectivity, while progress has been made in the categories of internet use and digital public services. Out of all categories, Croatia has achieved the best results in the human capital category and is ranked eighth in terms of the share of ICT graduates. "Croatian companies and the public sector are lagging, first and foremost, in understanding the importance of new technologies as a generator of economic growth and employment, and also in introducing these technologies."¹¹ It is encouraging that in recent years, digital solutions such as communication and services platform for citizens (e-Citizens), NIAS National Identification System or platform for organization and management of data in the state administration (State Information Infrastructure) have emerged. These platforms will enable further development of increasingly complex services and open up the possibility of using digital data, services, and activities in building a digital economy and increased competitiveness in the domestic and foreign markets. The recently launched project of the Shared Services Center (CDU) is in support of this. It will unify the functionalities of all state authorities and institutions and contribute to the digitalization of public administration. "We are going to create a country cloud with this project. That country cloud has five fundamental goals. The first is to standardize digital services, the second is better database connectivity across all government bodies, the third is to make the entire information and communication infrastructure system more affordable, i.e. cheaper, the fourth is to make sure that all the stored data is more secure, and the fifth is that it is going to be managed centrally."¹² "In principle, Croatia needs start-ups that are finding a 'global market in the local framework' in the development phase and are looking for innovative ways to offer their products or services. These companies need to have an elaborate business idea, create a business model, a product prototype or even a functional product itself, and gain knowledge

¹¹ Boban, M. i Babić, A. (2014). Utjecaj internetskih tehnologija na gospodarski rast, poslovni rezultat i stopu rasta profita poduzeća u Republici Hrvatskoj. *Proceedings of the Polytechnic of Šibenik*, (1-2/2014), page 69. Uploaded from: https://financedocbox.com/Finacial_News/78710388-Utjecaj-internetskih-tehnologija-na-gospodarski-rast-poslovni-rezultat-i-stopu-rasta-profita-poduzeca-u-republici-hrvatskoj.html 10 October 2019.

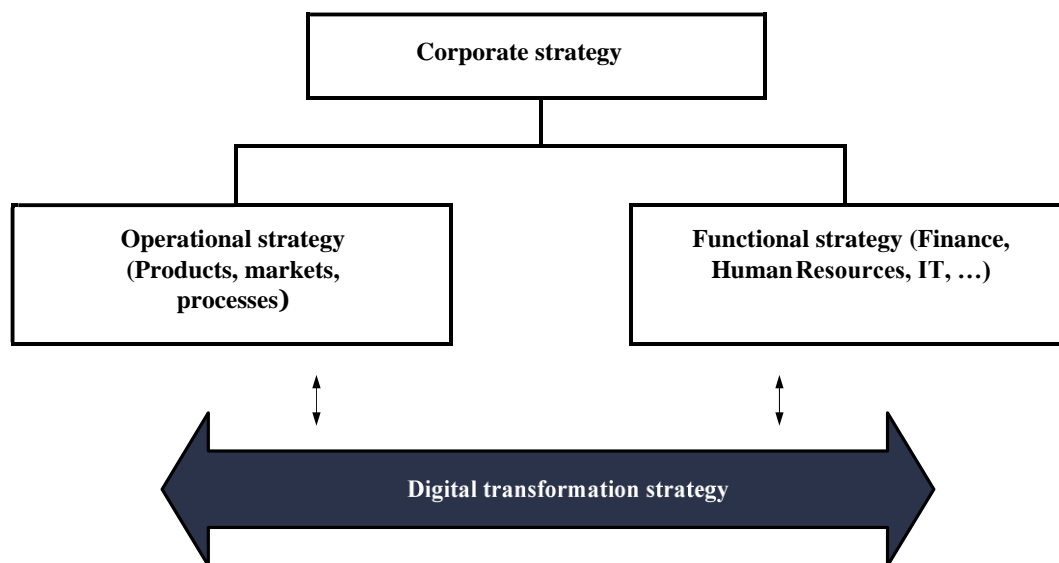
¹² <https://vlada.gov.hr/vijesti/centar-dijeljenih-usluga-pridonosi-digitalizaciji-javne-uprave-kako-bi-ona-bila-bolji-servis-građanima-i-poduzetnicima/26001>, accessed on 11 October 2019.

and experience in managing business risks."¹³ Global competitiveness and connectivity with other market players is a major determinant of the digital economy, and the digital economy is the basis for society's competitiveness and success. All of the above implies the active involvement of the Croatian Chamber of Economy in the development of a society and national economy based on the digital economy, which will be reflected in the process of our own digital transformation and creation of preconditions for a faster, more functional, simpler and more flexible functioning. This is being achieved through the Digital Chamber project, implemented by the CCE and offering new digital products and services for more comprehensive and higher quality support to its members, assistance in accelerating business flows and increasing the competitiveness of the entire economy.

2.2. The basic determinants of the digital transformation process

In recent years, businessmen from almost every branch have undertaken several initiatives to explore digital technologies and make use of their advantages. It needs to be emphasized that it often includes transformations of major business processes, organizational structure, and management concept. In order to manage complex transformation processes, it is necessary to establish positive management practices and develop a digital transformation strategy, which is a central concept for integrating coordination, prioritization and implementation of the overall digital transformation process.

Figure 2: Relation between digital transformation strategy and other corporate strategies



Source: Matt, C.; Hess, T.; Benlian, A. (2015): *Digital Transformation Strategies, Business and In-formation Systems Engineering*

The Digital Transformation Strategy assists in managing the transformations resulting from the integration of digital technologies, as well as in their work after the transformation process itself. The authors Matt, Hess and Benlian¹⁴ point out that with all the existing research efforts and challenges arising from the practice, businesses still lack clear guidelines on how to formulate, implement and evaluate digital transformation strategies.

¹³ Merkaš, Z. (2018). Rizici globalnog poslovnog okruženja – izazovi prve četvrtine 21. stoljeća. *Proceedings of the Libertas University*, 3 (3), page 104. Uploaded from <https://hrcak.srce.hr/195846>, accessed on 11 October 2019

¹⁴ Matt, C.; Hess, T.; Benlian, A. (2015): *Digital Transformation Strategies, Business and In-formation Systems Engineering*, 57(5), 339–343, <http://link.springer.com/article/10.1007/s12599-015-0401-5>.

Results of research undertaken by the company Apsolon¹⁵ in Croatia for 300 Croatian businesses shows that there is a great deal of misunderstanding of the concept of digital transformation and the lack of a strategy for its implementation. 84% of those surveyed believe that digital transformation is about digitizing the existing business model and business process, while only 3% of those surveyed are the most important topics on the priority list. 47% of those surveyed define the state of digitalization of the Croatian economy as weak and 12% as very bad, while only 15% have developed a digital transformation strategy. In order to improve the digital readiness level, it is necessary to enhance educational activities, work to recognize the importance of processes at all levels of management, devise a digital strategy that will guide the process and organization, and link the process of management to the highest levels of management.

3. DIGITAL CHAMBER – A DIGITAL TRANSFORMATION PROCESS OF THE CCE

The Croatian Chamber of Economy, through its "Digital Chamber" project, will enhance its services to its members through a faster and easier digitalization of their own businesses. The project is in line with the Digital Europe 2020 Development Plan and the e-Croatia Strategy and seeks to respond to the increasingly dynamic market needs and position CCE as the key and central place to support the Croatian economy through a central e-business platform. Given that the CCE has over 130,000 members, the digital platform will allow for greater reach and more effective communication.

3.1. Croatian Chamber of Economy Strategy 2017-2022

The Croatian Chamber of Economy is the umbrella institution of the Croatian economy that represents the interests of all its members and the entire Croatian economy both home and abroad and is a key partner to the Government of the Republic of Croatia and other legislative and executive bodies in promoting the interests of the Croatian economy. It encourages a strong linking of the economy with the scientific and educated community in order to strengthen the development and innovation capacity of the Croatian economy. It is an important promoter of the internationalization of the Croatian economy and the promotion of overall national interests abroad. CCE's strategic goals for the period 2017 – 2022 include:¹⁶

- Digitalization of business operations through the development of an E-business platform for the delivery and provision of all services electronically (business registration, licensing and authorization, legal and tax consulting, networking, providing information, promotion)
- Development of horizontal functions as a basis for the development of commercial services: internationalization of business, business information, education, innovation and competitiveness of the economy, financing
- Leadership in VET and providing information for entrepreneurs (accurate and reliable real-time information)
- Developing on-line communication channels to promote entrepreneurs and communicate with the external environment
- The continuous regulatory and administrative unbundling of the economy
- The positioning of County Chambers (CCs) as key local support institutions for entrepreneurship development (CCs as the central place for solving all operational problems of entrepreneurs)
- Generating 25% of total revenues at the end of 2022, provision of commercial services in the fields of education, consulting, economic information, mediation and promotion, and 25% of total revenues from projects financed by EU funds

¹⁵ Digitalna transformacija u Hrvatskoj 2019., Apsolon 2019., <https://digitalni-indeks.hr/wp-content/plugins/b4b-angular-plugin/views/assets/data/studija.pdf> accessed on 12 October 2019

¹⁶The Croatian Chamber of Economy's 2017 – 2022 Development Strategy, *CCE Internal document*, pages 9-10

- CCE's core assets are the accumulated knowledge and skills of employees, the quality of data collected and processed - information, a culture focused on the satisfaction of customers (they used to be members) and a system for information exchange between entrepreneurs and networking.

The stated goals determine the direction of further development and activities related to new services and products, changes in the organizational structure and way of doing business, along with the human, information and financial resources necessary for implementation. In order to bring the overall activities in line with the needs of the CCE, the key areas of interest have been identified based on the previous experience and carried out analyses:¹⁷

- INFORMATION (information on company rating, legislation, market, resources, networking)
- MARKET (how to find and reach the clients?)
- EDUCATION (law, taxes, digital economy, vocational education, skills development...)
- PROMOTION / COMMUNICATION (use of the CCE media for promotion of members, presentation of products/services)
- FINANCING (mediation between members and financial institutions, preparation of projects for application to the EU and national tenders)
- LEGISLATION (court register, sector strategies, administrative unburdening of the economy).

Defining key areas of activity was the basis for creating the functionality of the Digital Chamber and introducing e-services, as well as a way of implementing the overall digital transformation process, which includes organization and internal business processes.

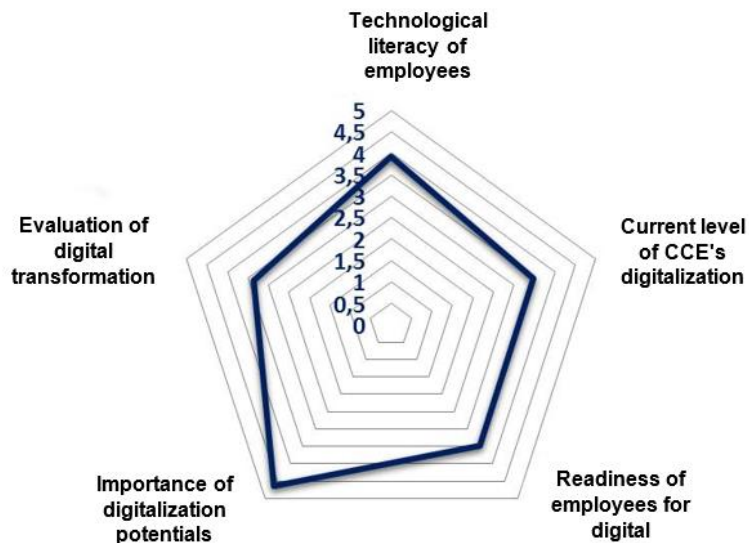
3.2. Digital readiness study - potentials for implementing the digital transformation of the CCE

In order to assess the capacity of employees and the maturity of the organization for change, analysis and study of the level of readiness of the CCE for digital transformation were carried out, which is a necessary prerequisite for the introduction of new e-services and implementation of the organization's digital transformation process. Surveys of the attitudes of all CCE employees conducted through an online survey via the *Microsoft Forms* service, while interviews with targeted content were conducted for top and middle management. The survey was taken by 305 CCE employees, representing more than 60% and making the survey relevant. The survey results defined the starting point for implementing the digital transformation process itself through the introduction of new technologies and business models and the creation of e-services that innovatively assist the Croatian economy in general and businesses individually. Through an analysis of the answers, it was calculated that the technological literacy of the Chamber's employees according to subjective self-assessment is 3.93 on a scale from 0 to 5. The current level of digitalization of the Chamber has been rated 3.48 according to employees' perception, while the employees' readiness for digital transformation is rated 3.49. The category of questions on the topic of digitalization was rated fairly high, with an average score of 4.64. Finally, the category regarding the assessment of Chamber's potential for digital transformation received an average score of 3.36 (Figure 3).

Figure following on the next page

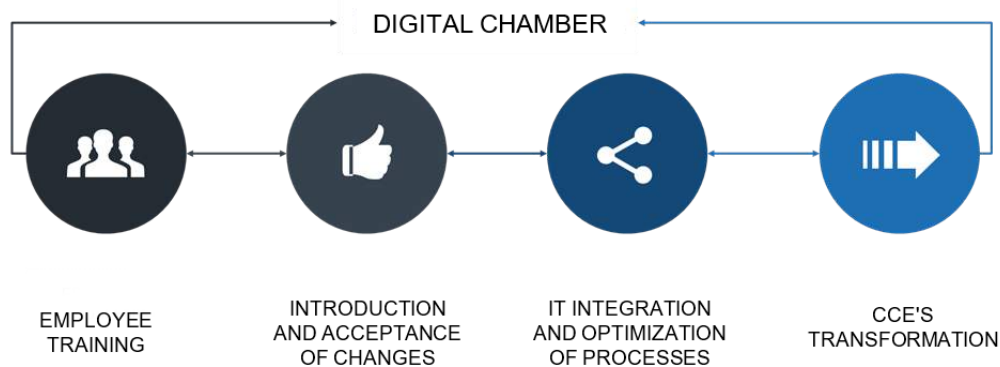
¹⁷ Ibidem, page 11

Figure 3: Analysis of the results of the CCE employees' questionnaire



Through further qualitative analysis done by interviewing the senior and middle management, priority processes and business segments in the internal and external environment were identified. After extensive analysis of the presented strengths and weaknesses, as well as the conditions in the environment, the potentials for the implementation of the digital transformation of the CCC were defined. (Fig. 4)

Figure 4: Implementation potentials of CCE's digital transformation



This part of the process has directly influenced the business decision-making on how to implement the digital transformation process itself, as well as the launch of the Digital Chamber project. The Digital Readiness Study, along with the CCE Development Strategy, is the basis for the development of a digital transformation implementation plan that takes into account all the above measures and the intervention logic of the previous two documents. The Digital Transformation Plan also represents the digital transformation strategy that contains all the operational details of the Digital Chamber development.

3.3. Main elements and functionalities of the Digital Chamber

Digital chamber; The Information and Communication Platform for Business Entities Public Administration on Buildings is a project of the Croatian Chamber of Economy, co-financed by the European Regional Development Fund from the Operational Program Competitiveness and Cohesion, based on a limited call for proposals for the development of e-services.

The three content design elements are:

- Establishment of the management model and development platform for the Digital Chamber and application-data infrastructure for the development of applications and services of the Digital Chamber;
- Digitalization of CCE's public services with the digitalization of internal business processes to support work with members and the establishment of a CCE communication platform;
- Design and digitalization of systems for entrepreneurship and business development and of business analysis systems for economic and industrial developments and indicators

The Digital Chamber is accessible to members and the business community, public administration and citizens through the platform digitalnakomora.hr. The project aims to contribute to the increased use of information and communication technologies in the field of e-services on the level of the Republic of Croatia. This platform will take over all of the Chamber's network functionalities, and its backbone will consist of 7 e-services:¹⁸

- **e-Members:** the core service of the Digital Chamber that contains each member's personal profile and is linked to all other e-services. This service provides access to CCE's associations, groups, and communities, as well as active engagement of each member through a digital platform, as well as faster and more efficient communication, both between CCE and its members and between the members themselves.
- **e-Financing:** To help members become more familiar with potential sources of funding and conditions for applying according to their needs and size of business entity, special search engines have been developed to link them to funding sources and investors. Custom tools will be created for users, such as interest, co-financing and credit calculators, and through the Information Center, they will be able to find out how to start a company, enter the stock market, start crowdfunding and what is the role of certain state institutions.
- **e-Legislation:** Through the digital platform, all members, depending on their activity, are provided with access to the legislative and regulatory framework in the Republic of Croatia. Consulting related to relevant legislation, advocating for necessary changes and active representation of the CCE members concerning other institutions are an integral part of this service. This segment also includes the Permanent Arbitration Court, Court of Honor and Mediation Center.
- **e-Learning:** A service that allows members to access knowledge bases, an overview of internal and external education, and mastering of various e-learning modules. Automatic retrieval of certificates is also possible, upon confirmation of online education's completion.
- **e-Trade Fairs and Promotions:** An overview of all trade fairs in the Republic of Croatia through an interactive map, a detailed description and the possibility of digital registration; calculator of potential costs. A digital platform for the "Let's Buy Croatian" campaign will also be available, and members will be able to promote their products and services within specially created modules.
- **e-Public Authorities:** Through the digital platform, members will be able to carry out most of the procedures related to the CCE's public authorities (submission of applications, issuance of certificates and payments) digitally and receive the electronic confirmation. Special guidelines will provide a detailed overview of the service and clarify the steps required to complete the request.
- **e – Economic information:** This service provides insight into the operations of all business entities on the territory of the Republic of Croatia, including general information, financial indicators, statuses of blocked accounts, a search engine by industry, as well as imports and

¹⁸ Functionalities of the Digital Chamber (2018), CCE internal documentation

exports statistics. Access to the Single Contact Point, the Electronic Procurement Bulletin and other relevant information will be provided.

The goals of the "Digital Chamber project" are:

- To improve the entrepreneurial environment and increase the quality of public services provided
- To increase the competitiveness of Croatian entrepreneurs in the domestic and foreign markets
- To increase the efficiency and quality of CCE services
- To contribute to the creation of the e-Business platform within the goals of the e-Croatia Strategy
- To increase the level of digital internationalization of the Croatian economy and introduce new opportunities for Croatian SMEs (e-learning, e-licenses, e-applications, etc.)

It is important to emphasize that the whole process of digital transformation will directly apply to the organization itself and its business processes through the introduction of new applications, systems, and services inside and outside the CCE, which fully integrate the Digital Chamber into a single functional system.

4. CONCLUSION

The Croatian Chamber of Economy is the country's main public-law institution that represents, promotes and protects the economic interests of over 130,000 of its members. Taking into account global trends and technological developments and the speed of change in the business environment, modernizing one's own way of operating and doing business is imperative. The main challenges in CCE's business are related to the low level of integration of software solutions and the interconnectedness of different databases, as well as the lack of adaptation of services to the increasingly dynamic market needs. These are the fundamental reasons that have led to the development and implementation of the "Digital Chamber" project, which marks a new era in the operations of the Croatian Chamber of Economy. Upon completion of the project, business optimization will be achieved, with better utilization and higher efficiency of human resources and more flexible communication with members. These activities will also contribute to a better quality positioning of the CCE, which will solidify the institutional position, increase competitiveness and affect the long-term sustainability of the institution. The new e-platform will enable the development of new services and the development of an eco-system - a common platform with other institutions, organizations, and businesses. The experience from the digital transformation process itself, related to the organization and processes, will facilitate the Chamber's providing of active support to the members in the process of their digital transformation. In this way, the Croatian Chamber of Economy will become a key and central place to support the Croatian economy. The biggest challenge in the time ahead is the implementation of digital education of Croatian businessmen to prepare them to accept and reap all the benefits of digital technologies and technological solutions and to use them as a competitive advantage in their own business on both the domestic and foreign markets.

LITERATURE:

1. Boban, M. i Babić, A. (2014). Utjecaj internetskih tehnologija na gospodarski rast, poslovni rezultat i stopu rasta profita poduzeća u Republici Hrvatskoj. *Zbornik radova Veleučilišta u Šibeniku*, (1-2/2014), 59-82. Accessed on 10. October 2019 at: https://financedocbox.com//Financial_News/78710388-Utjecaj-internetskih-tehnologija-na-gospodarski-rast-poslovni-rezultat-i-stopu-rasta-profita-poduzeca-u-republici-hrvatskoj.html

2. Digitalna komora: dostupno na digitalnakomora.hr , pristupano 08. listopada 2019.
3. Digitalna transformacija u Hrvatskoj 2019., Apsolon 2019., Accessed on 12. October 2019 at: <https://digitalni-indeks.hr/wp-content/plugins/b4b-angular-plugin/views/assets/data/studija.pdf>
4. Europska komisija, <https://ec.europa.eu/digital-single-market/en/desi>, Accessed on 10. October 2019.
5. Kolaković, M. (2005). Novi poslovni modeli u virtualnoj ekonomiji i njihov utjecaj na promjene u transportnoj logistici i upravljanju lancem opskrbe. *Zbornik Ekonomskog fakulteta u Zagrebu*, 3 (1), 195-210. Accessed at: <https://hrcak.srce.hr/26221,0910> on 09. September 2019.
6. Kolaković, M. (2010.): *Virtualna ekonomija*, Strategija d.o.o., Zagreb
7. Matt, C.; Hess, T.; Benlian, A. (2015): *Digital Transformation Strategies, Business and Information Systems Engineering*, 57(5), 339–343, <http://link.springer.com/article/10.1007/s12599-015-0401-5>.
8. Merkaš, Z. (2018). Rizici globalnog poslovnog okruženja – izazovi prve četvrtine 21. stoljeća. *Zbornik sveučilišta Libertas*, 3 (3), 95-106. Accessed on 21. July 2018. at: <https://hrcak.srce.hr/195846>
9. Pulić, A (1992.): *Elementi informacijske ekonomije*, Zavod za obrazovanje i organizaciju „Birotehnika“ u suradnji s Pravnim fakultetom u Zagrebu, Zagreb
10. Spremić, M. (2004.): *Menadžment i elektroničko poslovanje*, Narodne novine, Zagreb
11. Spremić, M. (2017.): *Digitalna transformacija poslovanja*, Ekonomski fakultet, Zagreb
12. Srića, V., Spremić, M. (2000.): *Informacijskom tehnologijom do poslovnog uspjeha*, Sinergija, Zagreb
13. The CCE's Digital Readiness Study, Croatian Chamber of Economy, Zagreb 2018
14. The Croatian Chamber of Economy's 2017 – 2022 Development Strategy, Zagreb 2017
15. Vlada RH, Accessed on 11. October 2019 at: <https://vlada.gov.hr/vijesti/centar-dijeljenih-usluga-pridonosi-digitalizaciji-javne-uprave-kako-bi-ona-bila-bolji-servis-gradjanima-i-poduzetnicima/26001> pristupano

THE APPLICATION OF TRIPLE BOTTOM LINE CONCEPT IN TOURISM WITH THE EMPHASIS ON THE HOTEL INDUSTRY

Ivana Bujan

*Polytechnic of Međimurje in Čakovec
B. J. Jelačića 22a, 40 000 Čakovec, Croatia
ibujan@mev.hr*

Damira Kecek

*University North
104. brigade 1, 42 000 Varaždin, Croatia
dkecek@unin.hr*

ABSTRACT

Economic restructuring and innovation are important measures for the tourism sector development, while progress strategies include the concepts of corporate governance and social responsibility. Research corpus on the components of corporate social responsibility in tourism for the Republic of Croatia is relatively modest. Therefore, the subject of this research is sustainability reports or social responsibility reports of the hotels on the economic, social and environmental components based on the Triple Bottom Line (TBL) concept. Hotels that included components of corporate social responsibility in their business are detected as well as methods for corporate social responsibility measuring. In this research the most common measures of the TBL concept in the Croatian hotel industry are identified. Furthermore, a comparison of qualitative and quantitative measures of each component of the TBL concept is given. Results of this research indicate that in corporate responsibility reporting large hotels are leading, because of their sufficient financial resources and human capital, i.e. employees who are familiar with the concepts of social responsibility.

Keywords: corporate social responsibility, hotel industry, Triple Bottom Line concept

1. INTRODUCTION

Corporate social responsibility is a concept that cannot be defined unilaterally and is sometimes referred to as sustainable development, social responsibility and corporate affiliation. The term corporate governance refers to the relationship of owners and management towards all stakeholders and can be applied to businesses of all sizes. In the term of tourism, the concept can be applied to large hotel chains and small hotels. Furthermore, measurement issues are even more complex, especially when considering non-financial economic performance indicators. The most comprehensive approach to achieve and measure sustainable business (i.e. integrating economic, environmental and social aspects into the core business) is the Triple Bottom Line concept (Dwyer, 2015). Many industries operate within the tourism industry. Hotel industry is one of the main contributors to profit and employment in tourism industry (Bartoluci, 2013). For the purpose of theoretical and practical research of the TBL concept in tourism on a sample of hotels in the Republic of Croatia, qualitative methods are used. Information on hotels that apply corporate social reporting principles and methods for measuring the related social, environmental, and economic components are collected. The paper is organized as follows. After the introduction, review of the relevant and recent literature based on the TBL concept in tourism is presented. In chapter 3 social, environmental, and economic components of the TBL concept are described. Chapter 4 presents results of the research. Finally, the conclusion outlines final remarks, limitations of the research and recommendations for further research.

2. LITERATURE REVIEW

In recent years, there has been an increasing awareness of sustainability. Inclusion of sustainability in the business of companies depends on the knowledge, financial resources and attitudes of management. The concept of sustainability is a very complex and dynamic and assumes a compromise between economic, environmental and social needs (Global Reporting Initiative, 2016). Furthermore, sustainability is often directly linked to environmental conservation and financial growth. Recent research focus on exploring the social effects of sustainability in tourism (Wise, 2016). Corporate social responsibility management of corporations is achieved through triple reporting (Tafra-Vlahović, 2009). TBL reporting concept "is a concept designed by Elkington (1977), a well-known environmental expert" (Vitezić, 2010, p. 75). The concept covers the economic, environmental and social component of corporate social responsibility. Corporate social responsibility is a concept within which companies try to solve social and environmental problems of business and as part of their relationships with stakeholders on a volunteer basis. Based on the TBL concept, the company should give more responsibility to the stakeholders and emphasizes the importance of the stakeholders, while companies should expand the decision-making and public disclosure process (Dwyer, 2015). Mihalic et al. (2012) analyzed sustainability in Slovenian hotels. Authors found that 66% of hotels report on the economic component, 28% on the environmental component and 42% on the social component of the TBL concept. From a theoretical point of view, Melissen (2013) looks at sustainability in the hotel industry and discusses the complexity of areas that need to be viewed from different areas. TBL sustainability has become a leading paradigm in the development of sustainable tourism development (Tyrrell et al., 2013). Benefits of the TBL concept are reflected in business costs reducing, market positioning improvement, better strategic decisions and improve competitiveness on the global level. Dimensions of sustainability in tourism outweigh the private and public business practices and are focused on the contemporary practice of sustainable development and recovery (Wise, 2016). In tourism, sustainability also refers to a destination that includes people (tourists), profits (financial and non-financial) and the planet (environment) as potential stakeholders or components. TBL concept can serve to make the tourism business competitive, especially hotels by focusing on long-term environmental, social and economic measures of business success. Furthermore, Boley and Uysal (2014) state that in the latter case there is a "competitive synergy" which they describe by combining the anticipated benefits of reduced energy costs with the no anticipated increase in employee satisfaction resulting in increased hotel competitiveness. Hotels and accommodation activities harder accept the sustainability in relation to other companies in tourism (Myung et al., 2012). At the macro level, the success of the hotel industry depends on the sustainability of natural resources, and at the micro level, there are potentials to reduce energy, water and other energy costs (Bohdanowicz, 2006). The most common social responsibility component in the hotel industry is the environmental component (green hotels) where the greatest potential benefits to the hotel can be realized. However, to achieve growth and development of a business, the synergy of all social responsibility components is necessary.

3. ASPECTS OF TBL CONCEPT

3.1. Economic aspect of TBL concept

The economic objectives relate to the financial performance of tourism enterprises, and includes some new measures of human and intellectual capital and non-financial performance indicators. From an urban destination perspective, the economic effects are increased number of visitors and opportunities for businesses, investments, incentives for local governments and the state (Wise, 2016). The economic performance criteria for the hotel industry can be classified as quantitative (natural and financial) and qualitative. Natural indicators are number of nights, number of guests, capacity occupancy indicators, price changes, share of nights in the total

number of nights at county or city level. Financial indicators are revenue per available room (RevPAR), profit per available room (GOPPAR), sales growth, profit growth (Sainaghi, 2010). Qualitative indicators are, for example, guest satisfaction, which can be seen in the survey filled by a guest at the hotel, the likelihood of his return to the hotel / destination, frequency of complaints of guests (Banker et al., 2005). The economic effects include partnerships and the benefits of community membership (the example is the National Association of Small and Family Hotels).

3.2. Environmental aspect of TBL concept

Environmental objectives relate to the exploitation of natural resources, energy use, pollution and environmental impact, and measures to this goal are life cycle analysis, environmental matrices, etc. Typical environmental indicators in the TBL concept are: water consumption, energy consumption, waste generation, discharge of key pollutants into the water, release of key pollutants into the air (UNIDO, 2003, p. 5). In addition to these indicators, there are more operational criteria for environmental certificates. Government and non-governmental organizations, hotel chains, and stakeholders from academia play a key role in changing and implementing environmental measures. Self-regulation of the system in the form of certification and labeling of eco-friendly hotels, greatly facilitates the introduction of changes and the detection of non-polluting hotels. Big hotels are very big energy consumers, especially luxury hotels. At the level of medium and small hotels, the causes of extensive energy consumption are similar. With increasing awareness of energy constraints and environmental protection, an increasing number of hotels are turning to environmentally friendly, sustainable energy sources and environmental protection. Many studies have shown that green hotel practices contribute to customer satisfaction and loyalty (Bohdanowicz, 2006; Tsai and Tsai, 2008; Levy and Duverger, 2010), but elements that link consumers and sustainability holistic approach remain to be explored.

3.3. Social aspect of TBL concept

Social goals relate to health, education, fair legal system and inter-generational and gender equality (Knez-Riedl, 2003). When social aspects are put in the context of tourism, the following indicators of sustainability differ (Wise and Whittam, 2015; Clark and Kearns, 2015; Smith, 2012): local tourism perception, social tourism, community development, enhancing local well-being through tourism planning, education as a socio-cultural indicator, local experience, local investments, maintaining cultural traditions and local artifacts, manifestations and humanitarian actions, civic pride. UNWTOManila declaration (WTTC) emphasizes the social aspects of the impact in tourism and lists a number of negative consequences for the people and communities which are a consequence of alterations culture, human rights, social issues, changes in traditional values and community fragmentation. Putting economic measures in the context of a hotel, the following indicators stand out (Houdré, 2008): involving suppliers in the business process, involving community representatives, organizing fundraising events and raising awareness for specific needs.

4. MEASURING CORPORATE SOCIAL RESPONSIBILITY IN CROATIAN HOTELS

This chapter analyses hotels in the Republic of Croatia in terms of corporate social responsibility. The survey sample consists of all hotels in the Republic of Croatia. According to the Financial Agency, in 2017 there was a total of 19 large hotels, 64 medium-sized hotels and 893 small hotels. The subject of the research was publicly available sustainability reports published by hotels on their websites. In total, 100% of large and medium-sized hotels and 70% of small hotels were analysed. In the overall sample, 90% of large hotels apply the Corporate Governance Code, while 40% of large hotels have a Code Questionnaire filled out on their

websites. In a sample of large hotels, 80% of them publish on their websites corporate governance information from the Code, which includes board members, majority shareholders, supervisory board members, shareholder meetings, annual and quarterly financial reports. Medium-sized and small hotels do not apply the Code. Their social responsibility is mainly measured by environmental impact and by providing infrastructure for person with disabilities, to procure the local food, to organize humanitarian, sports and cultural local community development events. Within the social responsibility framework, large, medium and small hotels also include hotel environmental sustainability certificates, ISO environmental certificates and social responsibility awards.

4.1. Economic component of TBL concept in Croatian hotels

This subchapter presents the qualitative and quantitative indicators of the economic component of the TBL concept in hotels. Small hotels do not report this component, while 32 % of medium-sized and 60 % of large hotels report on the economic components. Furthermore, table 1 shows the qualitative and quantitative economic components for all the hotels in the sample.

Table 1: Comparison of qualitative and quantitative economic component of the TBL concept in hotels

Qualitative economic component of TBL concept	Quantitative economic component of TBL concept
Financial business results	<ul style="list-style-type: none"> • <i>Gross Operating Profit-GOP</i> • revenue and expenses by profit centres, • published financial reports on the hotel website, • EBIT, EBITDA • stock price movements, EPS (earnings per share), DPS (dividend per share), • market capitalization, • information on capital increase, shareholders, the decisions of the supervisory board, the application form available to the general assembly, publicly available financial statements on page • published annual financial statements (AFS)
Price risks, liquidity risks, exchange rate risks	<ul style="list-style-type: none"> • numeric and percentage values
Expected capital investment	<ul style="list-style-type: none"> • investment values
Operational business	<ul style="list-style-type: none"> • the number of overnight stays achieved • the share of overnight stays in the total number of overnight stays at the county level

Source: Authors research

4.2. Environmental component of TBL concept in Croatian hotels

Many certifications and accreditations that demonstrate corporate social responsibility in the hotel industry (for example ISO 14001, Energy Star, Green Globe, Eco Flower) focus on environmental protection. There are also worldwide associations like Green Hotels Association, Environmentally Friendly Hotels, Go Green Travel Green, Eco Hotels of the World, which in their membership accept hotels that comply with the criteria of environmental sustainability. In Croatia, the small family hotels are branded as eco hotel. Eco certificate indicates that the hotel rationally uses energy. Hotel must be built in a way that does not waste energy and that waste is sorted. Four small and family hotels in Croatia are labelled eco hotels.

In addition to small and family hotels, eco certificates are also awarded by the Croatian Employers' Association of the Croatian hotel industry. In 2014, 21 medium-sized and large hotels were awarded by eco certificates. In 2017, 25 hotels in Croatia were registered as eco-friendly hotels. Table 2 provides an overview of the qualitative and quantitative environmental components of the TBL concept.

Table 2: Comparison of qualitative and quantitative environmental component of the TBL concept in hotels

Qualitative environmental component of TBL concept	Quantitative environmental component of TBL concept
Training employees to care about the environment / employees respect the laws on environmental protection	<ul style="list-style-type: none"> • Formal environmental management report
Drainage systems / filtration, water purifier, control of water consumption	<ul style="list-style-type: none"> • m³ of recycled water
Renewable energy, energy-saving lighting systems, reducing dependence on fossil fuels	<ul style="list-style-type: none"> • % of electricity from renewable sources • Number of new electric cars
Daily selection and sorting of waste, reuse of waste materials, promotion of recycling	<ul style="list-style-type: none"> • kg of waste selected
Emissions control	<ul style="list-style-type: none"> • % of reduction in greenhouse gas emissions
Certificates as evidence of environmental protection	<ul style="list-style-type: none"> • Sustainable hotel, Green Mark, The Green Key, Eco camping, Certificate Gold Travel life sustainability in tourism, ISO 14001, Travel life, Green Energy, Nature friendly, Heritage hotel, Certificate Sustainable hotel, Nature Friend Certificate
Introduction of eco-friendly materials	
Involvement of the guest in environmental protection	<ul style="list-style-type: none"> • % of guests not looking for a fresh towel every day • % of guests who note the ecological efforts of the hotel • % of guests who are willing to pay a higher price for an eco-friendly hotel

Source: Authors research

4.3. Social component of TBL concept in Croatian hotels

In this subchapter social component of the TBL concept is analysed. Comparison of qualitative and quantitative measures of social component of TBL concept is presented in table 3.

Table following on the next page

Table 3: Comparison of qualitative and quantitative social component of the TBL concept in hotels

Qualitative social component of TBL concept	Quantitative social component of TBL concept
Code of Ethics Available on the Website	<ul style="list-style-type: none"> • Not detected how to measure
Anti-corruption program	<ul style="list-style-type: none"> • Not detected how to measure
Infrastructure for people with disabilities	<ul style="list-style-type: none"> • Number of rooms for people with disabilities • Investments in infrastructure for people with disabilities
Donations and sponsorships in the fields of culture, sports, education	<ul style="list-style-type: none"> • Publicly disclosed value by area and year invested
Formal development of the donation system - Regulations adopted at the hotel or group level	<ul style="list-style-type: none"> • specified annual amount to be allocated for the social component of the TBL concept
Education of employees	<ul style="list-style-type: none"> • Amounts invested in employee education
Gender equality	<ul style="list-style-type: none"> • % women and men in the hotel
Number of newly employed workers	<ul style="list-style-type: none"> • Number of new employees in the reporting year

Source: Authors research

Some of the social component activities in large hotels that most report on the social component of the TBL concept are as follows: financing of associations, cultural, gastronomic, educational and entertaining events; financing projects and initiatives that enhance the attractiveness and competitiveness of the destination; supporting local cultural authors; supporting sports organizations; cooperating with vocational schools; educational programs on tourism in kindergartens; supporting colleagues in retirement; supporting local community initiatives; humanitarian actions; organizing a nautical fair for local community development; organizing events to encourage and finance start-ups in the field of sustainable development. The following is an overview of social responsibility listed by medium and small hotels: knights' games, manifestations, folklore; apartments for people with disabilities; anti-corruption programs; employee education; employee motivation; social projects. 32% of medium-sized hotels and 90% of large hotels report on the social component, while in the case of small hotels only 8%. The environmental component is also part of the social component, as some hotels claim to invest in educating their employees in the environmental field.

5. CONCLUSION

Based on this research, it can be concluded that efforts of the social responsibility integration in tourism have been identified. However, there is still a high level of ignorance about corporate sustainability. Objectives such as environmental protection and social goals are often side-lined, primarily due to the poor economic situation. Lack of financial resources and low liquidity are another reasons for the low level of social responsibility especially in medium and small hotels. Also, the reporting and monitoring system for sustainability and corporate social responsibility is often underdeveloped. Based on the research in this paper on a sample of hotels of all sizes in the Republic of Croatia, it can be concluded that large hotels are the leading ones in corporate responsibility reporting. The reason for this is sufficient financial resources available to large hotels, but also human capital, i.e. employees who are familiar with the concepts of social responsibility. Small hotels do not report the economic component of the TBL concept, while 32% of medium-sized and 60% of large hotels report economic component. Regarding the environmental component, small and medium-sized hotels emphasize their eco certificates. In 95 % of cases, large hotels report on the environmental component by publishing an environmental certificate or stating a measure of environmental pollution. 32% of medium-sized hotels, 90 % of large hotels and only 8 % of small hotels report a social component.

Most corporate social responsibility indicators are still generally at the qualitative level, with no published quantitative indicators. Proposal for further research is to conduct a survey on the detected sample of hotels to obtain complete information on the state of corporate management in hotels. Limitation of this research is reflected in the implementation of the social responsibility concepts in hotels that are not detected by analysing web pages, because they are not made public. For the future research it is accepted to analyse consumer perceptions of the components of the TBL concept in hotels.

LITERATURE:

1. Banker, R. D., Potter, G., Srinivasan, D. (2005). Association of nonfinancial performance measures with the financial performance of a lodging chain. *Cornell Hotel and Restaurant Administration Quarterly*, 46, (p. 394-412).
2. Bartoluci, M. (2013). *Upravljanje razvojem turizma i poduzetništva*. Zagreb: Školska knjiga.
3. Bohdanowicz, P. (2006). Responsible resource management in hotels – attitudes, indicators, tools and strategies, doctoral thesis, Royal institute of technology, Stockholm, Sweden.
4. Boley, B. B., Uysal, M. (2014). Competitive synergy through practicing triple bottom line sustainability: Evidence from three hospitality case studies. *Tourism and hospitality reserach*.
5. Clark, J., Kearns, A. (2015). Pathways to a physical activity legacy: Assessing the regeneration potential of multi-sport events using a prospective approach. *Local Economy*, 30, (p. 888-909).
6. Dwyer, I. (2015). Triple Bottom Line Reporting as a Basis for Sustainable Tourism: Opportunities and challenges. *Acta Turistica*, 27(1), (p. 34).
7. Global Reporting Initiative (2016). Sustainability Reporting Guidelines, Boston.
8. Houdré, H. (2008). Sustainable Development in the hotel industry. *Cornell hospitality industry perspectives*, 1(2), (p. 6-20).
9. Knez-Riedl, J. (2003). Corporate Social Responsibility and Holistic Analysis IDIMT Proceedings, Schriftenreihe Informatik, Bd 9, Universitätsverlag R. Trauner, cop., Linz, (p.187-198).
10. Levy, S.E., Duverger, P. (2010). Consumer Perceptions of Sustainability in the Lodging Industry: Examination of Sustainable Tourism Criteria, International CHRIE Conference-Refereed Track, Paper 31.
http://scholarworks.umass.edu/refereed/CHRIE_2010/Friday/31.
11. Melissen, F. (2013). Sustainable hospitality: a meaningful notion? *Journal of sustainable tourism*, 21(6).
12. Mihalic, T., Zabkar, V., Cvelbar Lj. (2012). A hotel sustainability business model: evidence from Slovenia. *Journal of Sustainable Tourism*, 20(5).
13. Myung, E., McClaren, A., Li, L. (2012). Environmentally related research in scholarly hospitality journals: Current status and future opportunities. *International Journal of Hospitality Management*, 31, (p. 1264-1275).
14. Sainaghi, R. (2010). A meta-analysis of hotel performance. Continental or worldwide style? *Tourism Review*, 65, (p. 46-69).
15. Smith, V. L. (2012). ed. *Hosts and guests: The anthropology of tourism*. University of Pennsylvania Press.
16. Tafra-Vlahović, M. (2009). Conceptual Frame of Corporate Social Responsibility. *Medianali*, 3(5), (p.163-184).
17. Tsai, C.-W., Tsai, C.-P. (2008). Impacts of consumer environmental ethics on consumer behaviors in green hotels. *Journal of Hospitality Marketing and Management*, 17(3-4), (p. 284-313).

18. Tyrrell, T., Cody, M. P., Biaett, V. (2013). A quantified triple bottom line for tourism: Experimental results. *Journal of Travel Research*, 52, (p. 279-293).
19. United Nations Industrial Development Organization (UNIDO) (2003). Triple Bottom Line Demonstration Project in Four Asian Countries, Final Report, Vienna.
20. Vitezić, N. (2010). Corporate Sustainability and Triple Bottom Line: Croatian experience. *International journal of trade and global markets*, 3(1), (p.68-81).
21. Wise, N. (2016). Outlining triple bottom line contexts in urban tourism regeneration. *Cities*, 53, (p. 30-34).
22. Wise, N., Whittam, Wise. (2015). Special edition: Regeneration, enterprise, sport and tourism. *Local economy*, 30(8), (p. 867-870).

IMPACT OF TRADITIONAL AND DIGITAL MARKETING ON CONSUMER PERCEPTION

Ante Roncevic

*University North, Croatia
ante.roncevic@unin.hr*

Tina Lukcic

*University North, Croatia
tina.lukcic@unin.hr*

Paula Spoljaric

*University North, Croatia
paula.spoljaric@unin.hr*

ABSTRACT

This paper analyses the impact of traditional and digital marketing on consumer perception. Consumer perception of a particular product or a service heavily depends on both consumers' age and their individual needs. Consumer perception is a complex process, influenced by various factors. One of marketing's vital functions is continuous monitoring of consumer needs and other factors that influence consumer behaviour and their perception on advertising the products and services. Adaptation to consumer needs will be quicker and more effective with better understanding of the footprint individual factors have on consumer perception. Traditional marketing is increasingly being replaced with digital marketing, as throughout the years digital marketing has been made much more accessible to consumers, especially younger generations. The objective of this paper is to determine the importance of both traditional and digital marketing and its affects on consumer perception through the purchase of certain products or services. Data used for the analysis was collected using 'desk research'- research that includes theoretical part. A quantitative survey was also conducted using a survey questionnaire on a representative sample. The analysis found that consumers' age has an affect on perception of traditional and digital marketing.

Keywords: *digital marketing, marketing, advertising, consumers, traditional marketing*

1. INTRODUCTION

Marketing, according to Kotler (2014), is a social and management process, where individuals and groups get what they need or want by creating and offering value-added products with others. Thus, marketing continues throughout the life of the product, trying to find new customers and retain existing ones in a way that enhances product attractiveness and quality, all based on the knowledge provided by sales results and the management of repeat orders (Kotler & Authors, 2006, p. 6). Knežević and Blić (2015) state that consumer behaviour is a relatively new scientific subject within the scientific branch of marketing, one that requires continuous monitoring of consumer behaviour in their interaction with the environment. It can also be said that there is a need to constantly monitor how to advertise a particular product or service, since consumer perception depends on both age and needs. Therefore, it is equally important for the company to identify the target stakeholders. Prior to the purchase phase, the perception that will depend on the influence of traditional or digital advertising plays an important role for the individual consumer. Consumer perception can be influenced by the elements of the marketing mix found within traditional and digital marketing. Traditional forms of advertising include newspaper ads, business cards, posters, TV and radio commercials, billboards, printed materials (leaflets, brochures), fairs and presentations and the like.

People still trust traditional marketing because they understand how it works and they trust it more. It can be said that it is an established method of advertising that has been a very successful form for many years and is used by many companies today. However, traditional marketing has many disadvantages such as hard to measure advertising results, no possibility of interacting with the audience directly, expensive advertising etc. (www.tabardi.hr). Digital marketing, unlike traditional marketing, does not have a long history and we can say that it is developing in parallel with the development of computers and the Internet. In order to define digital marketing, it is important to separate it from the term Internet marketing. Digital marketing is a much broader term than Internet marketing because digital marketing includes online and offline digital technologies, while Internet marketing includes only online technologies and channels (Gubor and Jakša 2018, p. 266). Digital marketing includes websites, social networks (Facebook, Instagram, Twitter, etc.), banners, e-mail marketing, mobile marketing, search engine optimization (SEO), PPC (pay per click) campaigns, and other channels based on digital media, those channels can be one-way and two-way (Taiminen and Karjauloto 2015, p. 4). The main advantages of digital marketing are that it is cheap, and if a quality plan and attractive story is made, as well as a product, digital marketing can reach a large number of target consumers for free. Another advantage is the easier and more accurate customer segmentation and we can measure results and get feedback almost instantaneously. The elements of the marketing mix (product, price, place, promotion) greatly influence consumer perception. Perception is a complex process by which people select, organize and interpret sensory stimuli and create their own attitude about a product or service (Kesić, Piri Rajh, 2016, p. 155). According to Kotler (2014) we can say that perception plays one of the most important roles because it is more important than reality, for the reason that perception influences consumer buying behaviour. He defines perception as the process by which we select, organize, and interpret stimuli to create a meaningful picture of the world. However, people may have different perceptions of the same stimuli, the reason being perceptual processes, i.e. selective attention where the tendency to ignore most of the information people are exposed to, then selective distortion where there is a tendency for people to adapt information to personal meaning, and selective memory with the tendency to retain only some of the information that people are exposed to (Kotler et al., 2006, p. 274).

2. THE IMPACT OF ON CONSUMER PERCEPTION

In today's time the main question marketing experts ask themselves is: how do consumers react to different marketing stimuli that a company might use? Many companies and scientists have researched the correlation between marketing stimuli (traditional and/or digital) and the reactions, that is to say the impact on consumers, and have come up with a stimuli-reaction model of customer behaviour, as shown in the following figure (Kotler et al., 2006, p. 255).

Figure 1: Behaviour model when shopping (Kotler et al., 2006, p. 255)

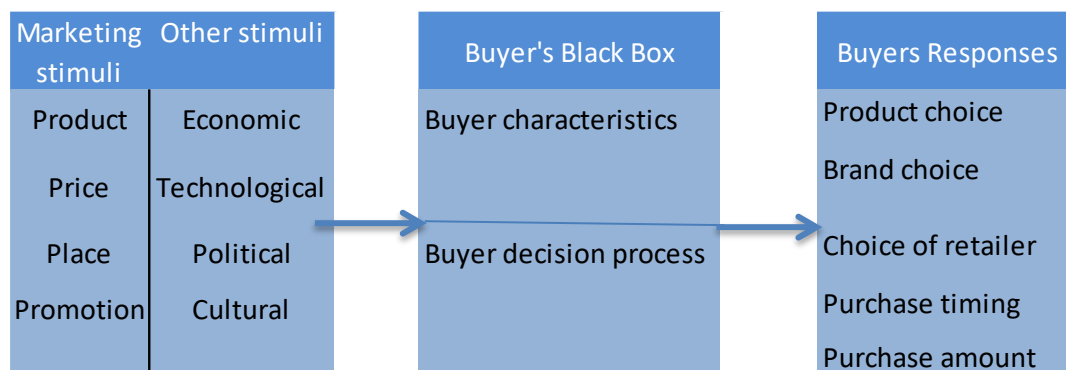


Figure 1 depicts a model of behaviour when shopping which begins with marketing stimuli, i.e. with the 4P (product, price, placement, promotion). Marketing stimuli can be within the frame of traditional and/or digital marketing. Other stimuli enter the black box; those would be customer characteristics or the process of decision which combined leads to the customer's response, i.e. choosing a product, brand, retailer, the moment of shopping and the amount (Kotler et al, 2006, p. 256).

2.1. Impact of traditional marketing on consumer perception

The impact of traditional marketing can be viewed through the concept of the marketing mix (product, price, placement, promotion), because that it is the initial stimulus that impacts consumer perception and their decision on purchasing a product or service. A product is all that can be offered on the market with purpose of satisfying needs and wants (Kotler et al., p. 372). Products can be physical objects, services, ideas, places, organizations and etc. Considering permanence and tangibility, we divide products into:

- Consumables – products that are consumed once or during several uses
- Durable goods – products that are used over a long time period
- Services (Šerić, p. 8)

Services are products that consist of an activity, benefit or satisfaction offered for sale but which are essentially intangible and do not result in ownership (e.g. banking, hotels, hair salons, etc.) (Kotler et al, p. 539). According to Martinović et al. (2011), packaging is one of the basic communication tools of a product with the customer, which includes design, graphics and information in order to get their attention. Therefore, if we buy hair shampoo, we notice that these products are carefully packaged, that is, the packaging most closely reflects the image of the product, and the bottles are comfortable to touch and easy to handle. We usually buy such products in stores because we want to smell the product, have a choice etc. (Kotler et al., p. 538). Each product and service has a price but also a value. Price is the only element in the revenue-generating marketing mix and can change quickly. We can say that pricing and price competition is the main problem that marketers face (Kotler et al., pp. 664-665). The price depends mainly on the positioning of the product or service in the market. Lončarić (2014) states that the price of a product is traditionally determined taking into account market demand, production costs and prices of competitors in the market. Also, the possibility of delivering the offer in the best possible way at a price that is affordable to consumers should be considered. Swatch is an example of a company that has succeeded in creating a watch that offers a blend of fashion and functionality at a price consumers are willing to pay with customized product costs (Kotler et al., 2006, p. 669). Traditionally, the design of the store has a significant influence on the purchase decision. The design of the store represents the image by which the store attracts consumers. Window design, music, lighting, sounds, colours, etc. Product range also plays a big part in the store image, as well as the style of the guarantee and pricing (Knežević and Bilić, 2016, p. 158). These elements influence the emotional reactions of consumers (satisfaction/dissatisfaction or willingness to buy/disinterest) which, depending on the element of atmosphere, increase/decrease the time they spend in the store where they decide to make/not make a purchase. The task of promotion is to inform the consumer of all the benefits and costs of using the product, and to a certain extent persuade him to buy (Lončarić, p. 13). The most important traditional medium for advertising or promoting a product or service is television via ads. The next advertising medium is the newspaper. A feature of advertising in national newspapers is that it creates a positive image of businesses and products. Newspapers are an asset for the advertiser in terms of flexibility. The advertising campaign can be concentrated during a desirable time period, within a special supplement, it can be changed just before the newspaper is published, etc. (Kesić, p. 314).

There is also outdoor advertising, i.e. on public transport, posters at bus and train stations and airports, point of sale advertising, yellow pages and advertisement in cinemas and theatres. The advantage of outdoor advertising is that the advertisements are broadcast 24 hours a day in the national market, 7 days a week (Arens, W. F., 1999, p. 536). Direct mail advertising includes the following forms: sales letters, postcards, folders and brochures, cover letters, report inserts, home reports and catalogues (Kesić, 2006, p. 425). Distribution ensures the availability of products and services to the target market, which is certainly important in order to meet its needs. The greater the availability of products is, the better the quality of life is for the consumers. Therefore, marketers should ensure that the product is available to the target market (Lončarić, p. 12).

2.2. The impact of digital marketing on consumer perception

Modern technology has played a large role in consumer behaviour, as people living a hectic life are increasingly being informed about products via the Internet and social networks, because technology has now enabled them to access information and order products faster via the Internet (Knezevic and Bilic, 2015., p. 158). The intensive use of the Internet for carrying out marketing activities began fifteen years ago (Škare, 2011.). With the increase of the number of users and the improvement of the Internet new possibilities of digital advertising are being created. The main benefits of digital marketing are better consumer control, reduced sales costs, it is measurable and cheaper, it is easier to reach the target audience, we can create a strong brand, it makes it easier to communicate with consumers and easier to connect with customers. The share of online advertising has been steadily increasing in recent years, while the share of allocation for other channels of advertising has stagnated (Škare, 2006, p. 13). Just like traditional marketing, we can also view digital marketing through the concept of the marketing mix. A product in the digital world is intangible and needs to be presented as realistically as possible without manipulating and distorting the characteristics and specifications of the product. Due to the availability of the Internet, the consumer has the ability to instantly search forums, blogs and articles with reviews of the product that he is interested in, and thus the consumer has no need to buy and try out the product in order to have an opinion on it. The main reason why "word-of-mouth" has greater power of persuasion compared to media advertising, according to almost all studies, lies in the fact that consumers are actually sceptical of the advertiser claims, because advertisers are, of course, in the service of promoting their interest (Haramija 2007, p. 885). Also, products are more accessible and customers often find it much easier to compare prices that have become more consumer-friendly because of digital advertising. Depending on consumer habits, which are being monitored in a timely manner, it is possible to set new product prices and do a campaign update. In this way, advertisers get timely information about the demand and sales of the product, which allows for almost instant customization to the customer. With this, it is possible to create special offers and coupons to attract consumers, which often motivates them to take action. Special coupons that have a shelf life encourage consumers to act quickly (Kirithi and McIntyre 2002, p. 493). We can measure the impact of digital marketing by the number of ad clicks, the number of product searches, the tracking of discount code utilization, the number of followers/likes/shares on social networks, the number of visitors to web pages, etc. Promotion in digital marketing is better simply by being measurable, which is not always the case with traditional marketing. Return on investment (ROI) is a financial measurement, and ROI analysis is used to evaluate and direct various forms of corporate business and personal investment (Lenskold 2003, p. 19). Choosing a distribution channel as a part of the marketing mix is important in order for the product to be perceived by consumers. Digitization provides new distribution options unlike traditional distribution channels. With one click, the manufacturer can determine whether he wants his product to be available locally or globally, and can choose whether he wants to distribute the

product and product information via the website, social networks, intermediary websites or a combination of the above. It is important to emphasize that consumers do not differentiate between different sources of information as marketing experts do; so it is extremely important to understand that in the minds of consumers, promotional messages that one wishes to send via different media are merged into one and become part of the overall message about the business entity (Golob, 2016, pp. 148-149).

3. RESEARCH RESULTS

The primary objective of this research is to identify the importance of traditional and digital marketing and how they affect consumer perceptions through the purchase of products or services. According to the results of the analysis, it will be determined how consumer age influences the perception of digital and traditional marketing. Consumer age is the key parameter of this research. Theoretical analysis is supported by the findings from both domestic as well as international scientific and professional literature, that is to say, the knowledge of scientists and other authors who, in their scientific books and articles, have explored the issues that are the subject of this research. After the documentation has been collected, the processing will be carried out in two basic steps: the first will be to find the necessary data, which is carried out by reading individual documents and making notes, and the second step is to arrange the data obtained in this manner. The third method is crucial in order to collect data for research purposes, and that is the survey questionnaire. The survey was anonymous and was conducted in June 2019. The survey was created and conducted in order to collect data on what influences consumer perceptions when purchasing a product or service. The first part of the questionnaire consisted of questions related to the demographic characteristics of the respondents - age, gender and county. The questionnaire consists of 5 closed-type questions and 10 questions designed using a five-point Likert scale consisting of a series of statements about different aspects of a certain viewpoint/stance. It took 5-10 minutes to complete the survey. A total of 104 respondents answered the survey. However, some respondents did not answer all the questions, so a sample of 99 respondents was accepted. The survey was conducted in combination, partly online and partly in print. Respondents were chosen into a suitable sample based on their availability, i.e. willingness to participate in the survey. The data obtained was analysed via graphical and tabular representations, and the results are interpreted below each such representation.

Table 1: Analysis of men and women by age

Age	Men	%	Women	%	Total	%
18 -24 years	9	24,3	18	29,0	27	26,5
25 - 30 years	15	40,5	24	38,7	39	39,2
31 - 40 years	7	18,9	15	24,2	22	23,5
41 - 50 years	3	8,1	5	8,1	8	7,8
51 and older	3	8,1	0	0	3	2,9
Total	39	100	62	100	99	100

Table 1 shows respondents by gender and age. 99 respondents answered the questionnaire, of which 37 were men (37.4%) and 62 were women (62.6%). According to the results, we can see that the majority of respondents are between 25 and 30 years old (39.2%) of which 15 are men and 24 women, then 26.5% are between 18 and 24 years, of which 9 are men and 18 women, while 23.5% are between 31 and 40 years old, of which 7 are men and 15 are women, and the smallest number of respondents is older than 41 years (six men and five women). The majority of respondents answered that they live in Varaždin County (47.47%), while 33.33% live in Medimurje County.

The remaining respondents live in Zagreb County (9.09%), Koprivnica-Križevci County (7.07%), Virovitica-Podravina County (2.02%), and Krapina-Zagorje County (1.01%).

Table 2: Hours spent on the Internet/online by age

Hours online	18 - 24 years	25 - 30 years	31 - 40 years	41 - 50 years	51 and older	Total
0 - 1 hour	0	1	0	4	2	7
1 - 2 hours	4	10	9	3	0	26
2 - 5 hours	15	15	10	1	1	42
More than 5 hours	8	13	3	0	0	24
Total	27	39	22	8	3	99

Table 2 shows how many hours the respondents spend on the Internet in relation to their age. It can be noticed that most of the respondents claim to spend 2 to 5 hours a day on the Internet, mostly those between the ages of 18 and 30; while those aged 31 to 50 years and older spend mostly up to 1 hour on the Internet. As the majority of the younger population spends their time on the Internet, many businesses are increasingly using the Internet as a channel for sales and distribution, all for the purpose of improving the interactive relationship between the business and the consumers. With this we can say that digital marketing has a greater impact on the younger population.

Table 3: Hours spent watching TV by age

Hours of TV	18 - 24 years	25 - 30 years	31 - 40 years	41 - 50 years	51 and older	Total
0 - 1 hour	20	14	8	2	1	45
1 - 2 hours	5	22	10	4	1	42
2 - 5 hours	2	2	4	2	1	11
More than 5 hours	0	1	0	0	0	1
Total	27	39	22	8	3	99

Table 3 shows the number of hours respondents spend watching TV in relation to their age. Surprisingly, 45.5% of respondents spend up to 1 hour a day watching TV. Respondents 18-24 years old (74.07%) are the least likely to watch TV, and thus we can say that traditional marketing will not have a significant impact on the younger age group. Respondents over the age of 41 generally spend 1 to 2 hours a day watching TV, so the traditional way of advertising has a greater impact on them.

Table 4: Frequency of newspaper purchase by age

Newspaper purchase	18 - 24 years	25 - 30 years	31 - 40 years	41 - 50 years	51 and older	Total
Daily	0	0	0	0	0	0
Weekly	0	1	2	3	1	7
Monthly	2	2	2	1	2	9
Yearly	1	5	4	2	0	12
I do not purchase newspapers	24	31	14	2	0	71
Total	27	39	22	8	3	99

Table 4 shows the frequency of newspaper purchases by age of respondents. 71.7% of the respondents stated that they do not buy newspapers, and none of the respondents buy newspapers on a daily basis.

This is due to the increasing presence of digital media, and newer generations are turning to reading online editions and blogs. Respondents over the age of 31 usually buy newspapers once a month or just once a year.

Figure 2: Purpose of social media use

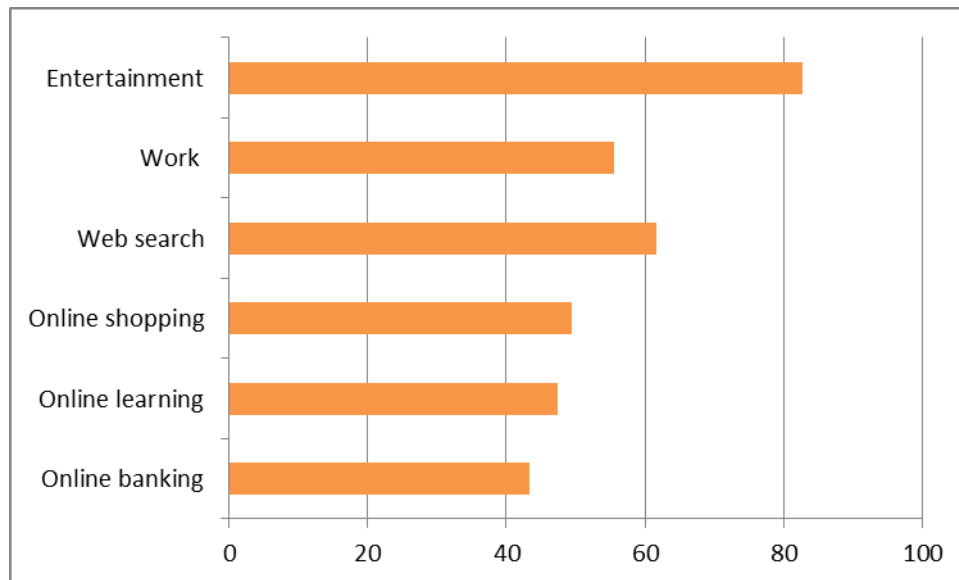


Figure 2 shows for what purposes respondents use social media¹. 99 respondents answered this question. Respondents were able to choose multiple answers. It is clear that 82.8% of respondents use social media for entertainment purposes, while 61.6% use social media for the purpose of online searching. Social media is used for work related purposes for 55.6% of respondents, and as much as 49.5% of respondents use it for online purchases. Slightly fewer (47.5%) respondents use social media to learn online. 43.4% of respondents use social media for online banking. Businesses use the Internet as a channel to add value to existing products and services, and to regulate prices through modern methods. With the advent of the Internet, a whole new market has emerged that offers numerous opportunities. Among other things, consumers can use search engines to get specific product information, but also for entertainment purposes. Unlike traditional media, the Internet provides consumers with relevant information. Also, social media on the Internet allows consumers not only to find information but also to quickly provide feedback.

Figure following on the next page

¹ Social media - a group of new media on the Internet that are based on user interaction and the creation and sharing of digital content. The most well-known forms of social media are blogs, social networks (e.g. Facebook), forums, wiki pages (e.g. Wikipedia), image sharing websites (e.g. Flickr) and videos (e.g. YouTube), etc. (Škare, 2011., p. 272)

Figure 3: Reasons for online shopping

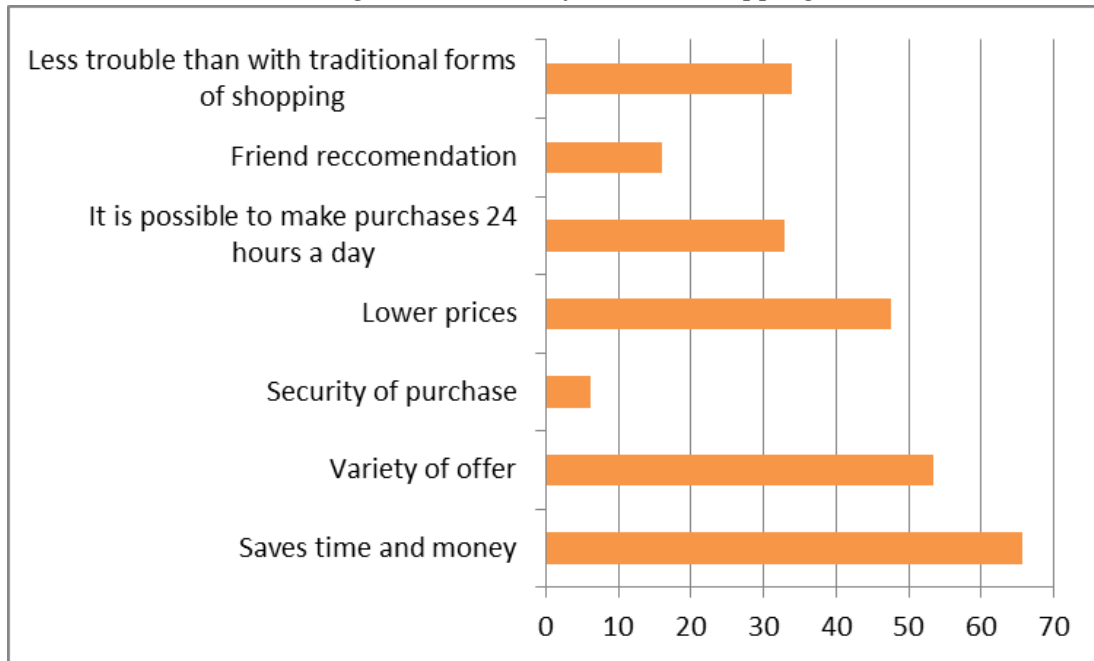


Figure 3 shows the most common reasons for online shopping. 99 respondents answered this question. Respondents were able to choose multiple answers. 65.7% of respondents buy online for the reason that they save both time and money, while 53.5% of respondents buy online due to the variety of the offer. 6.1% of respondents buy because of security of shopping, which leads us to the conclusion that respondents do not consider online shopping safe, but still choose to buy it. 47.5% of respondents prefer to buy online because of the lower prices. The Internet is a new medium for businesses to market their products. It is considered a form of mass communication because it enables consumer feedback with just one click on an ad.

Table following on the next page

Table 5: Five-point Likert scale and arithmetic mean of responses by age

	Questions	Total percentages of all answers					Arithmetic mean				
		1 (%)	2 (%)	3 (%)	4 (%)	5(%)	18-24 years	25-30 years	31-40 years	41-50 years	50 years and older
1.	I get more information about new products through digital media than through traditional media	0	8.33	13.54	22.92	55.21	4,63	4,37	4,05	3,38	3
2.	Digital media is a more affordable way to get more product information	0	5.21	15.63	27.08	52.08	4,48	4,47	4,05	3,63	2,67
3.	The presence of a product/service on social networks increases sales	0	6.25	26.04	30.21	37.50	4,15	4,08	3,91	3,75	3
4.	I often click on online ads to learn more about a product	13.54	21.88	25.00	19.79	19.79	3,15	3,29	2,95	3,13	2,33
5.	I prefer online shopping from going to the store	11.46	22.92	40.63	15.63	9.38	2,93	3,18	2,73	2,63	1,67
6.	I use a laptop/computer more often than a cellphone / tablet.	12.50	29.17	30.21	18.75	9.38	2,89	2,63	2,95	3,25	2,67
7.	I prefer going to the store more than buying online.	8.33	16.67	35.42	19.79	19.79	3,3	2,97	3,14	3,75	5
8.	I often look for information about a product/service that interests me in flyers/newspapers.	33.33	23.96	20.83	16.67	5.21	2,11	2,24	2,18	3,75	3,33
9.	Content posted by my friends on a platform is more important to me than the official product description.	9.38	14.58	44.79	20.83	10.42	3,37	3,05	3,09	3	1,67
10.	I compare products across different social media platforms to find a product that meets my expectations.	10.42	12.50	23.96	31.25	21.88	3,81	3,71	2,23	2,25	1

1. Completely disagree, 2. Mostly disagree, 3. Neither agree nor disagree, 4. Mostly agree, 5. Completely agree

Table 5 shows in the first section the total percentages of all respondents, while in the second section it shows the arithmetic means by age of the respondents. On each statement, the respondents could mark only one of the five options, i.e. from "completely disagree" to "completely agree". 55.21% of respondents completely agree with the first statement, i.e. respondents aged 18 to 30 years. 52.08% completely agree with the second statement, and it is also evident that the younger population believes that digital media is a more favourable way to obtain information, which is understandable given the greater use of the Internet and technology by the younger age group.

37.50% of respondents believe that the presence of a product / service on social networks increases its sales and 6.25% mostly agrees. It is also evident that the younger age group uses social networks more than the older age group. As for the fourth statement, the results are almost equal, i.e. 25% of the respondents are undecided, 13.54% completely disagree and 19.79% completely agree. We can say that the opinion depends on the consumer's needs for a particular product or service. Online shopping is preferred by 9.38% of respondents, mostly between 30-40 years of age, which means that they also have a higher purchasing power than the younger group, while the older age group does not prefer online shopping due to them using digital media less than the younger group. The sixth statement indicates that older people are more likely to use a laptop or computer than younger people. The seventh statement indicates that older aged people prefer to go to the store, i.e. 9.38% of the respondents. The eighth question shows that the younger age group completely disagrees with the claim. On the ninth question, most respondents (44.79%) are undecided, while the tenth question shows that it is important for the younger group (31.25%) to compare products on social platforms in order to find the desired product.

4. CONCLUSION

Via different marketing channels, it is attempted to reach as many consumers as possible. By strategic combination we can reach all of the target groups. In order for the right product to find its way to the right consumer, it is necessary to properly utilise the full benefits of both traditional and digital marketing. Although the trends are in favour of digital marketing, it is fairly certain that traditional marketing will not lose its place in advertising for a quite some time. Traditional marketing has the advantage that there is more research about it and although it has evolved over time, the basic aspects have remained the same. While traditional marketing is still useful, the development of technology has opened up new possibilities for connecting products with consumers. Digital marketing is more suited for the younger target audience, one that spends much of their free time online. Digital marketing also has an advantage in that its price is usually lower compared to traditional marketing. During this research we determined that the choice of traditional and digital marketing channels should also take into account the age of consumers, and that the predisposition towards traditional advertising channels increases with the age of consumers. After analysing the results of the survey, we can conclude that younger respondents prefer digital channels and that digital marketing has more influence on them, while older respondents prefer traditional channels of communication and traditional marketing has a greater influence on them. By analysing the results of this research and via market segmentation, as well as precisely selecting the target group and consumer profiling, we can present a product or service to a potential consumer more qualitatively and effectively. Consumers have prejudices, fears, and distrust of online shopping and do not consider it safe, so it is important to promote and present the purchase as safe and easy, which is one of the reasons that discourage consumers from buying online. It is important to establish a quality marketing strategy and make the most of the opportunities offered by both traditional and digital marketing.

LITERATURE:

1. Arens, W.F.(1999.) *Contemporary Advertising*, McGraw-Hill
2. Barkus, A. (2015.) *Mediji i marketing* [Media and marketing]. Retrived 26.05.2019. from <https://hrcak.srce.hr/file/223964>
3. Golob, M. (2016). *Mobilni marketing kao sastavni dio integrirane marketinške komunikacije*. [Mobile marketing as an essential part of integrated marketing communication] Polytechnic of Rijeka proceedings, 4 (1), 147-158. Retrieved 02.06.2019. from <https://hrcak.srce.hr/160239>

4. Grubor, A., Jakša, O. (2018.) *Internet Marketing as a Business Necessity*. Interdisciplinary Description of Complex Systems, vol. 16, no. 2. Retrived 05.06.2019. from <https://doi.org/10.7906/indecs.16.2.6>.
5. Haramija, P. (2007). *Marketing usmenom predajom: fenomen i mogućnosti*. [Marketing by word of mouth: phenomenon and possibilities] *Bogoslovska smotra*, 77 (4), 881-900. Retrieved 12.06.2019. from <https://hrcak.srce.hr/22540>
6. Heini Maarit, T., Karjaluoto, H. (2015.) *The usage of digital marketing channels in SMEs.*, *Journal of Small Business and Enterprise Development*
7. Kesić, Tanja (2006.) *Ponašanje potrošača* [Consumer behaviour], *Opinio*
8. Kirthi, K., McIntyre, S. (2002.) *The e-marketing mix: a contribution of the e-tailing wars.*, *Journal of the academy of marketing science*
9. Knežević, S., Bilić, N. (2015.) *Utjecaj kulture na ponašanje potrošača prehrambenih proizvoda u Republici Hrvatskoj* [The impact of culture on the behaviour of food product consumers in the Republic of Croatia]. Retrived 25.05.2019. from <https://hrcak.srce.hr/144044?lang=hr>
10. Kotler P., Keller K.L. (2006.) *Marketing Management*, Prentice Hall
11. Kotler, P. (2002.) *Upravljanje marketingom* [Marketing management], MATE d.o.o., Osijek
12. Kotler, P., Wong, P., Saunders, J., Armstrong, G. (2006.) *Osnove marketinga* [Principles of marketing], MATE
13. Lenskold, J. D. (2003.) *Marketing ROI the path to campaign, customer, and corporate profitability*. McGraw-Hill
14. Lončarić, D., *Društveno odgovorne marketinške odluke – razvoj mjerne ljestvice* [Socially responsible marketing decisions – scale development]. Retrived 29.05.2019. from https://bib.irb.hr/datoteka/764866.115_123_Krajnovic.pdf
15. Martinović, M., Pirić, V., Mušura, A. (2011.) *Etička pitanja vezana uz proizvod kao dio marketinškog spleta* [Ethical issues related to the product as part of the marketing mix]. Retrived 28.05.2019. from https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=110187.
16. Nakić, S. (2014.) *Područja primjene stavova potrošača* [Application of consumer attitudes]. Retrived 25.05.2019. from <https://hrcak.srce.hr/file/198999>.
17. Šerić, N. (2009.) *Razvoj i dizajn proizvoda i upravljanje markom* [Product development and design and brand management], University of Split, Split.
18. Škare, V. (2006). *Internet kao novi kanal komunikacije, prodaje i distribucije za segment mladih potrošača* [The Internet as a new channel of communication, sale and distribution for the young consumer segment] *Market-Tržište*, 18 (1-2), Retrived 11.07.2019. from <https://hrcak.srce.hr/21979>.
19. Škare, V. (2011). *Je li potreban novi okvir upravljanja internetskim marketingom?* [Is a new framework for Internet marketing management needed?] [*Market-Tržište*, 23 (2). Retrived 06.06.2019. from <https://hrcak.srce.hr/78963>.
20. Tabardi – digitalni marketing [digital marketing] (2018.) *Kada koristiti tradicionalno a kada digitalno oglašavanje?* [When to use traditional and when to use digital advertising?]. Retrived 25.05.2019. from <https://www.tabardi.hr/kada-koristiti-tradicionalno-a-kada-digitalno-oglasavanje/>.
21. Taiminen, H. M., Karjaluoto, H. (2015.) *The usage of digital marketing channels in SMEs*. *Journal of Small Business and Enterprise Development*.

CROSS-BORDER TOURIST DESTINATIONS IN EUROPE - GENESIS, ESSENCE AND PROMOTION

Tomasz Studzieniecki
Gdynia Maritime University, Poland
tomaszstudzieniecki@wp.pl

Eduardas Spiriajevas
Klaipeda University, Lithuania
borderlithuania@gmail.com

ABSTRACT

The issue of tourist destinations is richly reflected in the literature on the subject, but this does not apply to cross-border destinations where this problem is still being recognized. Classification of destinations allows the identification of cross-border destinations, i.e. those that are crossed by a state border. The authors analyse basic relationships between state borders and tourism destinations. They present various definitions and concepts of destinations and identify the specificity of cross-border destinations. They prove that borders can be not only barriers but also stimulators of tourism development. In relation to cross-border destinations, they use a broader interpretation, understanding them as points, lines and areas. In terms of points, the authors describe the phenomenon of 48 European tripoints, i.e. the crossing points of three national borders. The borders line have become tourist attractions allowing the traveler to physically stay in 2 countries at the same time. They compare the border line between Poland and Lithuania and cross-border seaside promenade connecting the Polish city of Świnoujście and the German city of Heringsdorf. Another group of cross-border destinations analysed in the paper are spatial destinations (Euroregions, macroregions, European Groupings of Territorial Cooperation) and cross-border facilities (hotels, restaurants, operas, hospitals). The authors also analyse 39 cross-border objects inscribed on the World Heritage List. The limited framework of the article does not allow full analysis of this interesting and complex issue. The authors' intention is that the article contributes to enriching the interdisciplinary theory of tourism, with particular emphasis on management science and economic geography, and constitutes an inspiration for further in-depth research in this field.

Keywords: border, destination, EGTC, Euroregion, macroregion, tourism, tripoint

1. INTRODUCTION

Interdisciplinary tourism theory has long been dealing with the issues of state borders. The dual interpretation of a border as a barrier and stimulator of tourism is noteworthy. The function and organization of borders is changing. In the EU, internal borders are softening but external borders are becoming stronger. However, it should be noted that cross-border cooperation is developing on both of these borders. It significantly stimulates the development of new destinations. The border becomes an attraction and the cross-border destination becomes a product. New destinations are born, with their core consisting in the state border. Cross-border tourist destinations are a work of nature or man. Their organization and development are very diverse. There are new theoretical and practical challenges associated with managing these destinations. Therefore, systemizing and enriching the theory as well as an analysis of existing solutions becomes a need and a challenge.

2. CROSS-BORDER DESTINATION IN THEORETICAL TERMS

2.1. The essence and specificity of tourist destination

The term "tourist destination" has become one of the most popular terms in tourism theory and practice [Wang, 2011]. Some, like Leiper [1979], are enthusiastic about this term, referring to destination as the "heart of tourism". Other researchers have a greater distance. Manente and Minghetti [2006] claim that the concept of destination became "fuzzy" and cannot be fully defined. Panasiuk [2017, p. 109] has a similar opinion, according to which it is difficult to propose a universal and generally accepted definition. It should be noted that the English-language term "tourist destination", appropriately transformed, appeared, although not without controversy, in non-English literature [Holešinská, 2007; Ejarque 2006; Magaš, Vode, Zadel, 2018; Zhilenko, 2017; Studzieniecki, 2008]. This undoubtedly proves the attractiveness of this term. In scientific literature there are many approaches aiming to conceptualize and interpret tourist destination [Borzyszkowski 2012, p. 19; Studzieniecki, Palmowski, 2019]. Tourist destination can be analyzed as a spatial, market, psychological, legal and even philosophical category. However the territorial dimension of a destination is exposed and the term is used interchangeably with such terms as "tourism reception area" and "tourism reception zone" [Moutinho, Witt, 1989; Niezgoda 2006, p. 10]. Tourist destination sometimes constitutes a synonym of a tourist region [Wanagos 2000, p. 233]. Meanwhile, tourist regions are part of tourism space, and more precisely geographical space, which properties determine their functioning [Fedyk, Meyer, Potocki 2017, p. 51]. Borzyszkowski [2012, p. 19], analyzing the etymology and interpretation of tourist destinations, comes to the conclusion that in social sciences the concept of destination goes beyond geographical interpretations. It constitutes a combination of resources that are able to attract tourists to a specific location. Kruczek [2017, p. 44] predicts that in the near future the term "tourist destination" may even displace the term "tourist region". Destination is often analyzed in systemic terms [Studzieniecki, Kurjata 2010, p. 520; Panasiuk, 2015, p. 71; Alejziak 2016, p. 11]. Such a system consists of the reception area (destination), the generating area, and channels connecting these areas [Więckowski 2010, p. 33; Canavan, 2015]. There are many models of tourist systems analyzing destinations in science. However, according to the authors, it is worth proposing a simple, managerial model of the tourist system (Fig. 1).

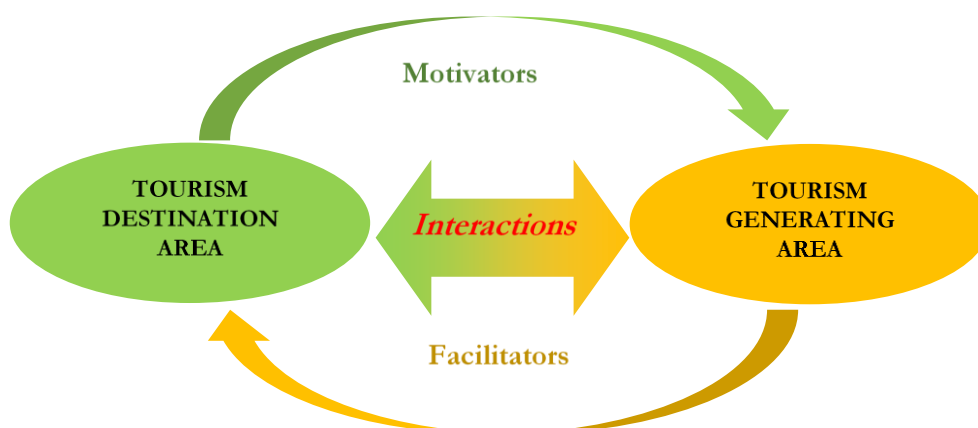


Figure 1: Managerial model of the tourist system (own elaboration)

Motivators for tourists and facilitators for travel are key determinants of the development of destinations. Ecological priorities [Przybyłowski, 201]), educational aspects [Grobelna, Sidorkiewicz, Tokarz-Kocik, 2016] and principles of corporate social responsibility [Szelągowska-Rudzka, 2016] should be positioned in the motivators and good accessibility should be significantly included in facilitators. It is worth paying attention to the fact that

sustainable destination management affects interactions between areas [Spiriajevas, 2019]. Research conducted in Lithuania has shown that if the borders are open, the spatial interaction between two tourism components is an intensively ongoing process [Spiriajevas, 2019]. Otherwise, like between Kaliningrad Region and Lithuania, the potential of tourism resources facilitate initiatives to promote spatial interaction and tourism related activities play a significant role in increasing of attractiveness of destinations.

2.2. Specificity and typology of cross-border destinations

A special case of destinations are cross-border destinations [Panasiuk 2015, p. 72, Studzieniecki, 2008]. They cover the area of at least 2 countries. Cross-border tourist destinations can be divided into natural (e.g. water reservoirs, mountain ranges) and anthropogenic (e.g. objects, cities). The delimitation of cross-border tourist destinations can be absolute (e.g. resulting from geographical borders, international agreements, etc.) or relative (determined by researchers, planners, etc.). More and more often delimitation is determined by the spatial extent of cross-border cooperation [Potocki 2009, p. 9; Alejziak 2016, p. 25; Studzieniecki 2009, p. 521; Fedyk, Meyer, and Potocki 2017, p. 64]. Therefore, the factor of international cooperation, including territorial cooperation, takes on special significance in delimitation of destinations. [Studzieniecki 2005, p. 26]. In the context of a state border, there is a need to use a broader interpretation of cross-border tourist destinations. The term tourist destination is large enough to distinguish 3 types of destinations (Fig. 2).

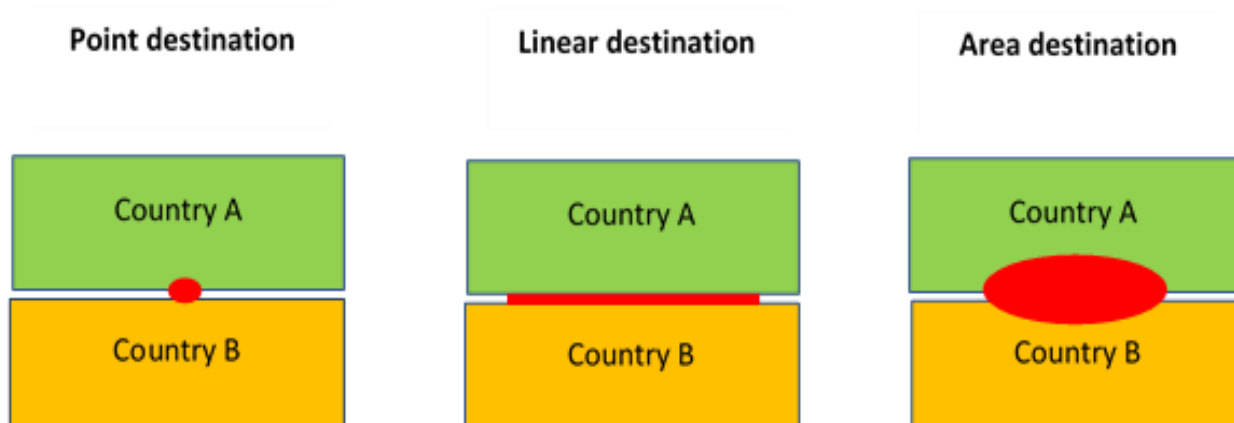


Figure 2: Typology of cross-border destinations in spatial terms (own elaboration)

The typology presented above in the context of state borders can serve an important ordering function. Destinations, like tourist products, can also be divided into real (already existing) and potential (just planned, or which may arise under certain conditions). Some cross-border destinations are deliberately created, others arise independently, for example as a result of delimitation of the state border.

3. POINT DESTINATION

The concept of point tourist destination refers to the idea of a point attraction and a point tourist product [Kaczmarek, Stasiak, Włodarczyk, 2002]. However, in the case of a state border, it acquires a more literal character. In a two-dimensional space, the border is a line. Therefore, determining a point requires another line crossing or reaching the border line. Such a line may be the border line of another country. The crossing points of three borders are called tripoints [Dallen, Saarinen, Viken, 2016]. Another example of a point destination may be the highest point on a border (Fig. 3).

Determining the number of tripoints in Europe depends on the delimitation of Europe itself. And this is still a contentious issue. It may be assumed [Krogh, 2008] that the number of tripoints is 48 (Fig. 4). It is indisputably easier to determine the number of tripoints in a given country. For example, there are 7 tripoints on the Polish borders (fig. 5). They became tourist attractions, frequently visited by tourists. However, it should be noted that only tripoints located at the internal borders are literally available to tourists. In other cases they are either inaccessible or their tourist development (most often the construction of a sign, monument board) is located in a short distance from the intersection of 3 borders.



Figure 4: Tripoints in Europe (Krogh, 2008)

Figure following on the next page



Figure 5: Tripoints in Poland (WP, 2015)

Mountain peaks have a different character. First of all, it should be noted that only the few highest points of state borders become tourist destinations. Tourists are primarily interested in mountain peaks. The best known such destination is the Mont Blanc alpine peak. It is believed [Encyclopedia Britannica, 2019] that it has a cross-border character. Its height, depending on the study, ranges from 4807 to 4810 m. In the context of the ongoing Italian-French dispute on some maps [Google Map, 2019a], political correctness is manifested by "blurring" state borders (Fig. 6). In turn, an example of a non-controversial cross-border destination is the Rysy peak (2499 m) located in the Tatra Mountains on the Polish-Slovak border (fig. 7). It should be noted, however, that this is not the highest peak of the Tatra Mountains, but the highest one in Poland.

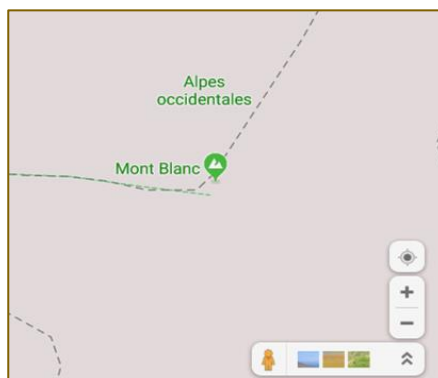


Figure 6: Mont Blanc in the Alps (Italy-France) (Google Map, 2019a)

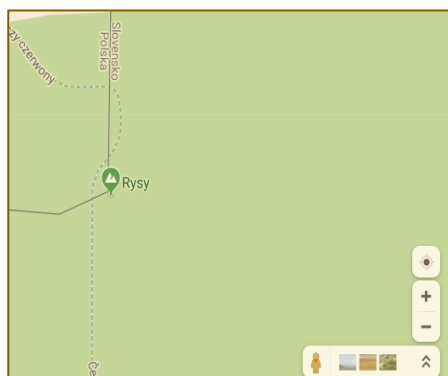


Figure 7: Rysy peak in the Tatra Mountains (Poland-Slovakia) (Google Map, 2019b)

It is worth noting that "Rysy" is an official Polish-Slovak border crossing. This is one of the more unusual crossings in Europe [Travelslovakia, 2019]. In practice it is available to a narrow group of qualified tourists. The crossing was created in 1999. Due to its location, it served only pedestrians. Crossing the border was only allowed during the summer and during daytime. In 2007, under the Schengen Agreement, the crossing was closed. However, in 2019 border controls on the Polish side were restored at the Rysy crossing for one week [Dziennik Ustaw, 2019].



Figure 8: Border crossing board on Rysy (Travelslovakia, 2019)

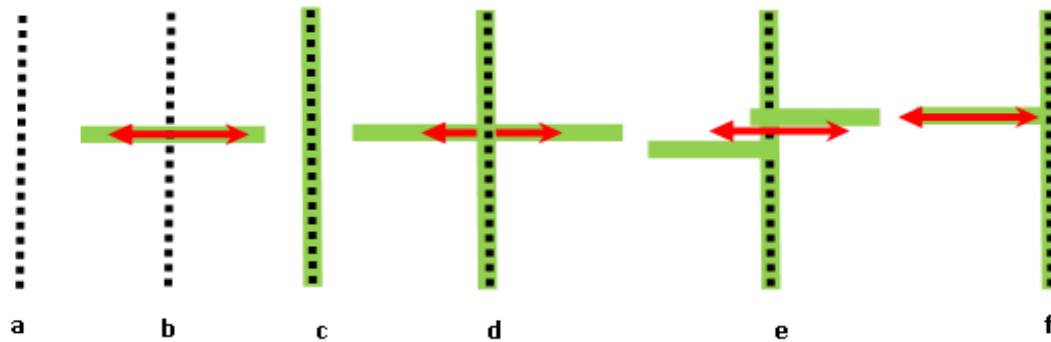


Figure 9: Cross-border trail through the Rysy peak (Travelslovakia, 2019)

4. LINEAR DESTINATION

The concept of linear tourist destinations usually appears in the context of roads [Guiver, Lumsdon, Weston, 2008], tourist routes [Styperek, 2012], both land and water [Newbold, 2011]. Więckowski [2010] distinguishes several types of trails along a border with the inability to cross the border (c), cross-border trail – trail intersection when the second trail runs along the border with the possibility of crossing the border in both directions; (d), cross-border trail - "shifted" intersection with the possibility of crossing the border in both directions (e), a trail with the possibility of crossing the border in one direction only (f). This typology (Fig. 10) is worth supplementing with a closed border, which is a potential tourist destination (a) and a trail intersecting a border (b).

Figure following on the next page



*Figure 10: State border as the core of a linear cross-border destination
(adapted Więckowski, 2010)*

European Cultural Routes are sometimes considered as cross-border linear tourist destinations [Scuttari, De Bortoli, Pechlaner, Riegler, 2017]. However, it should be remembered that of the 38 routes, only some possess a cross-border character. Their cross-border nature here consists only in intersecting the border (variant b in Fig. 10). The border line is a model linear cross-border destination, but it becomes a real destination when the border is open. After joining the EU, border belts were created. Some of them are still under development, for example the border belt separating Poland and Lithuania (Fig. 11). They may turn into attractive promenades in the future. The cross-border Promenade Świnoujście -Heringsdorf, operating since 2011 (Fig. 12) is a pedestrian route and bicycle path connecting both towns. Benches and boards regarding attractions and history of the region were set up on the entire illuminated route. A symbolic place on the promenade consists in a platform on which a stainless steel gate is installed, symbolizing the integration of the border region.



Figure 11: Border belt between Poland and Lithuania near Valakupiai) (BR, 2019)



*Figure 12: Polish - German promenade connecting Świnoujście and Heringsdorf
(Polskaniezwykla, 2019)*

5. SPATIAL DESTINATION

Spatial destinations constitute the largest and most diverse group of cross-border destinations. Their detailed discussion goes beyond the formula of this article. Therefore, this topic will only be signaled by examples in the category of cross-border facilities and cross-border areas.

5.1. Cross-border facilities

Transport infrastructure plays a key role among cross-border constructions. These are primarily bridges and tunnels. The border traffic infrastructure may also have a cross-border character. However cross-border buildings through which the state border runs are noteworthy. The cross-border character of these objects is highlighted in marketing activities. On the American-Canadian border, a cross-border building was erected as a symbol of friendship - the Haskell Free Library and Opera House (Fig. 13). The library's main entrance is positioned on the US side, however Canadian residents are provided an entryway from their side of the border. Inside, the line that demarcates the separation of the two countries is clearly marked [Vemon, 2019]. On the other hand, probably the only European cross-border hotel has a different origin. Hotel Arbez is an unusual place – half of it is located in France and half in Switzerland (Fig. 14). When a new border between the two countries was drawn in 1862 it happened to run down the middle of a private property [Uniqhotels, 2019]. The owner built a shop that straddled the boarder allowing him to conduct business in two countries at once. In 1822 the building became a hotel and then a cross-border destination. The EGTC - Hospital de Cerdanya [2019] on the French-Spanish border can also be considered an unusual cross-border destination. Although it is formally located in one country, it is of a cross-border nature because it is a European legal entity registered as EGTC. Noteworthy is also the Kalin cross-border restaurant (Fig. 15) located on the Croatian-Slovenian border [Tripadvisor, 2019]. However, unlike a cross-border hotel and a cross-border library, it was not intentionally built as a cross-border facility.



Figure 13: Cross-border library on the US-Canada border (Vemon, 2019)



Figure 14: Cross-border hotel on the border between France and Switzerland (Uniqhotels, 2019)



Figure 15: Cross-border restaurant on the border between Croatia and Slovenia (Tripadvisor, 2019)

5.2. Cross-border areas

Europe is an area of intensive international cooperation in which the states are the entities. The result of this cooperation consists in numerous international organizations and partnerships. Some partnerships (e.g. The Visegrad Group) are becoming transnational destinations. In the word's broad sense, the European Union and its 4 Macroregions can be considered as a destination [Studzieniecki, 2017.] Sub-state entities (cities and regions) also play an important role in the development of destinations. In Europe there are a number of spatial units separated by state borders. An example would be the Tatra Mountains located in Poland and Slovakia. There is intensive cross-border cooperation in the Tatra Mountains, supported simultaneously by such instruments as the Tatra Euroregion (Fig. 16) and the Tatra EGTC. 71 EGTCs [Council of Europe, 2019] and 152 Euroregions operate in Europe [AEBR, 2019]. Cross-border destinations become divided cities. Examples include Polish Cieszyn and Czech Tesin. These cities cooperate intensively with the support of the "Śląsk Cieszyński" Euroregion [Kurowska-Pysz, Castanho, Naranjo Gómez, 2018]. Selected cross-border objects (Fig. 18) of outstanding cultural and natural values are entered on the UNESCO World Heritage List.



Figure 16: Tatr Euroregion (Poland - Slovakia) (Euroregion Tatry, 2019) – left



Figure 17: Muskaer Park (Poland – Germany) (Zalesiński, 2019)

There are 39 cross-border objects located on the UNESCO list (Fig. 18). Among these 39 objects, 20 represent the category of cultural heritage (yellow), 16 natural heritage (green), and 3 cultural and natural heritage (yellow/green). The objects are located within the territories of 67 countries, including 35 European. However, it should be noted that not all sites are cross-border destinations with territorial continuity. This is demonstrated by the example of Lithuania in which only one object (Curonian Spit) is a typical cross-border destination.

The second (The Struve Geodetic Arc) is just a chain of survey triangulations stretching from Hammerfest in Norway to the Black Sea, through 10 countries [WHL UNESCO, 2019].

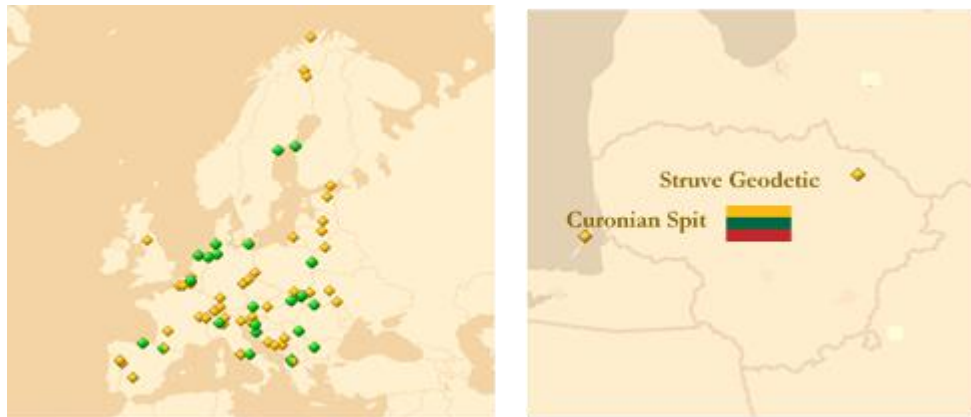


Figure 18: WHL UNESCO cross-border objects in Europe (left) and Lithuania (right)
(adapted WHL UNESCO, 2019)

Entry on the UNESCO list becomes an important tool for promoting destinations including cross-border destinations. This is the added value of international awards and prizes. The importance of the EDEN award (European Destinations of Excellence) is growing in Europe. This EC initiative aims to promote sustainable tourism development models across the EU. It is based on national competitions and promotional campaigns that result in the selection and promotion of a tourist "destination of excellence" for each participating country. In the context of territorial cooperation in Europe, it is worth considering extending the formula of the competition to include cross-border destinations.

6. CONSLUSION

Cross-border destinations are extremely varied. The very concept and definition of tourist destination will probably remain a source of controversy and scientific disputes. The interpretation and typology proposed by the authors aspire to sort out this issue. In managerial terms, destination should be analyzed as a component of the system. This approach facilitates planning and managing the development of tourism. Cross-border destination is significantly related to a product with its core consisting in a state border. Cross-border destinations are becoming more and more popular. Tourists are attracted by the magic of the state border. However, it should be emphasized that not all cross-border points, lines, objects, and areas must become tourist destinations. However, if they possess the appropriate potential, it is worth using cooperation tools (including territorial cooperation instruments) and take advantage of selected international organizations, which through their instruments can contribute to the development of tourism and thus the socio-economic development of cross-border destinations.

LITERATURE:

1. AEBR. (2019). Association of European Border Regions. Retrieved 10.09.2019 from https://www.aebr.eu/en/members/list_of_regions.php.
2. Alejziak, W. (2016). Multi-Level Governance jako instrument planowania rozwoju i zarządzania obszarami recepcji turystycznej. *Turystyka i Rekreacja – Studia i Prace*, No 16, (pp. 9–32).
3. Borzyszkowski, J. (2012). Dyskusja nad pojęciem destynacja, *Ekonomiczne Problemy Turystyki*, No 738 (20), pp. 9-29.

4. Canavan, B. (2016). Identification, Motivation and Facilitation of Domestic Tourism in a Small Island. *Scandinavian Journal of Hospitality and Tourism*, No 16 (4), pp. 512-527.
5. COE. (2019). Council of Europe. Retrieved 10.09.2019 from <https://portal.cor.europa.eu/egtc/CoRAactivities/Pages/welcome.aspx>.
6. Dallen, J., Saarinen, J., Viken, A. (2016). Tourism issues and international borders in the Nordic Region, *Scandinavian Journal of Hospitality and Tourism* No 16, pp. 1-13.
7. Dziennik Ustaw (2019). Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 7 lutego 2019 r. w sprawie przywrócenia tymczasowo kontroli granicznej osób przekraczających granicę państwową stanowiącą granicę wewnętrzną.
8. Ejarque, J. (2006). *Marketing y gestión de destinos turísticos: Nuevos modelos y estrategias 2.0*. Madrid: Ediciones Pirámide
9. Encyclopaedia Britannica (2019). Mont Blanc. Retrieved 10.09.2019 from <https://www.britannica.com/place/Mont-Blanc-mountain-Europe>.
10. Euroregion Tatr. (2019). Retrieved 10.09.2019 from http://www.euroregion-tatry.eu/o_historycznokulturowoprzyrodniczym_szlaku_wokol_tatr,241_p.html.
11. Fedyk, W., Meyer, B., Potocki J. (2017), Nowa koncepcja zarządzania regionami turystycznymi, *Studia Oeconomica Posnaniensia*, vol. 4, No 5, pp. 60–81.
12. Google Map (2019a). Mont Blanc. Retrieved 10.09.2019 from <https://www.google.com/maps/@45.8359639,6.854089,14.83z>.
13. Google Map (2019b). Rysy. Retrieved 10.09.2019 from <https://www.google.com/maps/@49.1806279,20.0881397,17.06z>.
14. Grobelna, A.; Sidorkiewicz, M., Tokarz-Kocik, A. (2016). Job satisfaction among hotel employees: analyzing selected antecedents and job outcomes. a case study from Poland. *Argumenta Oeconomica*. Vol. 37 Issue: 2, (pp. 281-310).
15. Guiver, J., Lumsdon, L., Weston, R. (2008). Traffic reduction at visitor attractions: the case of Hadrian's Wall. *Journal of Transport Geography*, No 16(20), pp. 142-150.
16. Holešinská, A. (2007). *Destinační management aneb jak řídit turistickou destinaci*. Brno: Masarykova univerzita
17. Kaczmarek, J., Stasiak, A., Włodarczyk, B. (2002.) Produkt turystyczny, *Turystyka i Hotelarstwo*, No 1, pp. 33-54.
18. Krogh, J. (2008) Geosite: Tripoints of Europe. Retrieved 10.09.2019 from http://geosite.jankrogh.com/borders/tripoints/tp_europe.htm#ALGRMK.
19. Kruczek, Z. (2017). Regiony czy destynacje turystyczne. Kontrowersje wokół definiowania i nazywania. *Ekonomiczne Problemy Turystyki*, No 37, (pp. 39–47).
20. Kurowska-Pysz, J.; Castanho, R.; Naranjo Gómez, J.M. (2018). Cross-border cooperation – the barriers analysis and the recommendations. *Polish Journal of Management Studies*, No 17, 2.
21. Leiper, N. (1979). The framework of tourism. *Annals of tourism research*, No. 6, (pp. 390-407).
22. Magaš, D., Vodeb, K., Zadel, Z. (2018). *Menadžment turističke organizacije i destinacije*. Opatija: Fakultet za menadžment u turizmu i ugostiteljstvu.
23. Manente, M, Minghetti, V. (2006). Destination Management Organizations and Actors. In D. Buhalis, C. Costa (eds.). *Tourism Business Frontier* (pp. 228–237). Oxford: Elsevier.
24. Moutinho, L., Witt, S. F. (1989). *Tourism Marketing and Management Handbook*. London: Prentice Hall.
25. Newbold, C. (2011). TN River Trail Launch Creates Linear Tourist Destination. Retrieved 10.09.2019 from <http://validitymag.com/2011/12/tn-river-trail-launch-creates-linear-tourist-destination>.
26. Niezgoda, A. (2006). *Obszar recepcji turystycznej w warunkach rozwoju zrównoważonego*, Poznań: Uniwersytet Ekonomiczny w Poznaniu.

27. Panasiuk, A. (2015). Współpraca i konkurencja podmiotów destynacji turystycznej. *Przedsiębiorstwo i Region*, No 7,(pp. 71–83).
28. Panasiuk, A. (2017). Zarządzanie destynacją turystyczną. Aspekty instytucjonalne. *Przedsiębiorczość i Zarządzanie*, vol. XVIII/8, part III, pp. 107–121.
29. Polskaniezwykła (2019). Retrieved 10.09.2019 from <http://www.polskaniezwykła.pl/web/place/28951,swinoujscie-transgraniczna-promenada-swinoujscie---heringsdorf.html>.
30. Potocki, J. (2009). *Funkcje turystyki w kształtowaniu transgranicznego regionu górskiego Sudetów*. Wrocław: Wrocławskie Towarzystwo Naukowe.
31. Scuttar, i A, De Bortoli, I, Pechlaner H, Riegler H (2017). Product innovation in route-based tourism: Interactive design of hiking routes as a driver for sustainable tourism. In: Hay Rachel Conference Proceedings of BEST EN Think Tank XVII: Innovation and Progress in Sustainable Tourism. (pp. 281-284).
32. Spirajevs, E. (2019). Borderlands of Lithuania and Kaliningrad Region of Russia: Preconditions for Comparative Geographic Approach and Spatial Interaction. In J. S. Methi, A. Sergeev, M. Bieńkowska, B. Nikiforova (eds.). *Borderology: Cross-disciplinary Insights from the Border Zone Along the Green Belt*. Berlin: Springer.
33. Studzieniecki, T. (2005) *Euroregions — new potential destinations*, *Tourism Review* 60(4), (pp. 26-32).
34. Studzieniecki, T. (2017). EU macroregions as potential tourist destinations. *Studia Turistica* No 3(8), (pp. 89-98).
35. Studzieniecki, T., Kurjata, E. (2010). Destination Branding in the Baltic Europe. *Acta Scientiarum Polonorum. Seria: Oeconomia*. No nr 4/9, (pp. 519–529).
36. Studzieniecki, T., Palmowski, T. (2019). Delimitacja destynacji turystycznej na przykładzie Regionu Morza Bałtyckiego. *Przedsiębiorczość i Zarządzanie*. Vol. XX/ 2, part 1, (pp. 91–107).
37. Studzieniecki, T. (2008). Europa als nationale und transnationale Destination. In W. Freyer, N. Nuamnn, A. Schuler (eds.). *Standfaktor Tourismus und Wissenschaft; Herausforderungen und Chancen für Destinationen*, Berlin: ESV.
38. Styperek, J. (2002). *Linearne systemy penetracji rekreacyjnej*. Poznań: Wyd. Naukowe Bogucki.
39. Szelagowska-Rudzka, K. (2016.) Actions Objected at Employees in CSR - Report from the Study. *Management-Poland*. Vol. 20/2, (pp. 143-159).
40. Tripadvisor. (2019). Restoran Kalin. Retrieved 10.09.2019 from https://www.tripadvisor.co.nz/Restaurant_Review-g1567720-d7224559-Reviews-Restoran_Kalin-Brezice_Lower_Carniola_Region.html.
41. Uniqhotels (2019). Retrieved 10.09.2019 <https://www.uniqhotels.com/hotel-arbez>.
42. Vemon, K. (2019). The Library Which Stands on the American-Canadian Border to Symbolize Love. Retrieved 10.09.2019 from <https://www.thevintagenews.com/2019/04/11/haskell-free-library/>.
43. Vodeb, K., Rudez, H. (2010). Potential Tourist Destination Development in the Istrian Countryside. *Tourism and Hospitality Management*, Vol. 16, No. 1, (pp. 75-84).
44. Wanagos, M. (2000). Wpływ dostępności turystycznej na kształtowanie produktu turystycznego regionu, *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania, Finansów i Marketing*, No 2, (pp. 233–241).
45. Wang, Y. (2011). Destination Marketing and Management: Scope, Definitions and Structures. In: Wang Y, Pizam A. (eds.), *Destination Marketing and Management. Theories and Applications* (pp. 1- 20) Oxfordshire: Cabi.
46. WHL UNESCO. (2019). Retrieved 10.09.2019 from <https://whc.unesco.org/en/list/?&transboundary=1>.

47. Więckowski, M. (2010). *Turystyka na obszarach przygranicznych Polski*. Warszawa: Polska Akademia Nauk.
48. WP. (2015). Polskie trójstyki - nietypowa atrakcja turystyczna. Retrieved 10.09.2019 from <https://turystyka.wp.pl/polskie-trojstyki-nietypowa-atrakcja-turystyczna-6043992940151425g>.
49. WR (2019). W Góry Sudawskie na rower. Retrieved 10.09.2019 from <http://www.bognairadek.pl/2014/10/rowerem-gory-sudawskie>.
50. Zalesiński, P. (2019). Park Mużakowski, czyli zielony kosmos. Retrieved 10.09.2019 from <https://podroze.onet.pl/polska/lubuskie/park-muzakowski-jeziorka-historia-atrakcje-zwiedzanie/v0gxtmj>.
51. Zhilenko, V. (2017). Turistskaya destinatsiya kak element turistskoy sistemy i instrument formirovaniya konkurentnykh preimushchestv regiona. In *Industriya turizma i servisa: izvestnost', imidzh, investitsii*. (pp. 306-309) Belgorod: Belgorodskiy Gosudarstvennyy Natsional'nyy Issledovatel'skiy Universitet.

THE IMPORTANCE OF IDENTIFYING OPPORTUNITIES AND RISK IN ENSURING BUSINESS CONTINUITY

Kresimir Buntak

University North

Trg dr. Žarka Dolinara 1, Koprivnica, Croatia

kresimir.buntak@unin.hr

Matija Kovacic

University North

Trg dr. Žarka Dolinara 1, Koprivnica, Croatia

matkovacic@unin.hr

Vesna Sesar

University North

Trg dr. Žarka Dolinara 1, Koprivnica, Croatia

vesna.sesar@unin.hr

ABSTRACT

One of the fundamental requirements that stakeholders have and its related to the organization is ensuring business continuity. Business continuity can be impaired by various events and risks which may result in an interruption in the delivery of the product, i.e. the provision of the service. Any interruption in business continuity also means less revenue for the organization, possible loss of market reputation, costs associated with remedying the consequences of risk, etc. In order to ensure business continuity, the organization can implement the business continuity management system and certify it with ISO 22301 norm. However, the implementation of Business continuity management has often not been sufficient and there is a need to integrate all management systems that will create synergy in the organization. To ensure business continuity, the organization defines plan. In addition, when creating a business continuity plan, it is necessary to analyze the opportunities and the risks and to define appropriate measures. For each opportunity, organization must define, measure to use identified an opportunity and for risk and consequence of the risk measures whit which they will be annulled.

Keywords: *Business continuity, Business continuity management system, ISO 22301, risk and opportunities, planning*

1. INTRODUCTION

Today's organizations face different challenges that are related to the changes of the conditions in an environment in which they operate. Environmental variability also means the emergence of new risks associated with the possibility of jeopardizing the existence of an organization in the market. Accordingly, the organization must identify the risks and, for each risk, identify measures to eliminate it. On the other hand, environment variability for an organization may also mean the emergence of new opportunities that the organization must seize to try to create a competitive advantage in the market. The conditions described above require organizations to create mechanisms for achieving business continuity. One of the ways to create a foundation for business continuity is to implement and certify a continuity management system in the organization. Ensuring the continuity of the organization's operations involves creating mechanisms by which the organization will be able to respond to all variables that may jeopardize the existence of the organization as well as its normal functioning. The created mechanisms must create homeostasis in the organization.

Homeostasis means the creation of an opportunity for each part of the organization to develop mechanisms for automatic response to the occurrence of risk that could threaten its existence, but on the other hand enable the providing of the required service, i.e. production of the product. The mechanisms also must include the ability of the organization or parts of it to seize opportunities and continue its growth and development (Zawiła-Niedźwiecki, 2010). The challenge of ensuring business continuity is growing with the development of science and technology as well as the application of IT in business. Due to the increasing use of IT there is a need for establishing secure communication. Without secure communication, there is a risk that information from the organization will be exposed to third parties. That may endanger the existence of an organization, but also may endanger the continuity of business information system is one of the foundations that enables normal functioning of the organization (Järveläinen, 2012). Today's organizations have different management systems like occupation safety and health management systems, environmental management systems, quality management system, etc. All management systems are providing measures that will eliminate the incident situation and its consequences if an incident has occurred. For example, crisis in the organization may be the result of an employee's injury, environmental pollution and interruption of energy supplies for the production and provision of services. If organization have a management system risk of such situations and consequences of occurring such situations are lower. Furthermore, organizations have one more requirement that is related the creation of mechanisms by which organization will nullify other incidents and situations that may threaten the existence and continuity such as employee strikes, etc.

2. SYSTEMATIC THINKING AND SYSTEMATIC APPROACH TO BUSINESS

To understand sustainability and business continuity, it is necessary to adopt the system thinking described by the general system theory. General theory began to develop in 1954 as the need to create a basis that will be skeleton that would allow a different perspective on the relationships between particular scientific disciplines. Furthermore, the importance of systematic thinking when considering how to ensure business continuity is growing. Given that, general systems theory is directed toward:

- studying the growth of the system as well as maintaining the tendency of the system growth,
- identify and study the interaction of system components,
- achieving system continuity as well as increasing system efficiency,
- identify and draw conclusions about the system based on the transformation taking place in the system,
- managing the system, which involves identifying the results of the transformation and drawing conclusions about possible improvements in the system (Žaja, 1993).

System thinking means understanding the system as a series of interconnected components. Each system may be part of a different system, or one system may consist of a number of other systems. Furthermore, each system is made up from different components and changes in one of the components may affect changes in the other components. An organization is a system consisting of a series of subsystems that represent organizational departments or organizational functions. Given fact, each organization operates within an industrial environment and the general environment, it can be said that the industrial environment and the general environment are actually a system. Furthermore, if all systems interact with each other and affect the subsystems the conclusion is that the risks and opportunities in one of the systems imply risks and opportunities related to the system components. In other words, if the organization faces a risk in energy supply, this may as result have an inability to normally carry out business processes.

On the other hand, problems in the information system can, as a consequence, endanger the data security but also the ability to communicate between organizational departments, which can lead to a crisis).

3. THE CONCEPT OF RISK AND OPPORTUNITY

Given the variability and turbulence of organizational environments, organizations face many risks and opportunities. For each identified risk that may threaten the existence and continuity of the business, the organization must define measures to eliminate the risk and the consequences of the risk. On the other hand, the organization must also seize opportunities to provide a basis for creating a competitive advantage in the market. Risk is defined as an event that can create uncertainty of achievement of goals that an organization defined in the plan (Purdy, 2010). Risk can be also defined as a combination of the likelihood of an occurring event and the consequences of occurred event. The consequences of an event can be positive, but it can also be negative (Peddada, 2013). Furthermore, risk can be viewed from different aspects, but the focus of the risk study in this paper is business risk, which is related to the possibility of organization market failure that means uncertainty in achieving the requirements of all stakeholders. Opportunities, on the other hand, are aimed at identifying a market niche or unmet stakeholder need. Seizing and identifying an opportunity for an organization is crucial when it comes to creating a competitive advantage in the market. However, in order for an organization to identify market opportunities, it is necessary to carry out an analysis of the organizational environment, which is also one of the requirements that the ISO 9001 standard places on the organization. Environmental analysis involves creating an organizational context based on which the organization identifies opportunities, weaknesses, threats and strengths. In addition, by analyzing the organizational context, organization can identify the risks as well as opportunities. Tools such as PEST analysis, VRIO analysis, etc. can be used to analyze the organizational context (Buntak, Mutavdžija, & Stanić, 2018). An organization uses its strengths to capitalize opportunities on the market. Furthermore, it uses its strengths or opportunities to overcome weaknesses and threats, which can determine business continuity. Furthermore, the identification of risks and opportunities is the basis for the creation of business plans in which the organization defines goals and activities for the achievement of goals and measures related to corrective actions if a risk occurs. In other words, if an organization identifies poor energy or other infrastructure, adverse social movements, etc. as one of the threats, there is a risk of endangering business continuity because poor infrastructure may mean the organization's inability to provide all the resources it needs to function properly. When it comes to business continuity, the most important activity is risk analysis and identification. Risk can be classified in different ways, depending on the organization and the conditions in which the organization operates. No matter how an organization classifies and identifies risks, it is essential to create a risk map that will contain all the identified risks. Furthermore, the risks identified once must be analyzed to determine their likelihood and its possible consequences. Risks can be related to financial risk, information security, loss of reputation, etc. Different tools and methods can be used for risk analysis. One of well-known are Delphi method and Monte Carlo method. Once analyzed, the risk must have defined measures by which it will be annulled or reduced. For each defined measure it is necessary to define control points in which will be measured effectiveness of developed and implemented measures (Gibb & Buchanan, 2006).

4. ORGANIZATIONAL KNOWLEDGE

The organization, during its operations and existence on the market, adapts to the conditions that arise in organizational environments. Adaptation to environmental conditions results in the creation of organizational knowledge. Organizational knowledge management is a process aimed at disseminating information that an organization uses to make decisions, solve

problems, etc. (Gupta, Iyer, & Aronson, 2000). Using organizational knowledge that arises through adaptation to environmental conditions, organizational employees can, based on the defined guidelines and activities in the plan, identify the threat and take measures which treat and consequences of the threat will be annulled. However, it is also necessary to emphasize the need to ensure the continuity of organizational knowledge, which implies the transfer of once acquired knowledge to other generations that continue to develop organizational knowledge and use it (Urbancová & Venclová, 2013).

5. BUSINESS CONTINUITY MANAGEMENT

Each organization consists of multiple management systems. One of the organizational management systems is the business continuity management system, which is aimed at identifying all threats that could threaten the business as well as defining the measures by which the organization will develop resistance to identified threats (Heng, 2015). For the establishment of an effective business continuity management system, it is recommended to integrate a different management system such as risk management system, quality management system, environmental management system, employee health and safety management system, information security management system, etc. The importance of having a strategic plan that defines threat-elimination measures are becoming imperative for almost all organizations today. In practice, organizations do not develop good enough plans to devise mechanisms to eliminate the danger and ensure continuity. One of the first attempts to create such plans occurred in the 1970s, when the so-called contingency plans geared towards the implementation of activities where a risk arises. Furthermore, contingency planning also recognizes the impact that the organizational environment has on the organization (Marisa & Oigo, 2018). Business continuity management consists of four basic steps, understanding the organization, defining a business continuity strategy, defining and implementing measures to ensure business continuity, and the last step is maintaining and evaluating the continuity management system (Malachová & Oulehlová, 2016). Talking about the impact that business continuity management has on an organization's performance, it is necessary to mention the positive correlation with efficiency, effectiveness, quality, profitability, quality of work and innovation, which are the basic parameters that shape organizational success (Sawalha, 2013). It is important to emphasize that business continuity management should not be solely aimed at defining the examination lists that an organization will use if a crisis occurs in the organization. The Business Continuity Plan must be used as a support tool. Furthermore, examination lists can be determined by the specificity of the industry, i.e. the activity the organization is engaged in. Some organizations will have a greater need to create examination lists, while some organizations may have a smaller need (Lindström, Samuelsson, & Hägerfors, 2010). An organization must identify risks that could create incidents within the organization that could jeopardize business continuity. To identify risks and define measures to reverse the consequences, an organization may apply different tools and methods, one of which is FMEA (Failure mode and effects analysis). However, it is important to note that, in addition to identifying risks in the process, opportunities for improvement can be identified that can be identified through feedback. Thus, a business continuity management system involves the creation and implementation of a series of activities that will enable an organization to deliver a product or provide service to a customer or user after an incident has occurred within the organization. Business continuity can be divided into system resilience, system response to an incident, and system recovery after an incident (Bajramović, Islamović, & Hodžić, 2016).

5.1. Business Continuity Planning

In order for the organization to achieve business continuity, it is necessary to define plans that will include the activities that will be taken if risk has been realized.

The business continuity plan must include:

- contact: it is necessary to define a contact person if an incident has occurred. It is necessary to define all contact persons during working hours as well as contact persons after working hours,
- roles and Responsibilities: in addition to roles and responsibilities, an organizational structure must be defined to ensure business continuity and recovery teams,
- risk level: means defining all risks and their likelihood,
- response time: defines the minimum and maximum time available to respond to an event,
- evaluation method: how the business continuity management system will be evaluated,
- processes: it is also necessary to define processes that will ensure business continuity,
- reporting: involves defining the documents that will be used to report the incident,
- education: All employees must be educated in order to be able to respond to incidents in the organization (Lam, 2002).

In addition to business continuity planning, an organization must also conduct an analysis of the impact that business interruption has on the organizational system, which includes:

- identifying activities or processes in the organization and defining their owners,
- identification of the staff who will collect the data,
- define scenarios that may lead to a crisis,
- define a timeframe within which business interruption is unacceptable (Tjoa, Jakoubi, & Quirchmayr, 2008).

The main objectives of applying impact analysis are:

- identification of key and critical business processes,
- identification of individual points at which problems may arise,
- identification of business process interruption to the organization,
- identification of recovery points is unacceptable (Tjoa, Jakoubi, & Quirchmayr, 2008).

5.2. ISO 22301 - Business Continuity Management System Requirements

An ISO organization as an umbrella organization that creates management system standards, develop ISO 22301 norm that defines the requirements for a management system in organization that are related to the business continuity. In addition to the ISO 22301 certification standard, the ISO / TC 223 Technical Committee defines a family of standards to design a business continuity management system. Furthermore, ISO 22301 complies with Annex SL, making it much easier to integrate with other management system standards. It is important to note that the business continuity management system can be implemented in all organizations, regardless of the industry and the size of the organization. ISO 22301 is based on the PDCA (Plan-Do-Check-Act) approach, which implies to the analysis of opportunities and risks associated with the organizational management system:

- planning: involves the creation of a business continuity policy, defining all general and specific goals, defining processes and procedures to ensure business continuity,
- implementation: implementation of previously defined goals and business continuity plans based on defined policies,
- verification: involves the evaluation and definition of opportunities for improvement in the business continuity management system,
- action: implies improvement of the management system based on identifying opportunities in the system (Bajramović, Islamović, & Hodžić, 2016).

5.3. Need for integration of management systems

Given the fact that business continuity management system within itself contains the need to identify risks that can be associated with all organizational functions and management systems, there is a need to integrate all management systems to create synergy. If it can be assumed that every management system in an organization represents a single process and that a quality management system is a fundamental process in an organization, then it can be said that the business continuity management system is a support process in organization. Furthermore, by creating an integrated management system, the organization is focused on creating business excellence. Because all norms are in accordance with annex SL, integration of norm is significantly simpler. Business continuity is affected by:

- quality management system: aimed at meeting the requirements of stakeholders but also defining a set of principles that organizational management must take into account when managing an organization and all its systems,
- information security management system: the implementation of IT solutions in business entails a greater risk associated with the availability of information to third parties, which can endanger the organization but also the customers and users of products and services,
- environmental management system: incidents in an organization can have a detrimental effect on the environment, which is necessary to establish an environmental management system and integrate it with the business continuity management system,
- employee health and safety management system: employees may be exposed to adverse impacts, which may endanger their safety and health, thereby impairing continuity, making it important to carry out integration,
- risk management system: although it is not a certification system, the risk management system is of particular importance for managing business continuity.

Each management system has defined measures that are related to reducing risk and reduce the consequences of occurred risk. However, there is a need to create and implement a management system that will eliminate the risks and consequences of the risks for all those areas which are not covered by management systems such as the environmental management system, the health and safety management system of employees, etc. This fact drives need for creating an integrated management system.

6. CONCLUSION

One of the basic requirements and goals of the organization is the achievement of business continuity. Business continuity means the ability of an organization to continue manufacturing products or providing services after an incident occurs. However, it is important to emphasize that business continuity depends on risk as well as an organization's willingness to implement measures that will eliminate risk and the consequences of risk. Furthermore, the ability of the organization to respond and undertake activities that will eliminate the risk. Organizational knowledge is gained through adapting the organization to the new conditions, and can also affect business continuity. To ensure business continuity, an organization must identify risks as well as events that could create a crisis in the organization. All risks must be documented, and for each risk the organization must define the measures by which it will abolish it as well as the measures by which it will annul the consequence of the risk. The ISO organization recognizes the importance of certifying the business continuity management system and for the certification ISO create ISO 22301 norm. However, with the implementation of the business continuity management system, the organization is advised to create an integrated management system that involves the implementation of two or more management systems. In addition to identifying risks, the business continuity management system also identifies opportunities to identify places in the process that can be improved and to reduce the risk of incidents that may

impair business continuity. In defining measures to ensure business continuity, it is necessary to include employees who, through a proactive relationship, will influence the identification of possible incidents, which is the basis for taking preventive actions, i.e. measures to prevent the realization of risks. Furthermore, each organization is advised to integrate management systems, since individual management systems such as the environment, employee health and safety, energy do not cover the full range of potential events that could endanger the business.

LITERATURE:

1. Bajramović, E., Islamović, F., & Hodžić, A. (2016). Uvođenje i implementacija BAS EN ISO 22301:2016 u organizacije. *VI. međunarodni stručno-znanstveni skup "Zaštita na radu i zaštita zdravlja"*.
2. Buntak, K., Mutavdžija, M., & Stanić, I. (2018). Primjena alata za određivanje konteksta organizacije. *Kvalitet & izvrsnost*.
3. Gibb, F., & Buchanan, S. (2006). A framework for business continuity management. *International journal of information management*, 128-141.
4. Gupta, B., Iyer, L., & Aronson, J. (2000). Knowledge management: practices and challenges. *Industrial management & data systems*, 17-21.
5. Heng, G. M. (2015). Business Continuity Management Planning Methodology. *International Journal of Disaster Recovery and Business Continuity*, 9-16.
6. Järveläinen, J. (2012). Information security and business continuity management in interorganizational IT relationships. *Information Management & Computer Security*, 332-349.
7. Lam, W. (2002). Ensuring business continuity. *IT professional*, 19-25.
8. Lindström, J., Samuelsson, S., & Hägerfors, A. (2010). Business continuity planning methodology. *Disaster Prevention and Management: An International Journal*, 243-255.
9. Malachová, H., & Oulehlová, A. (2016). Application of business continuity management system into the crisis management field. *Transactions of the VŠB–Technical university of Ostrava, Safety Engineering Series*, 43-50.
10. Marisa, R., & Oigo, D. (2018). Influence of Organizational Resources and Structure on Business Continuity Management of Private Security Firms in Kenya. *Journal of Human Resource Management*, 18-25.
11. Peddada, K. (2013). Risk assessment and control. *International conference "Governance & Control in Finance & Banking: A New Paradigm for Risk & Performance"*, 51-59.
12. Purdy, G. (2010). ISO 31000: 2009—setting a new standard for risk management. *Risk Analysis: An International Journal*, 881-886.
13. Sawalha, I. (2013). Organisational performance and business continuity management: a theoretical perspective and a case study. *Journal of business continuity & emergency planning*, 360-373.
14. Tjoa, S., Jakoubi, S., & Quirchmayr, G. (2008). Enhancing business impact analysis and risk assessment applying a risk-aware business process modeling and simulation methodology. *Third International Conference on Availability, Reliability and Security*.
15. Urbancová, H., & Venclová, K. (2013). Importance of Knowledge Continuity in Business Continuity Management. *Acta Universitatis Bohemiae Meridionalis*, 3-13.
16. Zawila-Niedźwiecki, J. (2010). Business continuity. *Foundations of management*, 101-120.
17. Žaja, M. (1993). *Poslovni sustavi*. Zagreb: Školska Knjiga

THE ROLE OF TRANSPORT DECARBONIZATION IN THE CROATIAN ECONOMY AND TOURISM

Dalibor Pudic

*Croatian Energy Regulatory Agency, Republic of Croatia
dpudic@hera.hr*

Igor Grozdanic

*Croatian Chamber of Commerce, Republic of Croatia
igrozdanic@hgk.hr*

Zoran Dojcinovic

*Croatian Gas Association, Republic of Croatia
zoran.dojcinovic@hsup.hr*

ABSTRACT

The aim of this paper is to research the importance of decarbonisation in the transport of the Republic of Croatia, as well as advantages and disadvantages it brings to the Croatian economy, respectively regarding the selection of priorities in the choice of the energy mix in the decarbonisation of transport. From the aim of the research one question arose: Which priorities should be selected when allocating subsidies to maximize emissions reduction with as little funding as possible? The goal of the climate policy of the European Union (EU) is to limit global warming to 2° C above the average level of temperature from pre-industrial times. From the Operational Program Competitiveness and Cohesion 2014-2020, investment priorities are the reduction of air pollution and the promotion of measures of noise reduction. The main funding priorities are focused on promoting renewable energy and energy efficiency measures in the sectors with the highest share of energy consumption, namely: industry, transport, services, agriculture, and households. The choice of the wrong projects for financing can only make Croatia's rating worse in terms of competitiveness. The Republic of Croatia has one of the lowest CO₂ emissions per capita in the European Union, and selection of poor projects to achieve greater emission reductions could have a negative effect on the economy itself. In the period from 1991 to 2017, the share of transport in the final energy consumption increased from 21.7% to 33.9%.¹ Although the highest energy consumption is in the construction sector, transport is extremely important in reducing emissions, because energy that used in transport is mainly fossil fuels. At a time when the share of tourism in the gross domestic product is almost 20 percent, it is necessary to take into account the infrastructure in transport that must be provided to tourists, respectively electric and gas filling stations. The paper will analyse the energy consumption in transport sector as well as the shares of types of energy. Furthermore, the situation in electromobility as well as use of natural gas as an alternative fuel will be analysed.

Keywords: *electromobility, emission reductions, pollution, transport*

1. INTRODUCTION

To meet medium and long-term climate targets we will need decarbonisation of the transport system. This target has its origin in the long-term worldwide goal to limit global warming in this century to no more than 2°C above pre-industrial levels. Paris Agreement has a more ambitious target to limit the temperature increase to 1.5°C.²

¹ Energy in Croatia (2017), Annual Energy Review, Ministry of Environment and Energy of the Republic of Croatia, 83

² Hulme M. (2016), 1.5 °C and climate research after the Paris Agreement, Nature Climate Change volume 6, pages 222–224

Greenhouse gas emissions have to be reduced between 80% and 95% by 2050 compared to 1990 levels in developed countries. Medium-term targets the EU and its Member States committed to were a binding target of at least 40% domestic reduction in greenhouse gas (GHG) emissions by 2030 compared with 1990. These targets result in the involvement of all sectors, including the transport sector. In 2016, energy consumption in transport in the EU-28 was 29% higher than in 1990. Transport is the largest energy consumer sector, except in Germany, Sweden, Slovakia, Belgium, and Czech Republic where the industry sector has a greater role and in Hungary, Latvia, Estonia where the residential sector is dominant. In Croatia, the residential sector is dominant, too. Consumption in transport sector in EU increased from 30% in 2000 to 33% in 2015. Half of the energy consumption for cars and 30% for trucks and light duty vehicles present the greatest challenges in reducing emissions. However, the specific fuel consumption of new cars has been decreasing since 2000 and was 1.8 l/100 km lower in 2014 at EU level. Between 2000-2007, the rate of decrease in consumption per 100 km was 1.2% per year while between 2007-2014 the rate of decrease in consumption per 100 km was 3.2% per year, mainly because of EU regulations on labelling and emission standards, as well as new emission-based taxes, that provided incentives for the purchase of low emission cars. It did not happen in Croatia, where the decreasing remained at almost the same rate. This indicates that Croatia is lagging behind in terms of emission reductions and energy efficiency in transport for developed European countries. Croatia encourages the purchase of electric cars, but no significant changes have been made in tax terms, as neither improvements in the construction of charging station infrastructure. In Croatia, energy consumption in transport increased by 2.6% in 2016 as compared to the consumption in 2015. Natural gas had greatest increase in consumption - by 10.6%, although it made up a small percentage of the total energy consumption (only 0.15%). Although energy consumption transport grew at a rate of 1.2% per annum from 2011 to 2016, natural gas consumption in transport grew at a rate of 41.3% per year. In the same period, electricity consumption in transport even fell at a rate of 0.1% per year. The share of diesel oil increased from 57.2% in 2011 to 63.1% in 2016.

2. EU REGULATIONS AND OBLIGATIONS

In moving towards a low-carbon economy and a renewable-based energy system the power and heating and cooling sectors are modestly explored while the transport sector is making slow progress. Europe reduced its total GHG emissions during 1990 to 2014 by 23%, but due to increased demand in number of vehicles, in the same period, the transport sector's emission increased by 20.1%. Road transport took the largest share, (about 73% of the total emission in 2014) showing that the transport sector is critical point to meeting emission targets. It happened because of the high retail price of alternative fuel vehicles (electrical cars), high cost of non-food-based biofuel production and lack of infrastructure.³ That's why natural gas and renewable natural gas (RNG) vehicles are important in the future. Low and stable natural gas price and low vehicles price can help in combating transport emissions and pollutants. On 22 October 2014, the European Parliament and the Council adopted the Directive 014/94 / EU on the deployment of alternative fuels infrastructure. Based on the consultation with stakeholders and national experts, as well as the expertise reflected in the Communication from the Commission of 24 January 2013 entitled 'Clean Power for Transport: A European alternative fuels strategy', electricity, hydrogen, biofuels, natural gas, and liquefied petroleum gas (LPG). According to the directive, new infrastructure networks need to be built, such as for electricity, natural gas (liquefied natural gas (LNG) and compressed natural gas (CNG)) and, where appropriate, hydrogen in order to not prevent the development of economies of scale on the supply side and Union-wide mobility on the demand side because of not harmonised development of alternative

³ Hagos D.A. and Ahlgren E., A state-of-the art review on the development of CNG/LNG infrastructure and natural gas vehicles (NGVs), Technical report FutureGas project – WP3 Gas for transport

fuels infrastructure across the Union. Member States should ensure an appropriate number of refuelling points accessible to the public for the supply of CNG or compressed biomethane to motor vehicles is built in order to ensure that CNG motor vehicles can circulate in urban/suburban areas as well as the European Union. Member States should ensure that refuelling points accessible to the public are put in place, taking into account the minimum range of CNG motor vehicles. As an indication, the necessary average distance between refuelling points should be approximately 150 km. LNG is an attractive fuel alternative for vessels and trucks. The decision on the location of the LNG refuelling points at ports should be based on a cost-benefit analysis including an examination of the environmental benefits. Member States should ensure that trucks refuelling points are accessible to the public and put in place within adequate distances taking, into account the minimum range of LNG heavy-duty motor vehicles. As an indication, the necessary average distance between refuelling points should be approximately 400 km. An appropriate number of LNG and CNG refuelling points accessible to the public should be put in place by 31 December 2025.⁴

3. POSITION OF NATURAL GAS IN EU TRANSPORT

In Europe, very few countries have high market penetration of natural gas vehicles. Decisive reason why natural gas vehicles play a minor role in Europe is the dependence on gas imports. The most successful story when we talk about natural gas vehicles in European Union is Italy with more than 1,130,000 natural gas vehicles and more than 1,326 CNG refuelling stations. All regions have natural gas refuelling stations, excluding the island of Sardinia. Between 2014-2017, Italian natural gas vehicles sales were in decline, due to the lack of new natural gas vehicle models offered by car manufacturers.⁵ The lack of models is probably another reason why people do not buy natural gas vehicles in Europe. A turnaround came in 2018, because VW-Audi-Seat-Skoda group offered wider range in natural gas model vehicles. Immediately after Italy, Russia has the highest number of cars (145,000), followed by Germany (100,000), Bulgaria (70,000), and Sweden (55,000). However, countries with the most number of cars per capita after Italy (16,000), are Bulgaria (9,900), Sweden (5,400), and the Czech Republic (1,850). Today, there are more than 5,000 natural gas filling stations and more than 2,000,000 natural gas vehicles in Europe.⁶ Although the focus is on hybrid technology and the electric car, European governments have developed incentives (e.g. tax reductions) to foster natural gas vehicles. Environmental reasons are the main motive for incentives. The use of biomethane as a renewable energy source in transport sector gives additional incentives because biomethane can be mixed with fossil-natural gas and vehicles without the need for changes in the existing technology. The role of natural gas vehicles in reducing greenhouse gas emissions can be clearly seen in Figure 1.

Figure following on the next page

⁴ Directive 2014/94/EU of the European Parliament and of the Council of the deployment of alternative fuels infrastructure, 22 October 2014, L 307/7

⁵ Resurgent NGV Market in Italy, Retrieved 1.9.2019 from <https://www.iangv.org/category/country/italy/>

⁶ Current Natural Gas Vehicle Statistics, Retrived 2.9.2019. from <http://www.iangv.org/current-ngv-stats/>

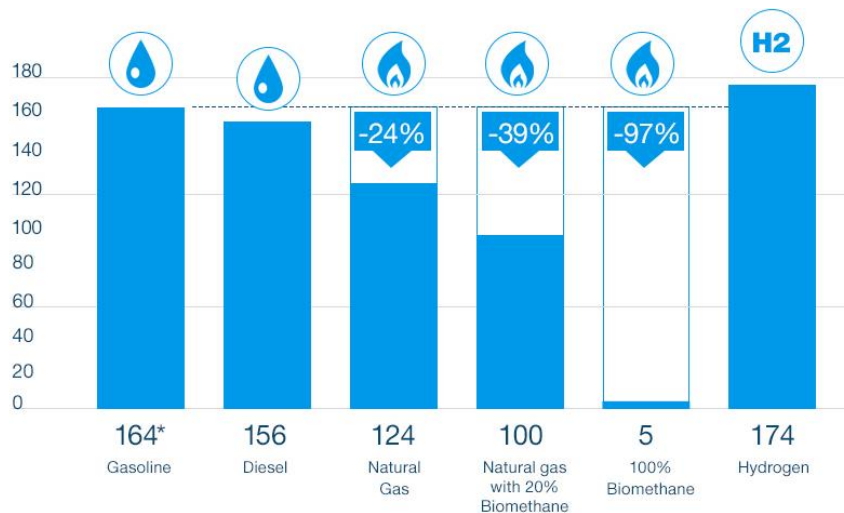


Figure 1: Greenhouse gas emission, <https://www.wingas.com/en/raw-material-natural-gas/mobility-with-natural-gas.html>

Natural gas vehicles can reduce carbon dioxide emissions by 24 percent if we compared with gasoline. Natural gas mixed with 20 percent renewable biogas can reduce carbon dioxide emissions by 39 percent, while renewable biogas can reduce carbon dioxide emissions by 97 percent. In Germany, the mobility sector is responsible for around 20 percent of CO₂ emissions. If a fifth of the cars in Germany switched from oil-based fuels to natural gas by 2030, it would be possible to save up to 20 million tons of CO₂ equivalent a year, shows a study by the Institute of Energy Economics (EWI). That is equivalent to the annual CO₂ emissions of 2.5 million two-person households.⁷ The German Bundestag amended federal highway toll law to exempt lorries powered by natural gas from tolls from 1 January 2019 for a period of two years. On that way they eliminated the toll and natural gas vehicles can save up to 18.7 euro cents per kilometer. Except for the toll exemption they give subsidies on the purchase of natural gas vehicles (€12,000 for LNG and €8,000 for CNG vehicles). These measures will make transport cheaper and more competitive. On top of cutting carbon dioxide emissions, natural gas vehicles generate 90% less NO₂ and 99% less Particulate Matter. Furthermore, the diesel engine produces 90 percent less noise than the diesel engine, making it suitable for use in vans and garbage trucks.

4. ENVIRONMENTALLY ACCEPTABLE FUELS IN THE REPUBLIC OF CROATIA - CURRENT SITUATION

The Energy Strategy of Croatia by 2030 and with a view to 2050, and the Low Carbon Strategy in the Croatia should realistically trace the long-term development of new gas consumption for transport in order to decarbonize the society through the implementation of action plans. As with the rest of us, the biggest problem is the lack of infrastructure for filling vehicles with environmentally friendly fuels, and this is especially important for natural gas, because without the infrastructure there will be no vehicles and therefore this is an important role of the state. On the other hand, while in other countries there are a subsidies for natural gas vehicles and other measures that will influence acceleration of growth of the number of natural gas vehicles, they do not exist in Croatia. If we do nothing about the issue of subsidies in the next few years, we will wonder why Western European countries have more competitive public transport and transport companies. We must bear in mind that transport costs have a significant impact on the final price of the product.

⁷ On the road with natural gas, Retrived 2.9.2019. from <https://www.wingas.com/en/raw-material-natural-gas/mobility-with-natural-gas.html>,

In the Republic of Croatia in 2018, a total of over 2 million vehicles were trafficked, of which approximately 1,660,000 passenger cars, 180,000 trucks, 160,000 mopeds, 124,000 tractors and 6,000 buses. If it is known that about 65% of the fleet is diesel fuel, data indicate a very unfavorable structure in terms of potential for substitution of environmentally friendly fuels and those from renewable energy sources, because they do not need to ignore the habits of consumers. However, there are only two public filling stations in Croatia (one in the capital of Zagreb and one in the city of Rijeka) and one within Zagreb's electric tram for filling its own buses, as well as one within Plinacro for filling its own vehicles, which is not enough to make a mass purchase of vehicles. Although there are no subsidies, in the Republic of Croatia at the end of this year and at the beginning of the next year a realisation of new projects is expected, in terms of filling stations for natural gas vehicles:

- The city of Pula is developing a project of buying new buses powered by compressed natural gas and build a new filling station with EU co-financing
- in Zagreb, a private company is building an LNG filling station for heavy trucks (location Radnička Road, - close to Homeland Bridge)
- Butan gas company is building in Kukuljanovo an LNG filling station for heavy trucks
- Construction of a compressed natural gas filling station is planned in the city of Slavonski Brod
- "Bunkering station" in Rijeka as an integral part of the LNG terminal project on the island of Krk (filling ships and heavy trucks) will be build as well

In addition to reducing greenhouse gas emissions and noise, the use of natural gas in vehicles can have other benefits. The great example of this is the gas filling station in Rijeka, which today accounts for five percent of total gas consumption in the area. This consumption reduces the load on the distribution tariff and thus lowers the distribution costs of gas for households and businesses. Furthermore, there is a significant number of tourists from Western European countries, mainly from Italy, who fill their vehicles at a natural gas filling station in Rijeka. The Republic of Croatia has a very big challenge to reach the EU target of 14% of renewable energy in transport by 2030. It will be difficult to achieve given that we now have less than one percent. There are EU funds available for investing in the gas infrastructure of the filling stations, and most of the current projects is made with grants from EU funds. However, to accelerate these projects and to increase the number of projects, additional efforts are needed to build infrastructure and promote gas in transport. By building a filling station infrastructure on CNG and LNG, we are creating the conditions for the arrival of road vehicles and ships on natural gas, which, apart from better services, provides cleaner air. The combustion of fossil fuels with a high sulphur content in marine engines, in addition to greenhouse gas emissions, also results in a large amount of sulphur dioxide that causes acid rain. Only one cruiser produces as much smog as 350,000 cars.⁸ To limit sulphur levels, the EU adopted the Directive 2012/33/EC which requires Member States to take all necessary measures to ensure that in areas of their territorial sea, exclusive economic zones and pollution control do not use marine fuels the sulphur content of which exceeds 0.50% since January 1, 2020. As an alternative to high sulphur diesel engines, it is recommended to use sulphur-free LNG. Although Regulation with reduced sulphur content comes into force in early 2020, many ports have reduced the entry fees for ships with LNG engines. Croatia is a tourist country with a large number of cruise ship arrivals and should therefore have adequate infrastructure in ports that are also part of the network of European transport corridors. In accordance with the Directive 94/2014/EU, they are also the potential starting points for the establishment of the coastal liner shipping by LNG for the period up to

⁸ Primorac Ž., (2016.) Ekološke i pravne posljedice uporabe brodskog pogonskog goriva sa smanjenim sadržajem sumpora, Zbornik radova Pravnog fakulteta u Splitu, god. 53, 2/2016., str. 553.-579.

2030. Therefore, it is necessary to start with the planned operational bases for capital investments in the construction of gas filling station infrastructure in the coastal cities of Rijeka, Zadar, Šibenik, Split, Ploče, and Dubrovnik, which should at the same time be an additional source of local gasification. The listed locations are also strategically marked in the bases of the NFP - the National Framework Plan of the Republic of Croatia with the included additional criteria such as pre-set national lines in coastal liner shipping. According to this scenario, the annual consumption of LNG ships in the coastal liner shipping is estimated at 13.1 million m³ of gas in 2030.

5. ELECTROMOBILITY

Electric vehicles, because they do not emit any emissions from the vehicle itself, are considered to be a key option for reducing greenhouse gas emissions. Electromobility has also gained momentum with the Volkswagen emissions scandal. In the Republic of Croatia, the purchase of electric cars is encouraged. Only in 2019, the Environmental and Energy Efficiency Fund provided HRK 17 million (approximately €2.300.000) in subsidies for the purchase of electric vehicles. According to the tender documentation, there was no price limit for the vehicles of HRK 400,000 (approximately €54.000) that existed in previous tenders, and according to the same, SUVs ((Sport Utility Vehicle) could be purchased. It means that rich people who are likely to buy vehicles themselves could receive grants. The maximum subsidy for an electric car could be up to 40% of the vehicle amount, or up to HRK 80,000 (approximately €10.800). Considering that these are expensive vehicles, it would probably be more appropriate if the vehicles could be bought by taxi drivers and public vehicles that exceed the mileage, as this would be a cost-effective purchase. In addition to subsidies for car purchases, electric car buyers have also had a free charge this year. Regardless of subsidies and free charging, the number of electric cars in Croatia in 2018 was 452.⁹ With so many electrically powered cars, the infrastructure is pretty well built, as there are almost 300 electric car charging stations. As electric cars make up only 0.6% of newly registered cars in the EU 28 in 2017, we can say that this is still a small figure, which, probably due to the high cost and limited battery life, does not guarantee a short-term future for electric cars. There are 1.3 million electric cars in Europe, consuming an average of 20 kWh / 100 km of electricity. In the event that each electric car exceeds 20,000 km per year, it would consume about 4 MWh of electricity per year, or all together would consume 5.2 TWh of electricity, which requires the operation of 3 Plomin coal-fired power plants.¹⁰ Indicators like this say that the use of electric cars is not always emission-free, as long as there are power plants that produce electricity from fossil fuels. Moreover, electric cars that use electricity from coal-fired power plants pollute more than both gasoline and diesel engines in cars.

6. CONCLUSION

Croatia is a member of the European Union and is therefore obligated to follow and implement emission reduction guidelines. The fact is that no one is imposing methods to achieve emission reductions and therefore we will have to take into account that we have a choice in how we accomplish in all of this - a choice of a path that will lead to an increase in gross domestic product and the development of our own industry. We should not neglect the exploration and production of fossil fuels, because they will be more topical this century. For example, Norway sells almost half of electric cars a year, thanks to its rich sources of oil and gas. Encouraging electric cars as subsidized today does not result in any economic competitiveness for our

⁹ Centar za vozila Hrvatske, broj vozila s električnim i hibridnim pogonom (2007-2018), Retrived 2.9.2019. from <https://www.cvh.hr/tehnicki-pregled/statistika/>

¹⁰ Pudić D. (2019), Influence of Natural Gas on the Competitiveness of the Economy and Reduction of Greenhouse Gas Emissions, 10th International Natural Gas, Heat and Water Conference, Proceedings, Osijek

economy. According to the Croatian Economy Minister, Darko Horvat, Croatia invests 0.87% in innovation and plans to increase investment to 1.4% in 2020.¹¹ It would be more useful to invest in research and innovation in the field of electric cars than just buying the same in the way that Croatia buys. Furthermore, Croatia has no incentive to build a gas transport infrastructure. The price of a natural gas car is almost the same as a gasoline or diesel fuel, but the fuel price is much lower. This means that such cars would be bought by people who plan to drive more miles. In addition, the LNG truck subsidies could result in a cheaper service of goods transport which in turn could result in cheaper goods in stores. The extensive gas infrastructure for CNG vehicles would encourage taxis to save on fuel, which would result in cheaper taxi service. The air would be much cleaner in cities. We could consider a ban on the use of diesel cars in cities, which is already in place in a number of European cities.

LITERATURE:

1. *Current Natural Gas Vehicle Statistics*, Retrived 2.9.2019. from: <http://www.iangv.org/current-ngv-stats/>
2. Directive 2014/94/EU of the *European Parliament and of the Council of the deployment of alternative fuels infrastructure*, 22 October 2014, L 307/7
3. Energy in Croatia (2017), *Annual Energy Review*, Ministry of Environment and Energy of the Republic of Croatia, 83
4. Hagos D.A. and Ahlgren E., *A state-of-the art review on the development of CNG/LNG infrastructure and natural gas vehicles (NGVs)*, Technical report FutureGas project – WP3 Gas for transport
5. *Hrvatska povećava ulaganja u istraživanje i inovacije*, Glas Slavonije, 7.5.2019. Retrived 2.9.2019. from <http://www.glas-slavonije.hr/398381/7/Hrvatska-povecava-ulaganja-u-istrazivanje-i-inovacije>
6. Hulme M. (2016), *1.5 °C and climate research after the Paris Agreement*, Nature Climate Change volume 6, pages 222–224
7. *On the road with natural gas*, Retrived 2.9.2019. from <https://www.wingas.com/en/raw-material-natural-gas/mobility-with-natural-gas.html>,
8. Primorac Ž., (2016.) *Ekološke i pravne posljedice uporabe brodskog pogonskog goriva sa smanjenim sadržajem sumpora*, Zbornik radova Pravnog fakulteta u Splitu, god. 53, 2/2016., str. 553.-579.
9. Pudić D. (2019), *Influence of Natural Gas on the Competitiveness of the Economy and Reduction of Greenhouse Gas Emissions*, 10th International Natural Gas, Heat and Water Conference, Proceedings, Osijek
10. *Resurgent NGV Market in Italy*, Retrieved 1.9.2019 from: <https://www.iangv.org/category/country/italy/>

¹¹ Hrvatska povećava ulaganja u istraživanje i inovacije, Glas Slavonije, 7.5.2019.

THE PROCESS OF FINANCIALIZATION IN GROUPS OF EUROPEAN UNION MEMBER STATES

Tomasz Florczak

*University of Lodz, Faculty of Economics and Sociology
ul. POW 3/5, 90-255 Lodz, Poland
tomasz.florczak@uni.lodz.pl*

ABSTRACT

In the beginning of 50. the economy started to be perceived by risk and profitability. In few next decades a big changes in financial sector had place, f.e. the fall of Bretton Woods system, new financial instruments, flexible exchange rates. The process of changes, which caused the growth of financial sector is determined as financialization. Excessive financialisation is often cited as the main reason for the financing crisis on the real estate market. The financialization is mostly visible in high developed countries. The interesting case is the European Union, which consist of 28 member states. The aim of the study is to define the differentiation of financialization between member states. To determine the growth of financial sector were used indicators, that are in literature of subject. The results of indicators were standarised by zero unitarization method. The results of the study allow to determine in the differentiation in financial sector growth in EU member states.

Keywords: *banking sector, EU, financialization, financial sector*

1. INTRODUCTION

In the 21st century, special attention was paid to the significant increase of the financial sector. The process of change, which accompanies this increase is called financialization. The financial crisis in the real estate market of 2008 played a special role in financialization research. The crisis has highlighted the negative aspects of the growth of the financial sector, which are visible mainly in developed and developing countries. The article attempts to indicate the degree of financialization in the countries belonging to the European Union. The aim of the article was to indicate the degree of financialization in characteristic groups of European Union countries. The research hypothesis was assumed that the countries of Central and Eastern Europe have the lowest degree of financialisation. The hypothesis was verified by using index analysis and the zeroed unitarisation method.

2. FINANCIAL SECTOR AND FINANCIALIZATION

Financialization is identified with the increase in financial sector assets and the increased innovation of financial instruments. At the same time, the financialisation process is also manifested by greater interest in profits from financial activities. (Gołębiowski G., Szczepankowski P., 2015, p. 197). The beginnings of financialisation should be searched in the 20th century. During this period, the financial sector began to be perceived by risk and profitability. Because of this, the benefits of risky transactions began to be recognized. The collapse of the Bretton Woods system played a special role in the development of financialization. This change resulted in the release of exchange rates (variable exchange rates) and changes in accumulation processes. New market conditions have enabled the rapid development of financial products. On the other hand, they have also become a threat - fluctuating exchange rates have increased the risk in international transactions. In order to minimize the mentioned risk, new financial instruments have been created: futures, options, swaps. New instruments caused the establishment new markets that have enabled speculation-based operations (Newman, 2009, p. 540-541). The above reasons for the growing importance of the financial sector are not the only elements stimulating the process of financialization.

Many factors and events influenced the described process. On the other hand, it does not only concern a separate element of the economy. For this reason, it is not possible to find a universal definition of the described phenomenon. Some cover the microeconomic level, others indicate the macroeconomic aspect (Engelen et al., 2015, p. 54-58). The following are some definitions that appear in the literature of subject. Financialization is the cause of changes, which take place in economic systems, state policies and shapes the economic results of entities operating in the economy. It mainly affects the growth of the financial sector in relation to the real sphere (Zalewski & Whelan, 2014, p. 760-761). Hardie takes a different approach. In his opinion, financialization can be defined as an opportunity to trade risk. The opportunity to trade risk is understood as risk taking and risk trading. (Hardie, 2011, p. 143). The definition of financialization can also be presented in two ways. M. Ratajczak proposes understand of financialization in two perspectives: narrow and wide. The first one shows financialization as an increase in the financial activity of non-financial entities. In the second approach, it is pointed out that the financial sphere is independent of the real sphere and the importance of financial markets on economic policy is increased (Ratajczak M., 2014). Defining financialization is an extremely important task because the increase in the importance of finance occurs in many parts of the economy. These include the financial sector, enterprises (in particular those that do not conduct financial activities) or households (Hall S., 2011, p. 406-408). The process of financialization was made visible by the financial crisis in 2008. There were also changes in the ratio of non-financial enterprises to financial sector operations regarding the purchase of shares, interest payments, and dividend payments (van der Zwan, 2014, p. 103-104). The increase in financial resources in the economy in recent years has not been accompanied by a corresponding increase in actual accumulation. It was the effect of mentioned changes of financial sector (Lapavitsas, 2011, p. 618-619).

3. METHOD

Financialization is visible in developing and developed countries. That was the reason to take European Union Member states the research objects. The years 2005-2015 were adopted as the study period. This choice is caused by the presentation of financial changes before, during and after the financial crisis of 2008. The research hypothesis is that the degree of financialization on the lowest level is in the countries of Central and Eastern Europe. The research underway in two steps. First one is the indicator analysis. The author used five indicators, which are related to economy, financial sector and banking sector. The study includes following indicators:

1. The ratio of public debt to the level of GDP (described as Ratio 1),
2. The ratio of budget balance to GDP (described as Ratio 2),
3. Financial sector assets to GDP ratio (described as Ratio 3),
4. The value of the bank loan to GDP (described as Ratio 4),
5. The share of the assets of the five largest banks in the total assets of the banking sector (described as Ratio).

The results obtained from the mentioned indicators allow to approximate the degree of each indicator for each group of countries. In order to obtain a clear result taking into account all indicators, the zero unitarization method was used (Radzka et.al., 2015, p. 92). Four indicator are stimulants for financialization process and there are measured with following formula (Kukuła & Bogocz, 2014, p. 6-8):

$$z_{ij} = \frac{x_{ij} - \min x_{ij}}{\max x_{ij} - \min x_{ij}}, \max x_{ij} \neq \min x_{ij}$$

$z_{ij} \in [0; 1]$

z_{ij} - normalised value of the i-th parameter for the j-th county, $i = 1, \dots, 5$; $j = 1, 2$;

x_{ij} - value of the i-th parameter for the j-th subject, $i = 1, \dots, 5$; $j = 1, 2$;

$\min x_{ij}$ – minimum value of the i-th parameter;

$\max x_{ij}$ – maximum value of the i-th parameter.

One of the indicators (indicator 2) is a destimulant of the finalization process. In order to apply the zeroed unitarisation method, the following formula should be used:

$$z_{ij} = \frac{\max x_{ij} - x_{ij}}{\max x_{ij} - \min x_{ij}}, \max x_{ij} \neq \min x_{ij}$$

To obtain one assessment characterizing the examined process, all normalized variables for this entity should be added together.

$$q_{ij} = \sum_{i=1}^n z_{ij} \quad (i=1, \dots, 5)$$

In addition, a synthetic Q_i ariable characterizing the subject has been introduced:

$$Q_i = \frac{1}{n} \sum_{j=1}^n q_i \quad (i=1, \dots, 5)$$

Variable Q_i takes values from of range $[0;1]$.

The zero unitarization method allows put the value of each indicator in the range $[0; 1]$. It is the method to determine the degree of financialization in researched groups.

4. RESULTS

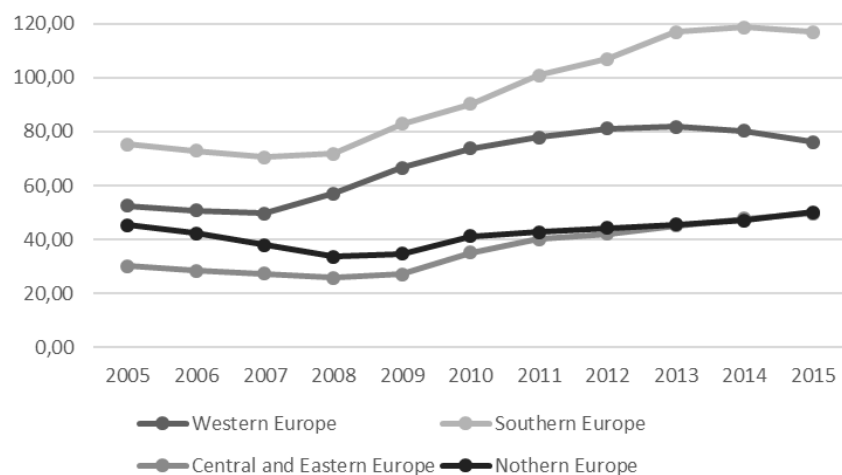
In order to facilitate the analysis of the research results, the member states of the European Union were divided into groups. The division is based on a geographical criterion, various paths of economic development and the level of the financial sector. On the basis of mentioned criterios four groups of European countries have been designated: Central-Eastern, Western, Southern, Northern. A detailed breakdown and justification are given in Table 1.

Table following on the next page

Table 1: Division of European Union member states into characteristic groups (own elaboration based on Górniewicz G, 2011; Grimshaw D., Rubery J., 2012; Kościewicz D., 2014; Okulicz-Kozaryn N., 2014; Sandmo A., 1994)

Group	Group members	Justification
Central and Eastern Europe	Bulgaria, Czech Republic, Croatia, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia, Hungary.	Location in Central and Eastern Europe. The financial system was shaped in the 1990s. Having a socialist system and a central planned economy focused on fulfilling the plan adopted by the state. In the 1990s, they underwent economic transformation into a free market economy.
Western Europe	Austria, Belgium, France, the Netherlands, Ireland, Luxembourg, Germany (Federal Republic of Germany - West Germany), United Kingdom.	Location in Western Europe. The financial system gained significance after World War II. After World War II, these countries had a free market economy. The economy and the financial sector responded to market changes. Majority of group are founding countries of the European Coal and Steel Community.
Southern Europe	Cyprus, Greece, Spain, Malta, Portugal, Italy.	Położenie w Europie Południowej. System finansowy o wysokim poziomie kredytów. Po II wojnie światowej państwa te posiadały gospodarkę wolnorynkową. W większości kraje* o trudnej sytuacji budżetowej i wysokim długu publicznym. Na sytuację państw Europy Południowej szczególny wpływ wywarł kryzys na rynku nieruchomości z roku 2007.
Northern Europe	Denmark, Finland, Sweden.	Location in Northern Europe (Nordic countries). The financial system shaped in accordance with the idea of a welfare state. After World War II, these countries had a free market economy. These countries were built on the idea of a welfare state, according to which the government, through political and administrative measures, makes long-term improvement in the functioning of market forces. A key function of the welfare state is to help an individual whose resources are insufficient (needs cannot be met by family and labor market resources) at various stages of life. Each of the countries in this group applies a long-term policy of building social security.

The presented division of countries into groups allowed for conducting the study, the results of which are presented below.



*Chart 1: The ratio of public debt to the level of GDP
 (Eurostat Database, ec.europa.eu/eurostat/data/database)*

Chart 1. presents the ratio of public debt to the level of GDP. The presented data indicate that the countries of Southern Europe characterize by the highest level of debt. In these countries there are the most favorable conditions for the development of financialization. In turn, the lowest values of the indicator are characteristic for Central and Eastern Europe and Northern Europe. This may be related to a different model of the functioning of these countries compared to southern European countries.

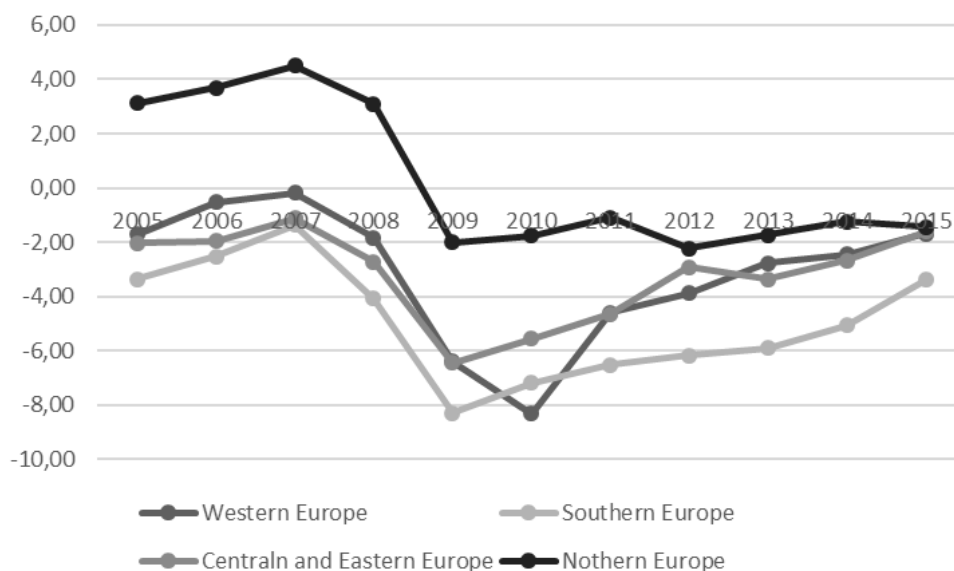


Chart 2: The ratio of budget balance to GDP
 (Eurostat Database, ec.europa.eu/eurostat/data/database)

According to the data shown in Chart 2 the highest value of budget balance to GDP have a countries of northern Europe. After 2008, Western Europe and Southern Europe were the most susceptible to the budget deficit. This means that the crisis has allowed to develop financialization faster in these countries.

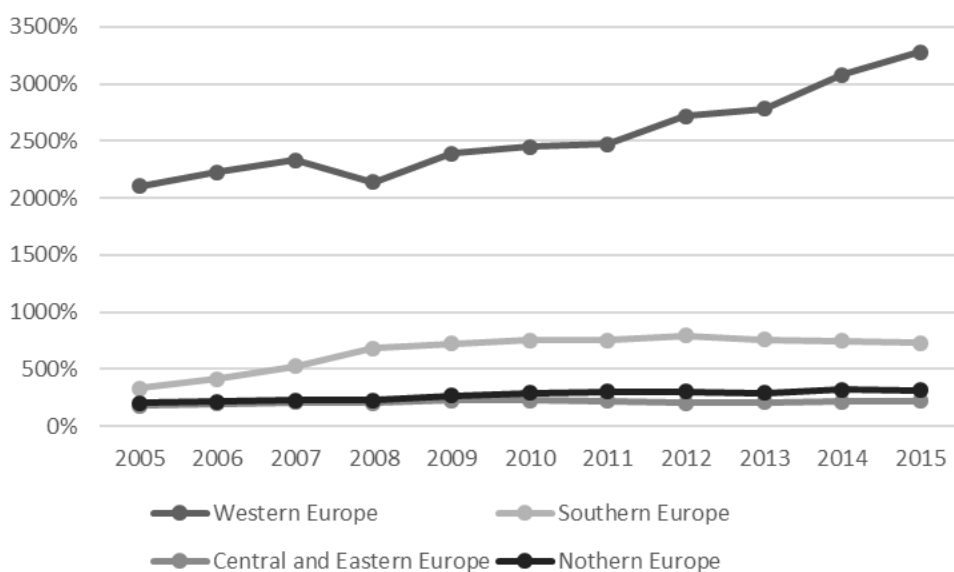
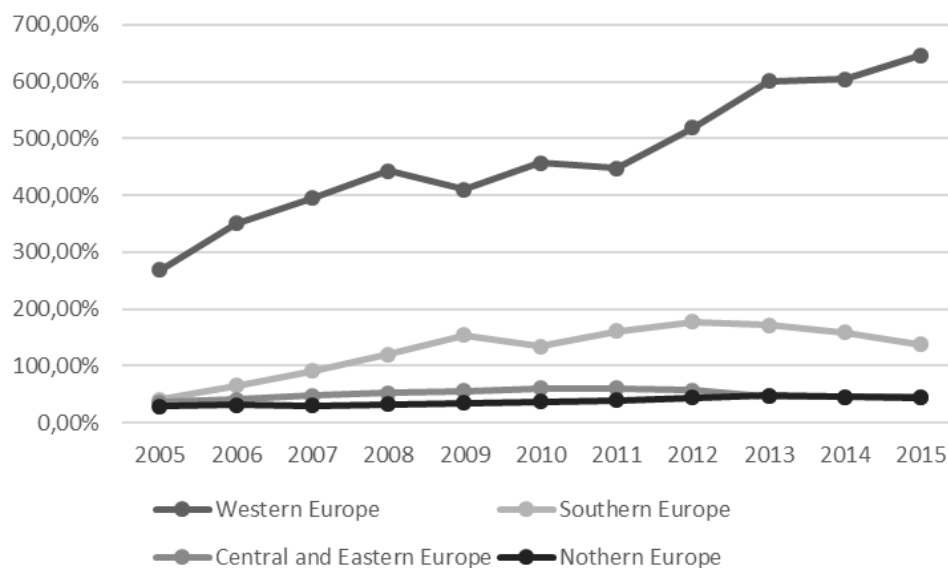


Chart 3: Financial sector assets to GDP ratio
 (Eurostat Database, ec.europa.eu/eurostat/data/database)

The graph 3 shows the share of financial sector assets in GDP. Western European countries have the most assets in the financial sector (3278% of GDP in 2015). Southern European countries recorded a large increase in the value of this indicator after 2008 - from 683% to around 730% in 2015. The assets of the financial sector of other groups of countries are at the level of 250-300% of GDP.



*Chart 4: The value of the bank loan to GDP
 (Eurostat Database, ec.europa.eu/eurostat/data/database)*

The shape of Figure 4 shows that the ratio of bank loan value to GDP is the highest in Western European countries. This may be associated with bigger demand for a credit for companies. The values could be influenced by the Luxembourg, which economy is based on financial sector. In other groups the value of indicator was below 200%.

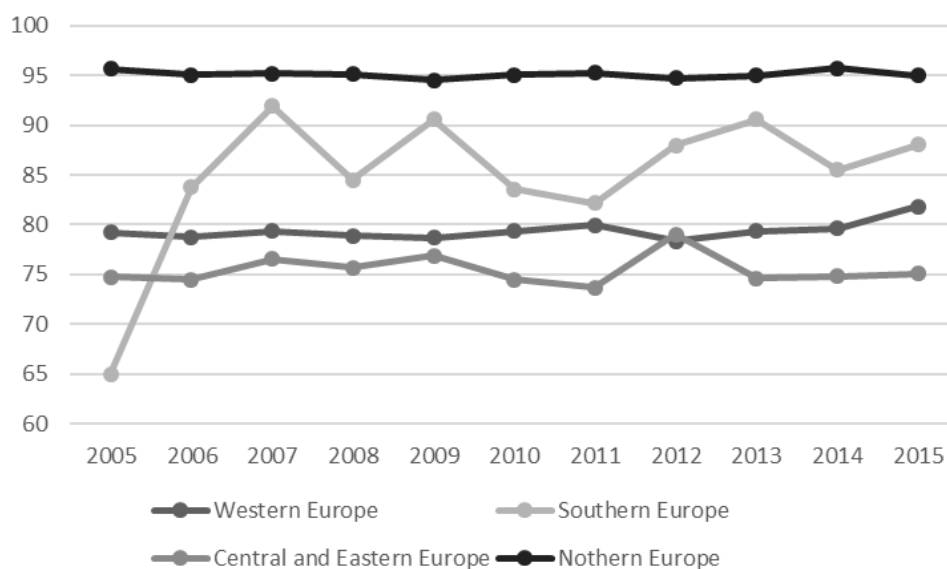


Chart 5: The share of the assets of the five largest banks in the total assets of the banking sector (Bankscope; World Bank Financial Development and Structure Dataset 2018)

Data presented on chart 5 shows the share of the assets of the five largest banks in the total assets of the banking sector. The indicator among the studied groups was not characterized by too much variability. Northern European countries stood out with the largest share of five banks in the total banking sector assets. In order to standardize indicator values, the zeroed unitarization method was used. The results of the study are presented in Table 2.

Table 2: Financialization in groups of EU member states (own elaboration on Eurostat Database, Bankscope; World Bank Financial Development and Structure Dataset 2018)

Ratio	2008				2015			
	West	South	Central and Eastern	North	West	South	Central and Eastern	North
Ratio 1	0,235	0,028	0,000	0,000	0,825	0,965	1,000	1,000
Ratio 2	0,203	0,389	0,299	0,208	0,183	0,291	0,094	0,881
Ratio 3	0,033	0,763	0,428	0,196	1,000	0,863	0,822	0,947
Ratio 4	0,460	0,578	0,662	0,188	1,000	0,706	0,376	0,850
Ratio 5	0,154	0,723	0,373	0,455	1,000	0,856	0,260	0,380
q_{ij}	<u>1,086</u>	<u>2,481</u>	<u>1,762</u>	<u>1,047</u>	<u>4,007</u>	<u>3,681</u>	<u>2,552</u>	<u>4,058</u>
Q_i	0,217	0,496	0,352	0,209	0,801	0,736	0,510	0,812

The data presented in Table 2. show the results of the zero unitarization method. It is possible to standardize the values of indicators in the range from 0 to 1 with used method. Sum up the values of the studied quantities may suggest the degree of financialization in groups of EU member states. The method was used for two years from the research period (2008, 2015). The choice of these years is due to the beginning of the financial crisis in 2008 and the end of the research period (2015). The obtained results suggest that the lowest degree of financialization in 2008 was represented by Northern European countries. This means that in these countries there were the lowest values of indicators describing financialization and factors, which let it growth. In the same year, Southern Europe characterised the highest figure. This may be related to the specificity of the economies of the countries belonging to this group. On the other hand, in 2015 the lowest level of financing occurred in the countries of Central and Eastern Europe. This group also had the smallest increase in the value of indicators. Among the other groups, Northern European countries deserve attention, as their degree of financialization has increased significantly since the beginning of the financial crisis.

5. CONSLUSION

The research carried out by the zero unitarization method indicates changes in the level of financialization in surveyed groups of EU member countries. According to the study, the group of Central and Eastern European countries is characterized by the lowest degree of financialization. It is also the most resistant group to the potential financial crisis. The author accomplished the goal by using indicator analysis and the zero unitarization method. The results obtained approximate the degree of financialization in the examined groups of European Union countries. The study confirms the research hypothesis that the lowest degree of financialization occurs in the countries of Central and Eastern Europe. The analysis should be expanded to include further indicators describing financing and the financial sector. It is also possible that the use of another data standardization method will indicate different results of the degree of financialization taking into account all the indicators examined.

LITERATURE:

1. Engelen E., Konings M., Fernandez R. (2015), Geographies of Financialization in Disarray: The Dutch Case in Comparative Perspective, *Economic Geography*, 86.
2. Gołębiowski G., Szczepankowski P. (2015), Finansyzacja gospodarki krajów Europy Środkowo-Wschodniej, *Ruch prawniczy, ekonomiczny i socjologiczny*, Rok LXXVII – zeszyt 4.
3. Górniewicz G. (2011), Kryzys finansów publicznych w krajach grupy PIIGS, *Zeszyty Naukowe Uniwersytetu Szczecińskiego; Finanse, rynki finansowe, ubezpieczenia*, nr 47.
4. Grimshaw D., Rubery J. (2012), The end of the UK's liberal collectivist social model? The implications of the coalition government's policy during the austerity crisis, „*Cambridge Journal of Economics*”, vol. 36.
5. Hall S. (2011), Geographies of money and finance II: Financialization and financial subjects, *Progress in Human Geography* 36(3).
6. Hardie I. (2011), How much can governments borrow? Financialization and emerging markets government borrowing capacity. *Review of International Political Economy*, 18.
7. Kościwicz D. (2014), Kulturowe wartości szwedzkiego państwa dobrobytu w świetle wybranych typologii kultury, *Społeczeństwa i Ekonomia. Society and Economics* 2(2), Wrocław.
8. Lapavistas C. (2011), Theorizing financialization. *Work, employment and society*, Vol. 25, No. 4.
9. Newman S. A. (2009), Financialization and Changes in the Social Relations along Commodity Chains: The Case of Coffee. *Review of political Economics*, V. 41, No 4.
10. Okulicz-Kozaryn N. (2014), Charakterystyka nordyckich modeli bezpieczeństwa socjalnego, *Zeszyty Naukowe Wyższej Szkoły Zawodowej im. Witelona w Legnicy*, nr 12(3)/2014.
11. Ratajczak M. (2014), Ekonomia w dobie finansyzacji gospodarki, *Ruch prawniczy, ekonomiczny i socjologiczny*, Rok LXXVI – zeszyt 2 – 2014.
12. Sandmo A. (1994), Ekonomisci o państwie dobrobytu, Edvardsen, Hagtvæt (ed.), *Nordycki model demokracji i państwa dobrobytu*, PWN, Warszawa.
13. Van der Zwan N. (2014), Making sense of financialization. *Socio-Economic Review*, Vol. 12.
14. Zalewski D. A., Whalen Ch. J. (2014), Financialization and Income Inequity: A Post Keynesian Institutional Analysis. *Journal of Economic Issues*, Vol. XLIV, No. 3.

SOCIAL ECONOMIC COMPLEX VALUE OF AMENITIES AS MEASURE OF BIDS FOR THE USE OF ITALIAN PUBLIC SEASIDES

Pasquale Balena

*Polytechnic University of Bari, Italy
Department of Civil Environmental, Territorial and Chemical Engineering
pasquale.balena@poliba.it*

Alessandro Bonifazi

*Polytechnic University of Bari, Italy
M.I.T.O. Lab, Department of Civil Engineering Sciences and architecture
alessandro.bonifazi@poliba.it*

Felicia di Liddo

*University "La Sapienza" Rome, Italy
Faculty of Architecture and Construction
felicia.di@hotmail.it*

Carmelo Maria Torre

*Polytechnic University of Bari, Italy
M.I.T.O. Lab, Department of Civil Engineering Sciences and architecture
carmelomaria.torre@poliba.it*

ABSTRACT

Coastal tourism, especially in sandy beaches, is generated by the competitiveness of seaside features, on valuable landscapes and natural issues, and furthermore, and on the access to services, accommodations and "amenities". The amenities level, joint with the service level, generate the competitiveness of coast for tourism. Some parts of the coastal strips, on one hand, are less accessible, due to the need to maintain the natural dimension of sea, to protect the environmental fragility of some peculiar part (e.g. Sites of community importance, marine parks, protected areas), to preserve from some hazard (e.g. geomorphological risk-related problems) and in the same to favour a sustainable compromise between nature and infrastructures (barriers such as railway line, or high waterfront). On the other hand, it is necessary to provide and to enjoy good accessibility, especially in proximity to bathing services. In addition to accessibility and support services, the most relevant "physical" indicator is that relating to the ability to accommodate bathers, ensuring the sustainability of the effects on the environment, and social equity. These aspects become peculiar in the Italian coastal management system, as the edge of the coastline is by Constitutional Law, public property, and the access to entrepreneurs and manager of coast services is granted through the payment of a fee. The very low value of this Italian form of taxation, however, does not repay the use of natural resources, and often conflicts with European directives (in this case the Bolkenstein Directive) obliges member states to assign by public bids the management of public coastal domain, just for granting the access, the valorisation and the preservation of public beach, based on environmental and socio-economic criteria. The paper shows a multidimensional approach to assess the amenity value of coastal lines, according to principle of sustainability and economic feasibility

Keywords: *bids, public coast management, nature amenities, social economic value, WTP*

1. INTRODUCTION

Sea is a main place of most environmental and ecological services. Coastal Management of seaside areas in the European Union represents a complex activity, which speed the Member States to develop and a common strategy, looking at environmental issues of research, development, economy and protection activities about the anthropic use of the seaside, according with public regulations. Many EU directives and programs regard coastal management. Furthermore, the data collection regarding European marine environments, is always on development. It is useful to give a look to the European Guidelines for Coastline In order to understand the complexity of managing interactions among marine systems and mainland, running on their dividing line. That borderline is the referring place where sea water, rivers, sand, rocks, fauna, flora and human systems generate the most complex ecosystems that provide a support in the same time for natural cycles and tourism economy. In the same time the seaside (especially inside the Mediterranean Basin) represents a main economic source due to the progressive involvement of the private actor in coastal management of the seaside.

Figure 1: Mediterranean countries



Source: our elaboration

In practice, except for Slovenia, that looks for the sea by a very short line (less than 50 kms), all Mediterranean Eu Member states (Greece, Croatia, Italy, France, Spain and Portugal) have a public-ruled system for conceiving the use of coastline. As a consequence, public domains in each country guarantee various and complex, but needful, legal systems for environmental protection with due to the need to combine the transfer of use from public property to the private management of coastal services. Some differences among the countries are related with

- the definition of boundaries of coastal public domain
- the classification of different land-use on beaches
- the definition of rules of use, as regards fixed and temporary structures
- the distinction between seaside, harbour areas and further elements of the coast
- the identification of environmental constrain (e.g. due to heritage conservation or natural risk preservation)

The improvement of normative systems for services, according with the contents of Directive 2006/123/CE (commonly known as “Bolkenstein Directive”), obliges Mediterranean EU Member States to promote to assign the coastal services in the public maritime domain, by a public bid applying the concept “the best amenity=the best use license=the highest private rent”. The paper is illustrative to explain, by the significant case-study in the Italian context, how the seaside-management represents a main item in the local public accounting; the tale puts on evidence some relevant criticality of the approach that municipalities should use considering the regional and local normative context.

As well as, the link between private use of public coast is ruled by law, and the public beach is hosting the mix of socio-anthropic and natural phenomena. Therefore, we will see a framework that considers the State, the Regions and the Municipalities, and their proper implications with the use of seaside. Among the Mediterranean countries, the largest part of coastline is the Italian one (7456 km), more or less one-sixth of the whole Mediterranean Sea borders (46.000 km). In the Italian context, all coastlines belong to the State Marine Domain, that is limited on the background with a variable deepness respect to the seaside. The first level of regulation (in charge on the State) regards mainly national rules on property, use licenses that are on charge on the fifteen (on twenty) Italian coastal Regions. At the second level of regulation, Regions develop their own action plans. The third level is in charge of municipalities, that implement their own action plan and higher regulation suggested by regional governments, taking in account the peculiarities of each environmental marine context. On one hand, the public system conceives the use of commons as coastline but, on the other hand, sets several constrains in order to achieve a sustainable use for those environmentally sensible parts of the coastline related with coastal erosion, hydrogeological, geomorphological risk and proximity of nature areas. Finally, the public, has to setup a "scaling" of values of the different parts of the rentable Public Domain, according to the National and Regional rules (Bolkenstein, 2002). Following the above reasoning, the paper tells about the result of some experiences regarding the assessment of the "amenity value" of the beach, describing two challenges:

- ruling the classification of uses, by ruling the licenses for private management of public coastlines, and
- assessing the quality of coastline segments, by a scale of values (Attardi, Cerreta, Franciosa, Gravagnuolo, 2014).

After the description of facts and data, the paper explains the experimentation of appraisal tools and, after the analysis of the results of their implementation, depicts a possible approach, by looking at a future increased methodological concern for the public evaluation system. The National Public Domain prices with its own rent-system of the use of coastal public domain by a general assignment of threshold - not based on real economic values - to be applied in all Italian maritime municipality. It is clear that a more realistic pricing of public property could represent a fair economic return for balancing private revenue with social expenditure for natural assets protection, without reminding the tragedy of commons (Hardin, 1968) The economic value should measure the importance the same time the pricing of public property for private use license reminds the risk of fallaciousness of public "Leviathans" (Ostrom, 1990) governing commons by a "up-to-bottom" approach. After this introduction of the dilemma on the better choice for private use of public goods, the paper is subdivided in several paragraph: in the first the geographic and socio-economic context is described that suggested to the authors to experiment the method. In the second the method is explained as regards the scientific framework and the use of the method. Finally, the application the method to the case of study is described in detail.

2. THE CONTEXT

2.1. The Apulian Coastal Management System

The paper illustrates an experience of implementation of rules both at municipal and regional level, in Apulia Region. The Apulian Context has been chosen as case study, because, is the only one Region that set up a two-level active planning system for coastal management (Torre, Selicato, 2013), to be implemented both at the local and the regional scale. Despite of what happens in other Italian regions, that provide at the municipal scale just indications for simple regulation of uses inside coastal state property by the Regional Law n.17 of year 2015, the Regional Government introduced the Regional Coastal Plan (RCP), and at the local scale the

Municipality Coastal Plans (MCPs), in order to develop a global system of rules for all marine municipalities (Bengstorm, Fletcher, Nelson, 2004; Cerreta, Poli, 2017)). As support to the coherence between rules of RCP and MCPs, the Regional Government provided a Regional Guideline for the "Implementation of technical standards and for the "Redaction of Municipality Coastal Plans". The Apulian RCP therefore, rules the planning activities at the local level; among these the RCP design the procedure of MCPs to identify those parts of coastline that can be licensed for use of seaside for facilities. Apulian MCPs are plans with a proper zoning, a set of directives, a set of forecasts and classifications of various segments of the public coastline. The set-up of MCPs is developed and defines in detail its contents by following the Guidelines, with reference to specific territorial objects, artefacts and works, public uses of the sea and of the coast. RCP defines the MCPs as instruments of planning, management, control and monitoring of the coastal municipal territory in terms of landscape protection, environmental protection, guarantee of the right of citizens to access and free use of the natural public heritage, as well as the discipline for its environmentally compatible use. MCPs pursue the public interests implementing the following tasks:

- the development of the tourism sector, due to its socio-economic implications;
- enjoyment of the coastline for the local community and tourists;
- the protection of the natural environment and the recovery of stretches of coast-line that they are in a state of degradation, or morphological instability"

Just because the physical and maritime dynamics modify continuously shape and morphology of the seaside and its background, MCPs upgrade spatial information in order to constitute a new, updated system for managing public terrestrial properties. According with the national law, all data provided by Municipalities are reversed in the National Information System of Public Domain. The continuous change of the character of coasts affects in the same time the social economic value and the private rent value (Torre, Morano, Tajani, 2017). As consequence, a main scope of MCPs is the assessment and the update of pricing due by entrepreneurs for the concession of the public coastal line. While at the local level MCPs classify the quality of offered maritime services, at the national level the Italian Government establishes a national rate system for marine uses license (that is periodically updated) the minimum annual rate for occupied square meter, according to a set of marine activities. In practice the Government define the minimum rent for maritime facilities put on the Maritime Public Domain.

2.2. The experiment on the field

According with the Bolkenstein directive the legislative framework a implies at the sub-local level the implementation of the assessment to these private entrepreneurs that apply their instances to have assigned some part of the public maritime seaside by a bid. The criteria to assess the instances should be based in the Italian context on the "more advantageous economic offer". The competitors should propose an "Economic Offer" (a discount rate on the pricing) and a "Technical Offer" (a plan for creating, organizing and managing facilities on the coast, according with criteria based on social, technical and environmental effectiveness). Until the end of December, 2018, the Italian Government, shifted in the future the deadline for applying the Bolkenstein Directive (January 2020). The Economic and Finance Plan of the Italian Government for the year 2020 delays the application of "Bolkenstein Directive" until the end of 2034 (more or less fifteen years) and increase the risk of EU infraction procedure. This new delay makes useful to produce a price appraisal, to compare the real rent for the concessionaire, with the amount of the license fees, with the aim of assessing in term of cost-benefits the attractivity of the various coastal segments in future bids for private coastal manager. The case of study explains how to test and to put in practices evaluative approaches on the field.

The experiment was carried out in the recent months of 2019, during the development of the Coastal Plan of a maritime Municipality of Apulia on the Adriatic Sea, named Rodi Garganico. The territory is extended for about 9.9 km along the north-Gargano coast and appears as a stripe on the map. On 01/01/2018 the Municipality had 6355 residents, of which 1860 women and 138 foreigners. The territory is characterized by some geographical natural features, representing at the same time a constraint and a stimulus for economic development. The municipal territory consists of a portion of the northern coast of "Gargano peninsula", connected to a hinterland of limited depth towards the interior, which extends in parallel to the coast itself. Its perimeter seen on the map is reminiscent of an inverted trapezoid, whose northern side represents the coastline, and to the south one continuous inland. The small historic settlement is located at 46 m up to the level of the sea, just in the highest rocky area that divides in the middle the municipal seaside into two parts, with different morphological characteristics: the East side Coast, is more impervious and characterized by historical crops, and the Westside Coast, is more flat and marked by olive-trees, arable crops and some touristic settlements in addition to the urban core of the historic urban settlement. Some peculiar aspects make the case of study quite singular. The first aspect, as explained above, regards the implementation at the local level of the hierarchic system composed by the Regional Coastal Plans at the highest level and by the Municipal Coastal Plan at the lower level. The Municipality of Rodi Garganico was suffering by lack of the necessary economic and technical resources; as consequence the Regional Government funded Rodi Garganico by a Loan. In the same time (according to the Regional Law) appointed a Special Commissioner with the power of the City council. The Commissioner asked for the support of Polytechnic University of Bari to produce the Municipal Coastal Plan. During the redaction of the CCP, the team considered interesting to develop a test for identifying the differences between some segment of the coast, according to given criteria, in order to better understand the advantages/disadvantages of simplify due to the National classification of usable seaside. The choice was to subdivide the three coastal section (Westside, City Harbour and Eastern side) in eight sub sections, identified by a letter (from "A" to "H") and to use a spatial multicriteria assessment, in order to identify the most competitive parts of the seaside.

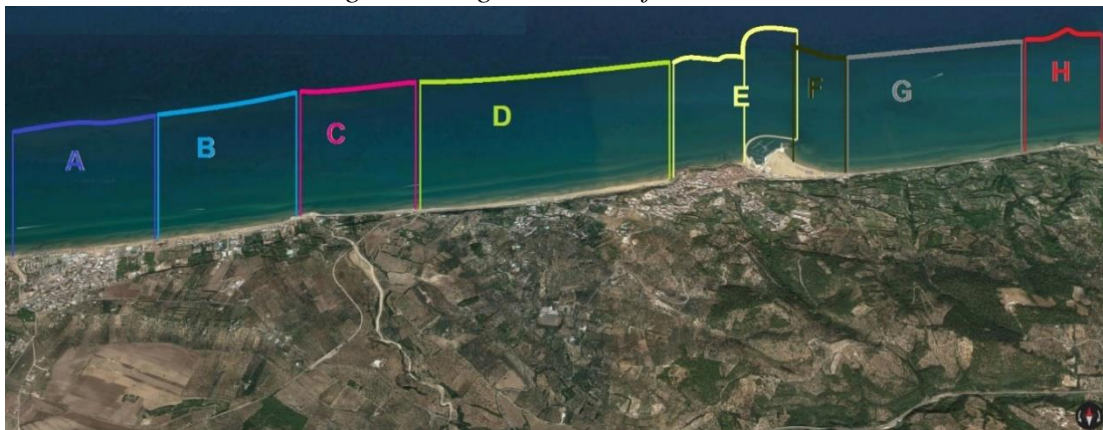
3. METHODS

3.1. The structure of the multicriterial assessment

Multi-criteria evaluations methods are a group of decisional models of problem solving that, in presence of some alternative solutions, identify that one characterized by the "highest and best" utility, according to a set of evaluation criteria. Those approaches are useful in practice, also when public institution have to assess the economic sustainability of plans and projects (Khakee, 1998; Munda, 2008). Several practices show that the evaluation of plans and projects faces continuously with the comparison among various solutions, based on an economic judgment regarding multiple advantages, in order to find finally the solution that maximise complex social use values. The estimation of socio-economic complex values frequently is based on a multi-variable utility function. Typical problems are: definition of perimeters of peculiar areas (e.g. nature areas, historic settlements), "zoning" of land uses according with economic and/or environmental criteria, assessing the highest and best uses of a given spatial context, choice of new land use for land reclamation, minimizing artificialization of soil etc... Criteria are generally based on principles of socio-economic benefit, feasibility, environmental impact (Cerreta, Poli, 2017). Therefore, multicriteria methods look at different points of view, different estimates of benefits which can pursue (as in this case) objectives of environmental protection combined with social-economic growth and wellbeing. Usually the seek for solution in assessing to socioeconomic results of plans faces with spatially pre-defined hypotheses. More in detail, in our case, the assessment should answer to select the best location for activities or

the best category of land use for properties (both private or public): problems related to different localization hypotheses of a given secondary urbanization work, in the face of more possible alternatives provided as, in our case the intended allowed use by planning instrument, which identifies several areas within which it is possible to choose. In other words, we can speak of “problems of intensity of use”: problems relating to identify some areas proportionate according to the plan, for which different locations are possible within a municipal area. The first theoretical step of multiple criteria evaluation is to build a logical model that expresses a “generalized concept” of preference. The first step is the creation of a comparative rule that is related with a criterion. When considering “preference”, therefore, we identify a relationship between two or more alternative solutions of a problem capable of expressing an “order of priority”. The order of priority is based on a “criterion for choice modelling”. In the case study we have eight alternatives and five criteria. The alternatives represent pieces of the coastline that we consider as the result of a “segmentations”. Segment “A” is characterized by the presence of seasonal residences and hotel services, nearby the beach, having a large sandy background, that touches the built areas. Segments “B”, “C” and “D” are sandy and separated from background small settlements, by a promenade. Segment “E” represents the harbour seat, that is not classified as seaside area. Segment “F” contains the deepest seaside area, potentially containing the highest number of users of the beach. Finally, Segment “G” and “H” represent the eastern coastline, that is characterised by a progressive erosion, starting when passing from “G” to “H”.

Figure 2: Segmentation of the coastline



3.2. Relationship between pairwise comparisons and utility of choices

The choice-modelling starts from the analysis of all possible pairwise comparison between a set “A” of predefined solutions. The pairwise comparison could be considered a binary relationship between alternatives (like a_i , a_j) belonging to a wide set, in order to the development of a ranking. In the classical formulation the model is presented as follows: the comparison between two solutions a_1 , a_2 will be carried out comparing the values of $u(a_1)$ and $u(a_2)$, where “ u ” is the utility function with respect to a criterion. Starting by comparing the solutions a_1 and a_2 belonging to the set of alternatives solutions $\{A\}$ we can distinguish the following results:

1. preferability: a_1 is preferable to a_2 (the binary pre-order: “ $a_1 P a_2$ ” is certainly true) and a_2 is not preferable to a_1 (the binary pre-order “ $a_2 P a_1$ ” is certainly not true): this means that the comparison produce a result, and it is possible to state that a_1 is preferable to a_2 and the opposite do not make sense; as a consequence the quantitative value of the utility function of a_1 is certainly greater than the quantitative value of the utility function of a_2 ;

2. indifference: it is possible to compare a_1 and a_2 , but it is not possible to state that a_1 is preferable to a_2 , or that a_2 is preferable to a_1 this means that the quantitative value of the utility function of a_1 and a_2 is equal even if a_1 and a_2 are “qualitatively” different;
3. incomparability: it is not possible to compare a_1 and a_2 , because there is no unique measure representing the quantitative utility of both.

3.3. Criteria for the assessment

Multicriteria evaluation are based on a ranking of all alternatives, obtained by a combinatory rule of all pairwise comparisons, carried out for each criterion. Since criteria usually do not have the same importance, the more frequent consequence is the elaboration of a weighting system of all criteria (Lopez Chofre, Gielen, Palencia Jimenez, 2018; Burkard, Kroll, Nedkow, Müller, 2012). The considered five criteria are described as follows:

- "Beach depth": the physical depth of the beach (regardless of the depth of the use licensed beach, it is more important a wider and deeper beach than a less wide and shallow one)
- "Facilities and Services": the greater or lesser presence of services for bathers
- "Accessibility": the greater or lesser presence of access services, vehicular and pedestrian traffic, public transport service stops
- "Parking": the presence of organized parking lots or parking lots along the roads
- "Landscape": the presence of major elements of environmental and/or landscape attractiveness (both natural and architectural and urban)

The criteria of our set, in fact do not have the same importance, and therefore it should be appropriate to develop a further step, that is the “weighting system”. The common use of weighting system, in order to increase or decrease the relevance of a criterion on the final ranking, has not been considered the more appropriate in this case. Instead of a weighting system, an alternative “discriminating” system was considered more effective, thanks to the association with the “shape” of each utility function, as peculiar character of the advantages deriving by the five features of each criterion. The discrimination among criteria, that derives from the different shapes of their utility function, can emphasize the relationship of depending variable (the utility) with the dominant variable (the quali-quantitative parameter, represented by a score). In this case the evaluation was based on a quali-quantitative scaling varying from 1 to 5, corresponding to a simple scale of judgments: "low", "medium-low", "medium", "medium-high" and "high" (Saaty, 1985). If an alternative prevails over all others seven for all criteria its score should be 5, (the sum of five “winning” comparison) and the maximum value of the utility function could be 1. In the same time if an alternative fails against all others seven for all criteria its score should be 0, (the sum of five “winning” comparison) and the value of the utility function could be 0. Each utility function has a trend of variation different from the others; therefore, in some criteria the score difference is more discriminating, in others less discriminating, depending on the trends (concave = less discriminatory, convex = more discriminatory, linear = uniformly discriminatory and "s" = less discriminatory to extreme values).

3.4. Shaping of Utility function

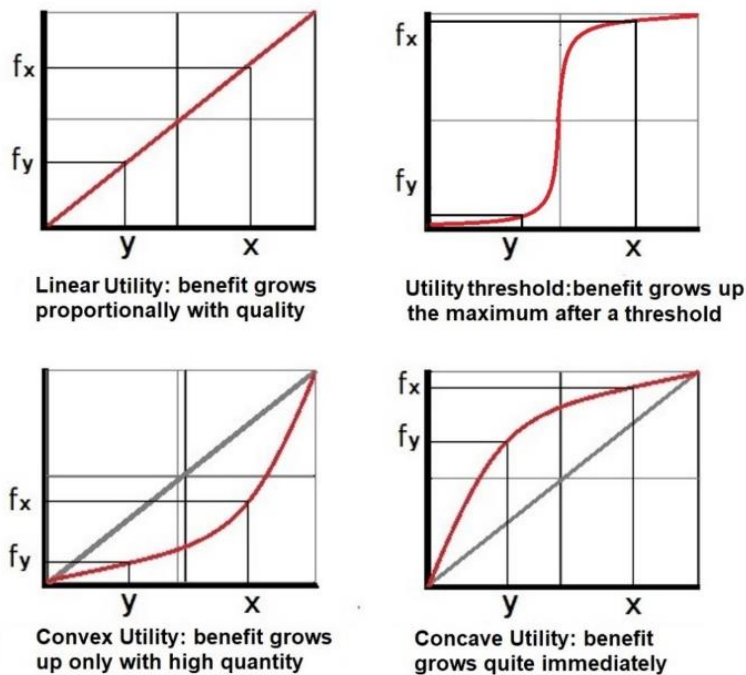
The following figures show the tables with the trends of the advantage of the choice (value of the utility) as the scores varies. Given that the extreme values always remain constant (score 0 = utility 0; score 1 = utility 1) regardless of the functions, these are the trends of the laws of variation of utility functions:

- s-shaped utility function (criteria: accessibility and landscape): it emphasizes the minimum and maximum values of utility function: $f(x)$ increases more than the score x if x is higher than the intermediate value of the interval and $f(y)$ decreases more than the score y is lower

than the intermediate value of the interval: the threshold define a “jump” from a very low utility to a very high utility

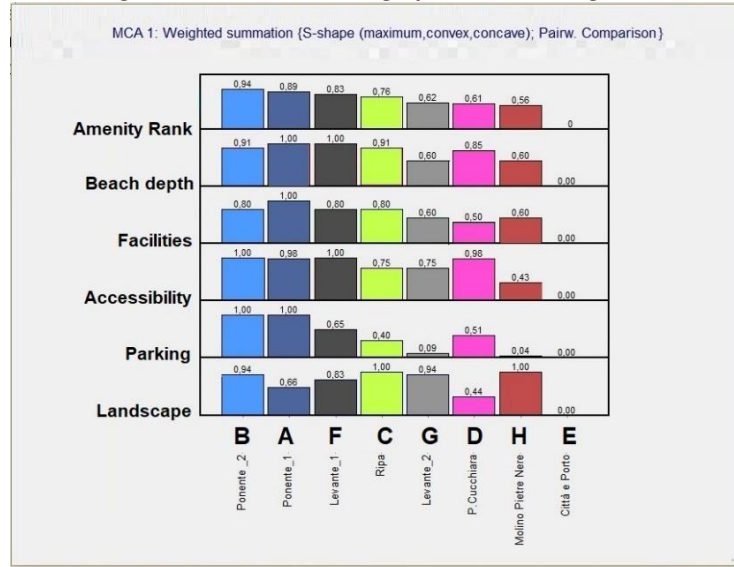
- linear shaped utility function (criterion: facilities): it respects the proportionality between scores x and y and corresponding values of the utility function f_x and f_y
- concave shaped utility function (criterion Beach depth): it brings the value of the utility function f_x of the score x upper than x : the threshold speed up the utility function quite soon
- convex shaped utility function (criterion Parking): it brings the value f_x and f_y of the utility function of a given scores x and y more down than x and y . The high values are obtained only with high scores.

Figure 3: Shapes of utility Functions



The first is that looking at the result, represented by the dominance indexes that are visible at the histogram at the top in fig. 4, it is quite difficult to assign a “High value” fee. If we exclude the Harbour Area (that was performing “zero”, as incomparable as regards a inexistent beach inside the harbour) the worst result, at the seventh place is “G-Molino-Pietre Nere” (0,56, on the left side of the histogram), while the Highest is “B-Ponente 2” (0,94, on the left side). The interval between the lowest performance attributed (0,94 vs 0,56) accounts 0,38. In between there are other five coastal segments, that in average differ for a score of 0,06. This means that is quite impossible to attribute a fear distinction, grouping in two cluster (high and normal value of the coast), if we think that the difference among the fees in term, of ratio is the highest is two times greater than the lowest one (2,643 €/m² against 1,322 €/m²). Therefore, the total yearly amount of fees for licences varies between 158.696,04 € (unit value for square meter 1,322 €/m²) and 317.392,09 € (unit value for square meter 2,643 €/m²). The amount of 158696,04 € is, more or less, corresponding to the monthly gross profit of 3 medium-sized beaches (on a whole number of 44). The shape of utility functions was a fundamental element for ranking the areas, as a proof that the discrimination, as alternative method in substitution of a weight system, can be effective. This means that our assessment, is destined to be an experiment for a long time even if the test shows that is better and more fear to apply a multiscale method to attribute the fee for the use license of the beach in the Public Domain, due to the difficulty to establish a break-even point to pass from the normal fee to the high fee.

Figure 4: Final ranking of coastline segments



4. CONCLUDING REMARKS

If we look at the way of conceiving the use license, we can observe an unbalanced collaboration between Public Authority and private entrepreneurs. Learning from the experience-on-field, a recurrent weakness point is emerging clearly: the unawareness of the municipalities to enjoy of an effective procedure for the convergence of collective interest with the use of public properties (Costanza et al. 1997). A better cooperation between public property managers and private investors should favour the diffusion of shared and appropriate organizational skills in the transformation and management of the public property assets (Murgante, Borruso, Lapucci, 2010; Attardi, Cerreta, Sannicandro, Torre, 2018). The economic development of coastline should derive from strategies, aiming to reduce the frequently unordered uses of the coastline, that overpass the carrying capacity of the seaside (Briassulis, 2002; Tajani, Morano 2014). More than a set of interventions without any reciprocal connection the scope of a Municipal Plan should be to set a rational system based on a correct relationship between built environment and natural heritage nearby the sea. According to the aims of Regional protection system, the main task of the MCPs is therefore to pursue economic and social development of coastal areas based on a system of rules set by law, that increase the quality and sustainability of leisure maritime activities on the seaside.

LITERATURE:

1. Bolkenstein, F. (2002). The Future of European Tax Policy, *EC Tax Review* 11, 19
2. Attardi, R., Cerreta, M., Franciosa, A., Gravagnuolo, A. (2014) Valuing cultural landscape services: A multidimensional and multi-group SDSS for scenario simulations. *International Conference on Computational Science and Its Applications ICCSA 2014* 398-413
3. Hardin, G. (1968). The Tragedy of the Commons. *Science* 162(3859) 1243-1248
4. Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, UK: Cambridge University Press
5. Torre, C.M., Selicato, M. (2013). The support of multidimensional approaches in integrate monitoring for SEA: a case of study. *Earth System Dynamics* 4 51–61,
6. Bengston, D. N., Fletcher, J. O., Nelson, K. C. (2004). Public policies for managing urban growth and protecting open space: policy instruments and lessons learned in the United States. *Landscape and Urban Planning* 69 271–286
7. Torre, C.M., Morano, P., Tajani, F. (2017). Saving soil for sustainable land use. *Sustainability* 9(3), 350

8. Khakee, A. (1998). Evaluation and Planning: inseparable concepts, *The Town Planning Review* 69(4) 359-374
9. Munda, G. (2008) *Social Multi-Criteria Evaluation for a Sustainable Economy*. Berlin Heidelberg: Springer-Verlag
10. Maria Cerreta M., Poli, G (2017). Landscape Services Assessment: A Hybrid Multi-Criteria Spatial Decision Support System (MC-SDSS). *Sustainability* 9(8), 1311
11. López Chofre, I., Gielen, E., Palencia Jiménez, J. S. (2018). Approach to urban metabolism of Almassora municipality, Spain, as a tool for creating a sustainable city. *WIT Transactions on The Built Environment* 179 209 – 219
12. Burkhard, B.; Kroll, F.; Nedkov, S.; Müller, F. (2012) Mapping ecosystem service supply, demand and budgets. *Ecological Indicators* 21 17–29.
13. Saaty, T. (1985). *The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation*. New York: McGraw-Hill
14. Costanza, R., et al. (1997). The value of the world's ecosystem services and natural capital. *Nature* 387 253–260
15. Murgante, B., Borruso, G., and Lapucci, A. (2010): Sustainable Development: concepts and methods for its application in urban and environmental planning. *Geocomputation, Sustainability and Environmental Planning, Studies in Computational Intelligence*. Berlin: Springer-Verlag, 348, 1–15
16. Attardi, R., Cerreta, M., Sannicandro, V., Torre, C.M. (2018). Non-compensatory composite indicators for the evaluation of urban planning policy: The Land-Use Policy Efficiency Index (LUPEI) *European Journal of Operational Research*, 264(2), 491-507
17. Briassoulis, H. (2002). Sustainable tourism and the question of the Commons *Annals of Tourism Research* 29(4) 1065–1085
18. Tajani, F., Morano, P. (2014) Concession and lease or sale? A model for the enhancement of public properties in disuse or underutilized. *WSEAS Transactions on Business and Economics*. 11, 787-800 (2014)

STAKEHOLDER DIALOGUE IN THE DEVELOPMENT OF SUSTAINABLE TOURIST DESTINATIONS

Anica Hunjet

*University North, Croatia
anica.hunjet@unin.hr*

Goran Kozina

*University North, Croatia
goran.kozina@unin.hr*

Dijana Vukovic

*University North, Croatia
dijana.vukovic@unin.hr*

ABSTRACT

Resources at the destination level are temporary in nature. Hence, sustainable tourist destinations must configure them and ensure the collaborative partnership between stakeholders at the beginning of each new tourist season. Furthermore, it is vital to introduce the concept of resource management indicator at the level of the tourist destination. It includes and connects the goals, resources and processes through which inputs, i.e. the resources engaged are transformed into values provided to tourism consumers, the success of which depends on the cooperation of all stakeholders in the development of a sustainable tourist destination. In addition to being sustainable and authentic, having adequate infrastructure, protected natural and anthropogenic destination values and efficient business entities of various sizes, a tourist destination must gain a distinctive advantage over its many competitors. In order to achieve sustainable development and ensure environmental protection, there is a need to coordinate and balance the responsibilities of all stakeholders.

Keywords: *stakeholders, sustainable development in tourism, sustainable tourist destination, stakeholder responsibility, implementation of sustainable development*

1. INTRODUCTION

A stakeholder in the context of the development and management of sustainable tourism can be defined as any group or individual who can affect or is affected by successful implementation of sustainable development of a destination. Such an approach requires active management of the relationships between all stakeholders involved. The concept of tourist destination management has emerged in response to the inability of tourist destinations to adapt quickly to constantly changing remote and immediate business environment. This approach has its roots in corporate social responsibility, implying that a tourist destination has other goals in addition to that assumed under traditional economic theory, which is to maximise the value of the economic entities involved in the delivery of the integrated tourism product. Pressure is placed on businesses to adopt corporate social responsibility practices due to the new concerns and expectations of stakeholders, i.e. the local population, tourism consumers, public authorities and investors. Several factors have become increasingly noticeable: the influence of social criteria on investment decisions, concern over damage caused by tourism activities, and increased transparency facilitated by the media and business communication technologies.

2. THE CONCEPT OF STAKEHOLDERS IN A TOURIST DESTINATION

Stakeholder management process involves four key steps: identifying the relevant public involved; identifying the interests and importance of each group; determining the efficiency

with which each group's expectations are met, and adapting the goals and priorities of the tourist destination accordingly (Carrol, 1989). Savage et al. (1991) identified four approaches to stakeholder relationship management that can be adopted in tourism as well:

- developing solutions in partnership with stakeholders;
- engaging stakeholders in formal organisational processes;
- protecting organisational activities from stakeholders' influences; and
- monitoring groups requesting change in organisational behaviour.

Post et al. (2002) suggest that there is a hierarchical relationship among stakeholders. Stakeholders in tourist destinations can be grouped into two categories: primary and secondary. By virtue of a formal, official or contractual relationship with business entities in the delivery of an integrated tourism product, primary stakeholders have a direct and crucial impact on business entities. Secondary stakeholders are not directly involved in the economic activity of business entities but do affect or are affected by other stakeholders' actions. The development of sustainable tourist destinations is feasible only providing that each tourist destination develops its own strategic matrix which will include all stakeholders, and providing their activities are assessed based on two dimensions - the potential for cooperation with stakeholders in the tourist destination and the potential for endangering the functioning of the tourist destination. Each stakeholder group involved is analysed so as to avoid jeopardizing the achievement of the goals set by the tourist destination on the one hand, and to improve business performance through the synergy of all stakeholder activities on the other.

2.1. Applications of the stakeholder theory in the marketing of tourist destinations

Relationship marketing differs significantly from the traditional approach to marketing strategy in that it involves a much broader range of factors that affect marketing strategy. According to Morgan and Hunt (1994), relationship marketing involves "all marketing activities aimed at establishing, developing, and maintaining successful relational exchanges". This approach implies a much broader consideration of interests than those of consumers and as such is highly applicable in sustainable tourism marketing. However, despite a clear shift towards relationship building, contemporary marketing focuses on creating a relationship with tourism consumers, while neglecting the broader social context. This phenomenon (according to Smith et al. (2010)) is termed the "new marketing myopia" that stems from three related phenomena:

- a single-minded focus on the consumer in tourism, leading to the exclusion of other stakeholders;
- an overly narrow definition of tourism consumers and their needs; and
- a failure to recognise the changed societal context of business that necessitates addressing multiple stakeholders.

Sustainable tourism marketing must consider the position of the tourist destination and the different stakeholders in tourism, and shift the focus from the tourism consumer to stakeholders and the tourist destination itself in order to enable the destination to grow and develop successfully in an unpredictable and highly complex global tourism market. The focus on stakeholders is necessary to establish and promote ethical decision making in all marketing activities (Laczniak and Murphy, 2006). Laczniak and Murphy (2012) emphasise that the dominant approach to the application of the stakeholder theory in marketing is largely instrumental and focused on the destination itself. Stakeholders are analysed to enable tourist destinations to manage stakeholder relationships so as to ensure that the planned profits are generated. This approach is referred to as a "soft" approach because the motivation behind it is to derive benefit for managers or business owners in the form of profits. They advocate a "firm" approach, also referred to as a "normatively ethical" approach, which implies the duty to make

a moral choice, regardless of the implications for the financial performance of the destination. In this context, marketers need to be aware of the importance and purpose of their function. Such a perspective requires a truly radical approach to understanding the tourism market and business, because the value delivered should be defined more broadly so as to include more than just the value for the consumer and the business owner. Ferrell et al. (2010) went a step further in their theoretical considerations, envisaging a shift from market orientation to stakeholder orientation, which underpins the marketing of sustainable development in tourism. Such a proposition is consistent with the position of Laczniak and Murphy (2012), who, in implementing the stakeholder theory in marketing, advocate a shift from a perspective that focuses on the destination towards a broader social and systematic understanding of interaction between stakeholders and the tourist destination itself. The available literature on relationship marketing describes a number of approaches to stakeholder categorisation, which is the first step in developing a successful strategy for building stakeholder relationships. Maignan et al. (2005) discuss different stakeholder concerns, such as the values and norms through which they evaluate sales activities of a tourist destination, consumer rights, environmental protection, product safety and transparent communication. In their theoretical review, Murphy et al. (2013) define the concept of social responsibility in marketing, which integrates the concept of corporate social responsibility and the application of stakeholder theory in marketing, as balancing the demands of stakeholders (consumers, employees, environment, suppliers, regulators, local community and owners), accepting accountability for marketing decisions, and integrating ethical and social responsibility in marketing activities. Stakeholder groups demand integrity, respect, standards, transparency and accountability, i.e. social responsibility. Bearing that in mind, it is vital to conduct an analysis of stakeholder interests and the implications of the pressure they exert on organisations in the context of sustainable marketing. All studies that have empirically examined the impact of stakeholders on the implementation of socially-responsible marketing strategies are almost exclusively concerned with the environmental dimension of their application. While theoretical literature suggests that sustainable marketing has evolved from green marketing, research in this area can serve as a starting point and an empirical basis for considering the interaction between sustainable marketing activities, the destination management and all groups involved. Expanding the concept of social responsibility, Murphy et al. (2013) identify key stakeholder groups in the field and the associated responsibility of the organisation.

3. THE CONCEPT OF SUSTAINABLE DEVELOPMENT AND ITS IMPACT ON THE TOURIST DESTINATION

The concept of sustainable marketing is considered an obligation rather than an option in the contemporary literature (Charter et al, 2006). It has been explored either as an evolution of the term green marketing (Peattie, 2001) and termed "sustainable green marketing" (Peattie, 2011), or as an evolution of socially responsible marketing that takes into consideration ethical and social aspects in developing marketing strategies and programmes (Kotler and Lee, 2005). Sustainable marketing as a construct has been developed from the concept of sustainable development, which, according to Elkington (1998), rests on three principles: preserving ecological integrity, developing social capital, and creating economic prosperity. It is through these three dimensions that one can observe the role of marketing in creating marketing resources, building capabilities and competitive advantage (Chabowski et al., 2011).

Table following on the next page

Table 1: Typical elements of sustainable design

Economic aspect	Environmental aspect	Social/ethical aspect
Technological feasibility Financial feasibility Short-term and long-term profitability Adequate pricing	Waste minimisation Cleaner production Cleaner materials and raw materials Eco-efficiency Reduction of energy consumption Reduction of raw material consumption Renewable energy sources Renewable raw materials Recycling	Fair trade Equity policy Good quality employment Working conditions Investment into the community Support for the regional economy Absence of cruelty Meeting real needs Consumer utility maximisation Better/Improved systems Participation Gender equality

Source: Charter, M., & Tischner, U. (Eds.). (2001). Sustainable solutions: developing products and services for the future. Greenleaf publishing, p. 128

At the level of the tourist destination, the ecological goals are achieved through the systematic management of the environmental impact of the destination, the primary focus being on reducing the negative impacts. The social aspects refer to the identification and consideration of the interests and expectations of all stakeholder groups involved, not just the ones with a financial stake in the business. The economic aspect implies the creation of value in the form of the products and services delivered to the market. For the concept of sustainable tourism to be put into practice, it is necessary to establish a development model that will foster the positive relationships between individual aspects of sustainability. Destination orientation towards sustainable development involves the following:

- reaching an adequate level of destination attractiveness, i.e. disposing of a certain volume and structure of natural and anthropogenic values that make up the primary (autochthonous) elements of tourism supply and dominant factors in attracting and directing demand;
- reaching a certain level of infrastructure; structure and quality of the infra and supra-structural elements of the tourist offer, which essentially determine the quality of service, price ranges and levels of profitability of business entities in tourism;
- reaching a certain level of tourist traffic and consumer spending (both domestic and foreign) as key indicators of tourist destination attractiveness, competitiveness, and functionality;
- a certain level of economic development of the region (country) that directly determines the volume and structure of tourism investments, aimed both at transforming tourism potentials into economic goods (conversion function of tourism) and at building the elements of the infra- and suprastructure of tourism;
- implementation of appropriate development policy in tourism and related fields comprising various regulatory, organisational and incentive measures (spatial, economic, environmental, etc.), as well as adequate positioning of tourism within the overall socio-economic development.

Commitment to achieving sustainable development entails prioritising environmental protection over economic dimension in relative terms. If we consider tourism as a production cycle, it involves several stages: a tourist destination is revealed to the public because it has elements of high utility value; through investment of human labour, these elements gain a fair market value; they are valorised in the market; the attractiveness and popularity of the tourist

destination and visitor numbers grow; revenues increase until the saturation point has been reached; this is followed by a downward trend; the popularity of the tourist destination and visitor numbers decline; demand and revenues fall down; and the elements that attracted tourists are depleted. Sustainable development requires synergy between the development process and the living environment, aimed at maximising economic performance while at the same time optimising the use of natural resources and adequately protecting cultural and historical sites and other features of the destination. The World Trade Organisation (WTO) defines sustainable tourism as follows: "Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support system" (Brown & Jafari, 1990: 79). The sustainability of a tourist destination is determined by the following factors: (Črnjar, 2008):

- Environmental sustainability - allows for the development of a tourist destination that is in balance with ecological processes, biological diversity and conservation of biological resources.
- Economic sustainability – allows for the development that supports economic efficiency and resource management.
- Socio-cultural sustainability – allows for the development that supports economic efficiency and resource management that will be able to support future generations too.
- Political sustainability - allows for the protection of human rights of the local population of the tourist destination.

Ecological, economic, socio-cultural and political sustainability enable a sustainable tourist destination to achieve competitiveness in the tourism market while maintaining the quality of its natural, social, cultural and environmental resources. The implementation of the concept of sustainable tourism implies a more restrictive strategy in terms of planning and managing the development of areas that have relatively well-conserved natural and social tourism resources and significant or limited natural resources, with the aim of preventing their degradation due to the negative impacts of tourism development (Weaver; 2006: 19-20). A slightly less restrictive sustainable tourism strategy is used in planning and managing the development of areas with highly anthropogenic factors (urban and industrial centres, man-made attractions etc.).

4. RESEARCH METHODOLOGY

The research examines the need for formulating marketing strategies to facilitate the development of sustainable tourist destinations. It looks into the level of the tourist destinations' orientation towards sustainable development, and the level of implementation of the concept of sustainable development marketing by stakeholders responsible for managing the development of an integrated tourism product. Furthermore, the impact of stakeholder collaboration on the level of sustainability of tourist destinations should be considered. Three hypotheses are presented and tested on a sample of 98 respondents to determine the relevance and interest in the research topic. Based on the review of the existing theoretical and empirical literature and the authors' own research into the implementation of the concept of sustainable development in tourism, several fundamental characteristics of sustainability have been identified. These characteristics make the process of adoption and cooperation among stakeholders at the tourist destination level, and eventually the process of implementing sustainable development marketing in tourism more complex than, for instance, understanding the importance of sustainability and the role of the concept of sustainable development among businesses engaged in the tourism industry.

They include the following:

- the complexity and understanding of the content and meaning of the concept of integrated tourism product;
- understanding of the role and importance of tourist destinations in the integrated tourism product;
- possibility of stakeholder influence on the sustainable development of tourist destinations;
- different approaches and complexity of managing the development of a tourist destination;
- monitoring the sustainability of the tourist destination.

A survey was carried out among 98 respondents. A questionnaire was sent to national government institutions, tourist boards, investors, hoteliers, non-governmental institutions, local action groups, local government units, cultural and social institutions, entrepreneurs and small businesses, travel agencies, locals and tourism consumers. In general, it is evident that individual stakeholders at the level of the tourist destination consider it imperative to act responsibly in performing their activities for various motivations. Sampling was intentional in that it focused on individuals with a high level of awareness of sustainable development issues and accountability for actions, as well as the need to implement sustainable development and sustainable tourism in a tourist destination. Sustainable development as a responsible version of marketing a destination does exist in the global tourism market and is reflected primarily in activities focused on the local population, the wider community, tourism consumers, and other interested stakeholders, as well as the destination itself. Majority of the respondents have completed higher education - 52% hold an undergraduate degree, 42% a master's degree, and 6% a doctoral degree. The aim of the empirical research is to: identify the characteristics of sustainable tourist destinations and destination values; define the role and importance of cooperation among stakeholders; identify the level of cooperation among stakeholders in defining the goals of tourist destination development, implementing sustainable development strategy, identifying the mission, and assessing product portfolio of the tourist destination. The following research questions were formulated:

- How is sustainable development in tourism designed and implemented?
- Does the sustainable development of the tourist destination affect its placement in the tourist market and, if so, to what extent?
- Does the pressure exerted by relevant stakeholders influence the level of implementation of sustainable development in the tourist destination and, if so, to what extent?
- Who or what is the main driver of responsible marketing activities at the destination level?

Considering the above, the following hypotheses are proposed:

- Hypothesis H1: Effective implementation of sustainable development in tourism has a positive impact on destination development;
- Hypothesis H2: Stakeholder intentions in the context of sustainable development in tourism affect the level of implementation of sustainability measures in the destination;
- Hypothesis H3: Stakeholder pressures at the destination level affect the implementation of sustainability strategies.

The Kaiser-Meyer-Olkin (KMO) test was used to measure sampling adequacy, i.e. how suited the data is for an exploratory factor analysis. The Bartlett's test of sphericity was used to test the suitability of the correlation matrix for factor analysis (Hari et al. 2010: p. 92). KMO value should be greater than 0.6 and the Bartlett's Test of Sphericity should be significant ($p < 0.05$) for the data to be suited for further factor analysis.

Table 2: KMO and Bartlett sample test

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy:	.800
Bartlett's Test of Sphericity	Approx. Chi-Square	2.334.891
	df	528
	Sig.	.000

Source: authors' work

Table 3: Descriptive analysis of items about sustainability at the tourist destination level

n=98		Mean	Standard deviation
INTEGRATION OF SUSTAINABLE DEVELOPMENT IN THE MARKETING STRATEGY			
A1	Tourist destination performance is measured by a combination of financial, environmental and social impact indicators	4.47	1.619
A2	The concept of sustainability is integrated into the tourist destination development plans	3.89	1.388
A3	Local government motivates local population to achieve environmental and social goals in addition to the financial ones	4.32	1.653
A4	In addition to the achievement of financial and economic goals of the tourist destination, the quality of life of the local population is monitored	3.91	1.641
A5	The environmental goals of the tourist destination are set in a way that enables the monitoring of the effect of tourism on the "carrying capacity" of the tourist destination	3.97	1.819
A6	The social goals of a tourist destination are defined with a view to increasing the positive effect on the tourist destination	4.68	1.510
INVOLVEMENT OF THE PUBLIC			
B1	Cooperation is established with various stakeholders to understand their expectations with a view to achieving sustainable development at the destination level	4.79	1.204
B2	Partners are selected in creating an integrated tourism product based on a set of environmental, social and economic criteria	4.31	1.459
B3	Personal and professional development of the local population is promoted through various training programmes and career planning assistance	3.45	1.942
B4	Participation in the development and preservation of the local cultural and historical heritage of the destination	4.51	1.756
B5	Preference is given to purchasing locally-sourced products and usage of environmentally-friendly products and services	4.19	1.543
B6	Joint meetings of all stakeholders at the level of the tourist destination to discuss the implementation of sustainable development activities and policies in the destination	3.89	1.878
MARKETING STRATEGY FOR SUSTAINABLE TOURISM DEVELOPMENT			
C1	Tourism consumers are differentiated based on the fact whether or not they appreciate the sustainable values of the tourist destination	4.61	1.603
C2	The behaviour, needs and wants of tourists are motivated by the sustainability strategy and the protection of destination values	3.91	1.954
C3	The development of selective forms of tourism oriented towards sustainable development is considered the only viable pathway towards further development of the destination	4.32	1.352
C4	The environmental and social impacts of tourism at the destination level are considered	4.60	1.511
C5	Eco-efficiency at the destination level is continuously improved	4.26	1.549
C6	Socially-accountable tourist behaviour is encouraged through promotional initiatives	4.18	1.527

Source: authors' work

In order to gain insight into the level of implementation of sustainable tourism development at the tourist destination level, prior to hypotheses testing, descriptive analyses were conducted of all tested items concerning sustainable tourism strategies. Under the factor 'integration of sustainable development in the marketing strategy' in Table 3, it can be seen that sustainability is part of the marketing strategy since the mean value for the item 'tourist destination performance is measured by a combination of financial, environmental and social impact indicators' is 4.47. Furthermore, all the other items under the same factor have reached above-average values on a scale of 5, which indicates that the results are significantly better than expected given the many challenges facing the modern tourism industry. Under the factor 'involvement of the public', the item 'cooperation is established with various stakeholders to understand their expectations with a view to achieving sustainable development at the destination level' has reached the highest mean value. This suggests that stakeholders do recognise the value of motivation and commitment of all stakeholders as the main value driver. It is interesting to note that the item 'behaviour, needs and wants of tourists are motivated by the sustainability strategy and the protection of destination values', as well as the item that refers to the integration of the environmental goals at the destination level is not observed to a large extent (mean value 3.97). In terms of marketing, significant efforts are being made by stakeholders to improve eco-efficiency. The motivation behind this may well be cost reduction. The respondents claim (mean value 4.32) that they systematically monitor and understand the effects of their products and services throughout the destination life cycle. Furthermore, they recognise the necessity to develop selective forms of tourism oriented towards sustainable development as the only viable pathway towards further development of the destination, which is consistent with one of the postulates of sustainable tourism development. This indicates a systematic and relatively high level of adoption and implementation of sustainable development practices in the tourist destination. The analysis of the data obtained using the structural model indicate that the implementation of sustainable development in a tourist destination has a statistically significant impact on the tourist destination performance in the market. Despite the fact that the possibility of predicting the relationship between these two variables is relatively low, the conclusion reached has major implications for the existing marketing theory and practice and points to the necessity of implementing a sustainability strategy in tourist destinations.

Table 4: Statistical significance of structural coefficient between sustainable marketing and tourist destination performance

Hypothesis	Direction of the relationship	Standardised assessment (beta coefficient)	Standard error	t-value	p-value	Hypothesis confirmed
H1	Sustainable tourism development → achieved	0.326	0.094	3.713	0.00**	YES
Note**p <0.001						

Source: authors' work

The second hypothesis is determined by three sub-hypotheses, arising from the stakeholder theory, i.e. the need to anticipate stakeholder behaviour and cooperation between them. Donalds and Preston (1995) stated that there is no need for equal participation of all stakeholders in the decision-making process; however, it is vital to identify and define their interests. Based on previous research into the model, it is assumed that the awareness of the need to implement sustainable development in tourism, intentions to balance their interests and stakeholder behaviour management are good predictors of future intentions, and thus of responsible and ethical behaviour in tourism. Hence, stakeholder intentions are the consequence of these three variables.

Table 5: Statistical significance of the structure coefficient between understanding the need to implement sustainable tourism strategies, balancing stakeholder interests and managing stakeholder behaviour

Hypothesis	Direction of the relationship	Standardised assessment (beta coefficient)	Standard error	t-value	p-value	Hypothesis confirmed
H2a	Understanding→ Sustainable tourism development	-0.142	0.777	1.555	0.096NS	NO
H2b	Intention to balance interests→ Sustainable tourism development	0.385	0.104	3.467	0.00**	YES
H2c	Behaviour management→ Sustainable tourism development	0.326	0.071	4.183	0.00**	YES
Note**p <0.001						

Source: authors' work

Recent studies indicate that tourism development should balance the benefits for all stakeholders, which is why their views and opinions should be identified during the planning process.

Table 6: Statistical significance of the structure coefficient between pressure exerted by stakeholders and sustainable marketing

Hypothesis	Direction of the relationship	Standardised assessment (beta coefficient)	Standard error	t-value	p-value	Hypothesis confirmed
H3	Stakeholders at the level of the tourist destination→ Sustainable tourism development	0.008	0.087	0.127	0.089	PARTLY
H3	Tourism consumers→ Sustainable tourism development	0.146	0.069	3.157	0.002**	PARTLY
H3	Institutional stakeholders→ Sustainable tourism development	0.326	0.064	1.923	0.055**	YES
Note**p <0.001						

Source: authors' work

In accordance with the hard disputed fact that the locals, a critical group for the initiation and systematic integration of responsibility and ethics in the tourist destination, the local population is a major stakeholder of the rapid and sustainable development of the destination is impossible. The primary stakeholders in the value delivery process (all stakeholders involved in the integrated tourism product), it is assumed that they have a positive impact on the level of implementation of sustainable development in tourism. It is assumed that the primary stakeholders in the value delivery process (all stakeholders involved in the integrated tourism product) contribute positively to the implementation of sustainable development in tourism. The data confirm there is a positive correlation but without statistical significance. The positive influence and statistical significance of tourism consumers as external stakeholders indicate that market factors are relevant for incorporating responsibility at the strategic level, as tourism consumers increasingly choose sustainable tourist destinations.

Legal norms are considered to be only the minimum requirement and as such are not part of the responsible behaviour of a tourist destination. They include relevant legal provisions, various EU regulations, as well as the activities of the government, government agencies and non-profit organisations, all of which, as institutional stakeholders, make a positive contribution to awareness-raising and the implementation of sustainable development in tourism. Although the statistical significance of this indicator is lower compared to other indicators ($p = 0.055$), this hypothesis can be accepted at a significance level of 10%.

5. CONCLUSION

Assessing the life cycle of a tourist destination is at the heart of the implementation and delivery of sustainable development goals. As a quantitative instrument, it measures the effects of the development of an integrated tourism product on the environment and health of the local population. Thus, it is aimed at identifying the overall effects of tourism activities, processes and products on the destination and its values. In destinations with a long tradition of tourism, the local population and the destination itself rely on tourism for sustenance and growth. Stakeholder theory suggests the need to balance the benefits for all stakeholders, and the need to identify stakeholder perspectives during the planning process. Sustainable development of tourist destinations can only be achieved through the following:

- destination life cycle review – assessment of energy demand, emissions, volume of wastewater, solid waste and other environmental pollution throughout destination life cycle;
- life cycle impact assessment - assessment of environmental impacts, impacts on the health of the local population, quality of life, and other social, cultural and environmental impacts on destination values;
- improvement of the destination life cycle - the analysis includes qualitative and quantitative measures for improvement such as changes in the development of selective forms of tourism, the use of raw materials, determining the carrying capacity and consumption, and waste management.

Generally, a precondition for developing sustainable tourist destinations is minimising the impact of tourism on destination values. Destination sustainability entails much more than the cooperation of stakeholders. It involves environmental, economic, social and ethical aspects in the life cycle of the tourist destination. Unless a tourist destination contributes to addressing a specific socio-environmental issue in a measurable way, it cannot be considered sustainable. Thus, for the strategic orientation and the activities of a tourist destination to be truly effective, they must be consistent with the goals and destination values, as otherwise they may be misinterpreted by all groups involved. This may cause loss of credibility in the global tourism market and damage both the reputation of the tourist destination and consumer confidence that the tourism product they purchased will be delivered to them. Failure to systematically explore and take into account stakeholder interests is likely to have negative social and environmental impacts on the whole destination supply chain and the tourist experience. Hence, it is the moral duty of sustainable tourist destinations to change and adapt existing policies in order to minimise or completely eliminate the possibility of a negative impact on the destination.

LITERATURE:

1. Brown, F. & Jafari, J. (1990). Tourism and Culture, in: *Tourism Management*, March, pp. 78-80.
2. Charter, M., & Tischner, U. (Eds.). (2001) *Sustainable solutions: developing products and services for the future*. Greenleaf publishing.

3. Charter, M., Peattie, K., Ottman, J., & Polonsky, M. J. (2002) Marketing and sustainability. *Centre for Business Relationships, Accountability, Sustainability and Society in association with the Centre for Sustainable Design*.
4. Carroll, A. B. (1989) *Business and Society: Ethics and Stakeholder Management*. Cincinnati, OH: South- Western.
5. Carroll, A. B. (1999) Corporate Social Responsibility Evolution of a Definitional Construct. *Business & Society*, 38(3), pp. 268–295.
6. Carroll, A., & Buchholtz, A. (2014) *Business and society: Ethics, sustainability, and stakeholder management*. Cengage Learning.
7. Črnjar, M. & Črnjar, K. (2009). *Menadžment održivog razvoja: ekonomija, ekologija, zaštita okoliša*, Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji, Sveučilišta u Rijeci.
8. Elkington, J. (1998) *Cannibals with Forks: The Triple Bottom Line of the 21st Century Business*, Gabriola Island (Canada), Stony Creek (US): New Societies Publishers.
9. Laczniak, G. R., & Murphy, P. E. (1991). Fostering Ethical Marketing Decisions. *Journal of Business Ethics*, 10(4), pp. 259–271.
10. Laczniak, G. R., & Murphy, P. E. (2006). Normative perspectives for ethical and socially responsible marketing. *Journal of Macromarketing*, 26(2), pp. 154-177.
11. Maignan, I., & Ferrell, O. C. (2004). Corporate social responsibility and marketing: an integrative framework. *Journal of the Academy of Marketing science*, 32(1), pp. 3-19.
12. Maignan, I., Ferrell, O. C., & Ferrell, L. (2005). A stakeholder model for implementing social responsibility in marketing. *European Journal of Marketing*, 39(9/10), pp. 956-977.
13. Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, 30(8), pp. 909-920.
14. Morgan, Robert M., and Shelby D. Hunt. (1994). "The Commitment-Trust Theory of Relationship Marketing." *Journal of Marketing* 58(3), p. 22
15. Murphy, P. E., Laczniak, G. R., & Prothero, A. (2013). *Ethics in marketing: International cases and perspectives*. Routledge.
16. Murphy, P. E., Öberseder, M., & Laczniak, G. R. (2013). Corporate societal responsibility in marketing: normatively broadening the concept. *AMS review*, 3(2), pp. 86-102.
17. Murphy, P. E.: (1999) Character and Virtue Ethics in International Marketing: An Agenda for Managers, Researchers and Educators, *Journal of Business Ethics* 18, pp. 107-124.
18. Murphy, P. L. (2000). The Commodified Self in Consumer Culture: A Cross-Cultural Perspective. *The Journal of social psychology*, 140(5), pp. 636-647.
19. Murphy, P.E., G.R. Laczniak, N.E. Bowie, and T.A. Klein. (2005) *Ethical Marketing*, Upper Saddle River, N.J: Pearson Prentice-Hall.
20. Peattie, K. (2007) 'Sustainable Marketing: Marketing Re-thought, Re-mixed and Re-tooled', in M. Saren, P. Maclaran, C. Goulding, R. Elliott, A. Shankar and M. Catterall (eds) *Critical Marketing: Defining the Field*, pp. 193–207. London: Butterworth-Heinemann.
21. Post, J., Preston, L.E., Sachs, S. (2002). Managing the extended enterprise: the new stakeholder view. *California management review*, 45(1), pp. 6-28.
22. Savage, Grant T., Timothy W. Nix, Carlton J. Whitehead, and John D. Blair. (1991). "Strategies for Assessing and Managing Organisational Stakeholders." *Academy of Management Executive* 5(2), pp. 61-75.
23. Smith, J. W. (2006), "Coming to Concurrence: Improving Marketing Productivity by Reengaging Resistant Consumers". In: Sheth, J. N. and Sisodia, R. S., (eds.), Does Marketing Need Reform?, New York: M. E. Sharpe Inc., pp. 15-25
24. Smith, N. C. (1990). *Morality and the market: consumer pressure for corporate accountability*. London: Routledge.

25. Smith, N. C., Drumwright, M. E., & Gentile, M. C. (2010). The new marketing myopia. *Journal of Public Policy & Marketing*, 29(1), pp. 4-11.
26. Smith, N. C., Palazzo, G., & Bhattacharya, C. B. (2010). Marketing's Consequences: Stakeholder Marketing and Supply Chain Corporate Social Responsibility Issues. *Business Ethics Quarterly*, 20(4), pp. 617–641

A MODEL FOR ASSESSING CUSTOMERS' PERCEPTIONS TOWARDS FUNCTIONAL FOOD

Jose Joao Oliveira

*ESTGA, University of Aveiro, Portugal
jjoliveira@ua.pt*

Humberto Ribeiro

*GOVCOPP, ESTGA, University of Aveiro, Portugal
hnr@ua.pt*

ABSTRACT

The functional food phenomena has been receiving increased attention, to the extent that the concern for this specific type of food continues to expand and has drawn consumers' attention towards the relation of food with performance and health. Furthermore, and in some developed countries, there is a high prevalence of diseases associated with improper diets and lifestyles, which could be regarded as preventable. The concept of functional foods has been granting a high level of deep reflection, as well as increasing consumers' behaviour and focus in regard to this range of products. The functional food market is in a clear stage of growth, and therefore deserves the focus of the modern retail industry, as these products can be catalysts of increased sales and differentiation as well. In this paper, a theoretical analysis of functional food and consumers' perception, i.e. willingness to pay for a more specific, but also more expensive, type of food is developed in order to contribute for a possible enhanced product development by the food retail sector of activity.

Keywords: *Functional Food, Consumer's Behaviour, Willingness to Pay, Food Retail*

1. INTRODUCTION

Currently the focus of nutrition science is on optimizing the power of food, with the aim of improving the daily diet in terms of nutrients and non-nutrients and other food properties that help to maintain health (Doyon and Labrecque, 2008). The functional food is increasingly fashionable nowadays. It is somewhat ambiguous to set functional food to the extent that any food fulfils certain functions. However, in a strict sense it is a food that provides beneficial physiological effects on health, and the same optimization or reduction of a disease development situation (Pereira, 2014). The definition comes up issued by FUFOSE (Functional Food in Europe): The food can be regarded as "functional" if it is satisfactorily demonstrated to beneficially affect one or more target functions in the body, beyond adequate nutritional effects, in a way that is relevant to either an improved state of health and well-being and / or reduction of risk of disease. Functional foods must remain foods and they must have their effects on amounts that normally can be expected to be consumed in the diet: they are not pills or capsules, but part of the normal food pattern" (Hawkes, 2004). Functional food should be distinguished from nutraceuticals, since the latter takes the form of a bioactive compound in addition to beneficial health characteristics (Palm, Shore, & Knutson, 2016). In his research, so that he could systematize the concept of functional foods, Doyon and Labrecque (2008) perform a classification of items that most settings feature. The authors emphasize on four main features:

- a) Health Benefits:** This is a central aspect for most settings. They can be classified as improvement of a function or reducing the risk of certain diseases.
- b) Nature of food:** in this area there is a diversity of inclusions, some authors consider that the functional food should be as true to nature as possible, others who believe that can be enriched or that there is the removal of allergens and harmful components to health (eg, salt and sugar).

- c) Function level: this parameter is par excellence one that characterizes the functional food, including benefits beyond basic nutritional functions. Roberfroid (2002) stresses that food should be considered by their functional attributes, more than others.
- d) Consumption pattern: this item is related to the context where the food is. This concept states that a functional food should be part of a normal diet or being embedded in a geographic context / specific culture. Thus, we have a functional food which can be accepted in one country and not in others.

It is considered functional food the universe of a subset of healthy foods that reduce the risk of disease, improve function and contribute to improved health, with a reduced intensity. Thus, the enriched and / or improved food, can be considered functional if the physiological effects would fit inside the area of influence, such as reduction of risk of disease and promotion of health. The fact that a food has nutritional balance it is not a condition to be considered a functional food. In summary, it is concluded that the functional food is perceived by consumers as having a beneficial effect on health (Urala & Lähteenmäki, 2003) containing ingredients enriched by technological processes and from which the components have been removed. Doyon and Labrecque (2008), after the research made, build the following definition of functional food: it is or looks similar to a conventional food. It is part of a standard diet and is consumed regularly, in normal amounts. It has health benefits proven, as it reduce the risk of specific chronic diseases or beneficially affect target functions beyond basic nutritional functions. The changing lifestyles, population aging in the more developed countries, and the increasing importance with dietary patterns associated with wellness and health promotion, has led to increased consumption of functional foods in studies of different cultural contexts, as Rifnaz et al. (2016) Sri Lanka, Urala and Lähteenmäki (2007) in Finland and Chen (2011) in Taiwan. Kotilainen et al, (2006); Spence (2006) cited by Siro Kápolna, Kápolna, and Lugasi (2008), perform a collection and systematization of the types of functional foods and their definitions. In Table 1 we can observe the categorization performed by the authors.

Functional food type	Definition	Examples
Product fortified	Fortified product with additional nutrients	Fruit juice with vitamin C
Product enriched	Food product with new nutrients and components that are not typically found in this product.	Margarine plant sterol, pro-biotics, pre-biotics
Altered products	A food something which a harmful component was removed, reduced or substituted by other substances with beneficial effects	Fibers as liberators fat in meat products and ice cream.
Improved products	A food in which one component is naturally particularly enhanced by growth conditions, new food composition, handling, or otherwise.	Eggs with Omega-3, and improved child food.

Table 1: Types of functional food - classification Kotilainen et al, (2006); Spence (2006)

2. CONSUMER BEHAVIOR IN THE FACE OF FUNCTIONAL FOODS

Various studies show that there are several factors that determine the acceptance of functional foods by consumers and is divided into large two large groups of factors: features related to consumers and characteristics related to the product. Associated to consumers are three major subgroups of factors: Personal, Psychological and Cultural and Social (Kaur and Singh, 2017).

Table 2: Factors Related to Functional Food Consumption

Factors Related to Functional Food Consumption	
Associated with Consumers	Description
Subgroup: Personal	Yield, high levels of education positively related functional food consumption (Hung, Kok, & Verbeke, 2016; Jang & Hur, 2015; Jezewska-Zychowicz & Królak, 2015; Schnettler et al, 2015;. (Sääksjärvi et al. , 2009); (Siro, et al, 2008) Age and gender, after three systematic studies, presented some difficulty in relating to the consumption of functional foods; Kaur and Singh, 2017). There are some studies that highlight the feminine gender as more likely in the acquisition of functional foods (Sääksjärvi et al., 2009); (Siro et al., 2008);(Küster-Boluda & Vidal-Chapel, 2017). With regard to age, 2015 Nielsen study showed that there is an acceptance of functional foods in reducing disease, and that younger generations are more open to acquire the same(Küster-Boluda & Vidal-Chapel, 2017).
Subgroup: Psychological	Acceptance and preferences, particularly the attitudes and motivations, concern about health, balance of benefits and risks of functional foods are good predictors of purchase there of (Hung et al, 2016.).
Subgroup: Sociocultural	The propensity to consume functional foods increases with the existence of a sick family member, when health professionals recommend consumption, and in the presence of children in the family. Characteristics of the products have differentiated feedback on consumers (Fizman, Carrillo, & Varela, 2015; Kraus, 2015). The company's image to promote the product has a high reputation in the customer and may even surpass the effects of functional foods in the consumer's mind. Aspects such as natural bioactive product and are measured; Taste and price are important aspects; (Santeramo et al., 2018). Packaging, the product brand and convenience positively affect consumer choices (Urala & Lähteenmäki, 2003); as well as health promotion information (and not to fight disease) (Lähteenmäki, 2013; Van Kleef et al., 2005).

Source: Adapted from Santeramo et al. (2018)

However a study carried out in Spain, by Kuster-Boluda and Vidal-Chapel (2017), pointed out that a healthy lifestyle negatively influences the consumption of functional foods and does not significantly influence the attitudes in the face of functional foods. Within this line of thought, Siro Kapolna, Kapolna and Lugasi (2008) point out that Europeans are more critical of the use of new products and food technologies, stressing they do not meaningful relationships. Considering the markets of Northern Europe, Bech-Larsen and Grunert (2003) report that the health benefits are a necessary, but not sufficient for the consumption of functional foods. Hunter, Jones, Hedderley, and Jaeger (2019) note that in the specific universe of people who aim to lose weight, the characteristics of functional foods are highly valued, particularly in appetite control. Carrillo, Prado-Gasco Fizman, and Varela (2013) stress in their search through structural equation methodology carried out in Spain, that almost half of respondents have no knowledge about the characteristics of functional foods. In terms of gender, women are those that more information appears before this type of food, since they are also the most responsible for house purchases. Functional consumers perceive the food to have benefits beyond the nutritional capabilities. One of these attributes is related to the healing capacity of food. According to the American Dietetic Association, 87% of Americans believe that certain foods have health benefits, or are functional (Palm et al., 2016). At their research, Carrillo et al. (2013) report that older consumers have a more conservative stance towards the functional food, coming to meet the Tuorila studies, Lähteenmäki, Pohjalainen, and Lotti (2001), meaning that

the younger population may be more sensitive to this type of product. However, Poulsen (1999) showed exactly the opposite of a study in Denmark. We can therefore infer that such trends are closely related to the substance of the sample and the cultural / geographical scope that it is imbued. In terms of perceived importance and consumption of functional foods, (Carrillo et al., 2013), they report that they have little importance given by Spanish consumers. In an analysis of the attitudes towards functional foods, the indicator of "security (food)" was the one who obtained the lowest value of Cronbach's alpha. Of the various used constructs, the authors stress the Positive Attitudes (such as satisfaction and well-being) have a positive relationship in the consumption of functional foods, increasing if there is a clear perception of the packaging information / labelling (nutritional aspects) and clarification of communication, sales improved appearance.

3. FUNCTIONAL FOOD MARKET

The functional food market demonstrates an intense activity and growth. According to Doyon and Labrecque (2008), the worldwide market of functional food grows about 7 to 10% per year, although this is a range for defining the functional food may vary. In the emerging market of functional food, research and development, private investment and government regulation assume preponderance (Thomassin and Cloutier, 2001). However, this is a market where there are wide variations between settings and applied legislation, not managing to thereby convey a strong image to industry on market potential data, or to protect consumers. There are also the concepts of nutritional and natural health that are often associated with functional foods creating further confusion between the product classes (Doyon & Labrecque, 2008). In terms of market, functional food (and drinks) in 2013 represented sales of about 43,270 millions USD. Despite the 2009 growth, this was not as high as expected compared to the beginning of the century, due to a combination of effects such as the global economic crisis, regulatory and legal constraints, as in many countries, manufacturers are required to submit evidence scientific benefits of food (Monteiro, 2017). Santeramo et al. (2018) emphasize that functional foods represent a market of the emerging to the food sector level. The same authors emphasize the development of new functional foods is an activity that comprises some risks, and that much of the market has a short life cycle (Melletim, 2014) associated with technical difficulties (Bleiel, 2010) and the difficulties in acceptance of products by consumers (Van Kleef, Van Trijp, & Luning, 2005), hence the increasing importance in the study of consumer behaviour in this area. It appears that the market for functional foods is presented with an interesting growth profile. According to Jorge Portugal, General Manager of COTEC, this market could grow 6% annually and be worth about 2.5 billion dollars growth worldwide. In the Portuguese case not exhibit ever-varied examples of successful companies that bet on functional and sports nutrition. Prozis is perhaps one of the most known cases. Basing its action on online, turnover continues to grow, EUR 60 million (2016); EUR 84 million (2017) and EUR 120 million (2018 - estimate), in a worldwide market which is estimated at about 55 to 60 billion Euros (Sousa, A. 2019). The company Iswari sold in 2017 about 7200 referrals a day, basing its business in online, this sales growth was due in part the change in consumer awareness, adopting increasingly a healthier lifestyle (...) pure superfoods, an increase of 41% in volume, and vegan proteins, thought to sportsmen and / or people with a vegan diet (which includes spirulina and bee pollen) (...) the Iswari It earned 6.6 million euros in 2017, an increase of 52% over the previous year (Barbosa, M; Nunes, P. 2019). The functional food it is a growing market, it becomes important to evaluate this type of food in modern landscape large retail food. The development of socio-demographic changes, related to new consumer trends, and constant innovation in the world of retail are constant challenges for retailers. In addition to the behaviour of consumers, there is all the surroundings, such as climate change, population growth, resource production rationalization and which together influence the change in patterns and consumer awareness.

In this context of holistic challenges, companies to prepare better, will be more competitive. The new trend by looking for functional foods, brings challenges for companies, to the extent that is necessary research and launching products through its protective effects to prevent and reduce the spread of disease in the population (Szakály, Kovacs, Peto Huszka, & Kiss, 2019). The same authors point out that the development and production of functional foods is a challenge, since consumers are slow to adopt new styles of consumption of food innovations. This phenomenon is called the neophobia (Labrecque, Doyon, Bellavance, & Kolodinsky, 2008) in addition to presenting a conservative stance towards the benefits of food. Note that exists among consumers in the European Union a less positive outlook for food products that are designed to provide health benefits (Siro, Kápolna, Kápolna, & Lugasi, 2008) cited by Kuster-Boluda and Vidal-Capilla (2017). In order to increase the consumption of functional foods as regards as the Spanish market, Kuster-Boluda and Vidal-Chapel (2017) defined several steps that companies should follow:

1. Focus of marketing departments to promote the benefits and safety of functional foods. The higher consumer confidence towards functional products, the greater the willingness to pay a premium price for these products. This certainly will set up a commercial bank bonus and innovation that retailers certainly will not forget, as well as changes in the supply chain to increase value and opportunities (Kotilainen et al., 2006). However, as emphasized by Bower, Saadat & Whitten (2003), the availability of consumers to pay premium is not as high as the industry often provides. This premise confidence in the food industry, in particular food product is related to greater acceptance and benefit health (Urala, Arvola, & Lähteenmäki, 2003) and (Manganese-Miroso & Walker, 2018).
2. The technical specifications of the products to be visible and legible, and the quality and labelling requirements, with no addition or extraction of ingredients.
3. Marketing campaigns that promote the products and their benefits and disease prevention, should be clear. The customer will effortlessly be able to evaluate the benefits compared to a conventional food.
4. The transparency to the consumer, such as packaging and packaging to be the best visible and understandable.
5. Set the target audience. Given the precursor of health benefit, there are segments of the population (elderly, osteoporosis) and weight loss (more often associated with female gender), will eventually have a positive impact on consumption, relationship and recommendation of functional food.

Carrillo et al. (2013) in its conclusions, it stated that the used constructs highlight the Positive Attitudes (such as satisfaction and well-being) presenting a positive relationship in the consumption of functional foods, increasing if there is clear information on the packaging / labelling (nutritional aspects), better information campaigns customers. The development of the functional food market is a complex, multi-step that requires inputs from the business, academic and regulatory areas, building on a basic need that is consumer acceptance (Jones & Jew, 2007). In order to succeed in the field, you need new forms of management, in particular the field of the evidence supporting technologies, creation of internal skills, consulting external and innovative sources, develop new markets, establishing alliances, packaging development, brand building and provide venture capital. Are often unusual strategic options for the business of the traditional retail and may discourage some companies to innovate (Kotilainen et al, 2006). In order to achieve success on the market, functional foods should be adjusted to the designs that present as nutrient capacity and disease prevention (Menrad, 2003). Thus one of the first aspects to develop a product development perspective, is to analyse the concerns of consumers in order to adjust the supply to the consuming market (Van Kleef et al., 2005). Several studies have shown that the major concerns of consumers relate to cardiovascular diseases, stress, high

blood pressure, development of tumours in the digestive system, arthritis and obesity (Hilliam 1998; Keller, 2006; Korzen-Bohr & O'Doherty Jensen, 2006; Van Kleef et al, 2005), as pointed out by Siro et al., (2008), the success of functional foods based on the interplay of various factors, intrinsic to customers and their social context, and the features and communication products.

4. ASSESS THE PERCEPTION AND ACQUISITION OF AVAILABILITY AND FUNCTIONAL FOODS

Oliveira, Poínhos, Sousa, and Silveira (2016) based on the research of Urala and Lähteenmäki (2007), developed a study in Portugal, so as to create an oriented tool for adults, in order to assess their perception of consumption of functional food questionnaire to assess the perception of functional foods (QAPAF) with 17 items.

1. Functional foods do not replace a healthy diet, but should be eaten as part of a varied diet.
2. Functional foods are useless for a healthy person.
3. Functional foods can repair the damage caused by an unhealthy diet.
4. Healthy foods are flavoured.
5. Functional foods are unnecessary.
6. The notices that refer benefits of functional foods are false.
7. Functional foods are only for the elderly, sick and children.
8. The functional food can have undesirable effects.
9. Functional foods are able to improve my well-being.
10. Is it safe to use functional foods.
11. Functional foods are a fad that will pass.
12. The safety of functional foods is well studied.
13. Excess functional foods are harmful.
14. Functional foods are more expensive.
15. The only functional foods are the ones whose labels claim health benefits.
16. I believe in the effects of functional foods a health professional (doctor, nutritionist, etc.)
you recommend the product.
17. Functional foods cause the health benefits mentioned in advertising.

The study from Oliveira et al. (2016) has the advantage of structure in general, and in terms psychometric analysis of perception compared to functional foods, as highlighted by the authors, and can be used in marketing and market research studies. However, it is a very generic construct face perception, and does not consider directly the "willingness to pay" in face of functional foods. Aiming at the analysis of the availability for the acquisition of functional foods, it is important to highlight the contributions of several authors as (Carrillo et al., 2013; Kuster-Boluda & Vidal-Capilla, 2017; Rezai, Teng Kit, Mohamed, & Shamsudin, 2014; Szakály et al., 2019; Yazar & Orth, 2018, and Miller, 2015). As analysis models of the availability of acquisition of functional foods, many authors use constructs applying models based on structural equation. Carrillo et al. (2013), presents a study model based on seven constructs that connect aspects of functional foods, personal, social and availability for the acquisition, namely: (1) attitudes towards functional foods; (2) positive attitudes towards functional foods; (3) scale of satisfaction with life; (4) health; (5) natural content; (6) novelty / fashion; (7) spending on functional foods. Regarding the construct 1 - attitudes towards functional foods, was adjusted to the Spanish market, subdivided into four items: a) reward for using functional foods; b) the need of functional foods; c) reliance on functional foods; d) Safety of functional foods. Kuster-Boluda and Vidal-Chapel (2017), developed also a study in Spain, performing a broad spectrum of research of various functional foods, in order to obtain a holistic view of consumer attitudes towards food. The model developed by the authors, results from an

analysis of previous research models, including various assumptions and a mediating variable, the gender. The hypotheses are:

- H1: Attitudes towards functional foods influence the desire to consume them.
- H2: A healthy lifestyle positively influences consumer attitudes towards functional foods.
- H3: Motivating factors positively influence the healthy lifestyle of consumers.
- H4: Barriers negatively influence the healthy lifestyle of consumers.
- H5: The healthy lifestyle of consumers positively influences the desire to consume functional foods.

One can supplement the 5 main hypotheses shown above, by adding the moderating role of gender, generating therefore the following hypotheses, as outlined below:

- H1b: Consumer gender moderates the relationship between attitude towards functional foods and the willingness to consume them.
- H2b: Gender consumer moderates the relationship between healthy lifestyle and attitudes towards functional foods.
- H3b: Consumer gender moderates the relationship between drivers and healthy lifestyle consumers.
- H4b: Consumer gender moderates the relationship between barriers and healthy lifestyle of consumers.
- H5b: Consumers gender moderates the relationship between the healthy lifestyle of consumers and the desire to consume functional foods.

We consider these three important studies in our analysis, since one was used in Portugal (Oliveira et al., 2016) and other studies (Carrillo et al., 2013 and Küster-Boluda & Vidal-Chapel, 2017) were applied in Spain, given its proximity in many respects, it is added value for the conceptual, theoretical and methodological development of our work. Rezai et al. (2014) present us with a hybrid model based on combining the model of belief in health (Health Based Model) and behaviour planning (Planned Behaviour Theory). HBM and TPB models present seven conceptually independent determinants to postulate the intention of consumers to buy synthetic functional foods: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, attitude, cues to action or subjective norms and self-efficacy and perceived behavioural control. Szakály et al. (2019) in its recent study, uses factor analysis, where knowledge and information; health history; current buying patterns; demographic, social and economic factors influencing consumers various mediating variables: beliefs of the attributes of functional foods; attitudes towards functional foods; beliefs about nutrition and health, which in turn will eventually influence the willingness to pay for functional foods, the dependent variable in examination.

5. CONCLUSIONS

This paper has the aim to analyse the theoretical and methodological aspects of the functional food. It appears that there is an evolution in theoretical research, particularly in relation to consumers on a commercial valuation perspective of this type of product and on the analysis on the willingness of consumers to purchase them. The functional food market has been shown to have a very high growth potential. Several specialized and non-specialized retail companies have started betting on this business area. The search for this type of food, based on a good scientific technical validation, and a marketing work could lead to a dramatic increase in sales. The willingness to pay for functional foods is based on several parameters, including social, cultural, economic, gender, and others that affect the way products are perceived by potential customers. This paper aims to present and bring to the discussion some precursors and theoretical foundations that will base a future empirical study, based on market research.

ACKNOWLEDGEMENT: *This work was financially supported by the research unit on Governance, Competitiveness and Public Policy (UID/CPO/04058/2019), funded by national funds through FCT - Fundação para a Ciência e a Tecnologia.*



LITERATURE:

1. Barbosa, M; Nunes, P.; retrieved on March, 18, 2019 from: <https://eco.sapo.pt/2018/02/19/portuguesa-iswari-dispara-em-2017-vende-7-200-produtos-por-dia/>
2. Bech-Larsen, T.; Grunert, K. G, (2003) The perceived healthiness of functional foods: A conjoint study of Danish, Finnish and American consumers' perception of functional foods, *Appetite*, 40 (1), 9-14.
3. Bleiel, J. (2010). Functional foods from the perspective of the consumer: How to make it a success? *International Dairy Journal*, 20 (4), 303–306.
4. Bower, John & Saadat, Ayoub & Whitten, Catherine. (2003). Effect of Liking, Information and Consumer Characteristics on Purchase Intention and Willingness to Pay More for a Fat Spread with a Proven Health Benefit. *Food Quality and Preference*. 14, 65-74.
5. Carrillo, E, Fiszman, S., & Varela, P. (2013). Why buying functional foods? Understanding spending behavior through structural equation modelling. *Food Research International*, 50 (1), 361-368.
6. Chen, Mei-Fang, (2011). The joint moderating effect of health consciousness and healthy lifestyle on consumers' willingness to use functional foods in Taiwan, *Appetite*, 57 (1), 253-262,
7. Doyon, M., & Labrecque, J. (2008). Functional Foods: The Concept Definition, 110 (vol.).
8. Drbohlav, J., Roubal, P., Binder, M., Šalaková, A., & Plechacová, M. (2007). Research and development of functional foods with special regard to dairy foods in the Czech Republic. In *Proceedings of the fourth international FFNet meeting on functional foods*.
9. Hawkes C. (2004). Nutrition labels and health claims. The global regulatory environment. *World Health Organization*, 1- 88
10. Hely Tuorila, Liisa Lähteenmäki, Leena Pohjalainen, Leila Lotti, (2001) Food neophobia among the Finns and related responses to familiar and unfamiliar foods, *Food Quality and Preference*, 12 (1)
11. Hilliam, M. (1998). The market for functional foods. *International Dairy Journal*, 8, 349–353.
12. Hung, Yung & de Kok, Theo & Verbeke, Wim. (2016). Consumer attitude and purchase intention towards processed meat products with natural compounds and a reduced level of nitrite. *Meat Science*. 121, 119-126.
13. Hunter, DC Jones, VS, Hedderley, DI, & Jaeger, SR (2019). The influence of claims of appetite control benefits in those trying to lose or maintain weight: The role of claim believability and attitudes to functional foods. *Food Research International*, 119, 715-724.
14. Jeżewska-Zychowicz, Marzena & Krolak, Maria. (2015). Do Consumers' Attitudes Towards Food Technologies and Motives of Food Choice Influence Willingness to Eat Cereal Products Fortified with Fibre?. *Polish Journal of Food and Nutrition Sciences*.
15. Kaur, Navdeep & Singh, Devinder. (2017). Deciphering the consumer behaviour facets of functional foods: A literature review. *Appetite*. 112.

16. Keller, C. (2006). Trends in beverages and “Measurable Health”. In Proceedings of the third functional food net meeting.
17. Korzen-Bohr, S., & O’Doherty Jensen, K. (2006). Heart disease among post-menopausal women: Acceptability of functional foods as a preventive measure. *Appetite*, 46, 152–163.
18. Kotilainen, L., Rajalahti, R., Ragasa, C., & Pehu, E. (2006). Health enhancing foods: Opportunities for strengthening the sector in developing countries. *Agriculture and Rural Development Discussion Paper* 30
19. Kuster-Boluda, I., Vidal & Chapel, I. (2017). Consumer attitudes in the election of functional foods. *Spanish Journal of Marketing - ESIC*, 21 (Supplement 1), 65-79.
20. Mellentin, J. (2014). Failures in functional foods and beverages. London, UK: New Nutrition Business.
21. Miroso, M., & Mangan-Walker, E. (2018). Young Chinese and Functional Foods for Health Mobility: Perceptions of Importance, Trust and Willingness to Purchase and Pay a premium. *Journal of Food Products Marketing*, 24 (2), 216-234.
22. Monteiro, P. (2015). Functional Foods: sociological framework and consumer habits. CIES e-Working Paper No. 200, 25.
23. Nina Urala, Liisa Lähteenmäki, (2003) "Reasons behind consumers' functional food choices", *Nutrition & Food Science*, 33 (4), 148 158
24. Oliveira, L., Poínhos, R. Sousa, F., & Silveira, MG (2016). Construction and Validation of a Questionnaire for Perception Evaluation of Functional Foods. [Development and Validation of a Questionnaire to Assess the Perception about Functional Foods]. *Acta English Nutrition*, 0 (7), 14-17.
25. Özen AE, Bibiloni Mdel M, Pons A, Tur JÁ (2014) Consumption of functional foods in Europe; a systematic review. *Aula Medica Ediciones* 2014. Published by Aula Medica. All rights reserved
26. Palma, MA, Shore, LA, & Knutson, RD (2016). The Era of the Functional Consumer. *Journal of Food Products Marketing*, 22 (5), 555-570.
27. Pereira, A. (2014) Trabalho final do 6º ano médico com vista à atribuição do Grau de mestre no âmbito do ciclo de estudos de mestrado Integrado em medicina, Alimentos Funcionais. Faculdade de Medicina da Universidade de Coimbra.
28. Poulsen, J. B. (1999). Danish consumers' attitudes towards functional foods. Working paper 62, MAPP, The Aarhus School of Business, Denmark
29. Rezai, G. Teng Kit, P., Mohammed Z., & Shamsudin, MN (2014). Structural Equation Modeling of Consumer Purchase Intention Toward Synthetic Functional Foods. *Journal of Food Products Marketing*, 20, 13-34.
30. Rifnaz, MBM, Mudalige-Jayasinghe, UK, Guruge, TPSR, Udugama, MWG, Herath, HMLK, & Edirisinghe, JC (2016). Perceived Health Status of Consumers and Incorporation of Functional Ingredients into their Diet. *Proceeded Food Science*, 6, 56-59.
31. Roberfroid (2002) - Functional foods: concepts and application to inulin and oligofructose - *British Journal of Nutrition* (2002), 87, Suppl. 2, S139–S143
32. Sääksjärvi, Maria & Holmlund, Maria & Tanskanen, Nina. (2009). Consumer knowledge of functional foods. *The International Review of Retail, Distribution and Consumer Research*. 19, 135-156.
33. Santeramo, FG, Carlucci, D., De Devitiis B, Seccia, A., Stasi, A. Viscecchia, R., & Nardone, G. (2018). Emerging trends in European food, diets and food industry. *Food Research International*, 104, 39-47.
34. Schnettler, Berta & Miranda, Horacio & Lobos, German & Sepúlveda, José & Orellana, Ligia & Mora, Marcos & Grunert, Klaus G. (2015). Willingness to purchase functional foods according to their benefits: Consumer profiles in Southern Chile. *British Food Journal*. 117, 1453-1473.

35. Siro, I., Kápolna, E., Kápolna, B. & Lugasi, A. (2008). Functional food. Product development, marketing and consumer acceptance-A review. *Appetite* 51 (3), 456-467.
36. Sousa, A Retrieved on March, 19, 2019 from:
<https://jornaleconomico.sapo.pt/noticias/prozis-das-lesoes-desportivas-ate-a-economia-global-394545>
37. Spence, J. T. (2006). Challenges related to the composition of functional foods. *Journal of Food Composition and Analysis*, 19, S4–S6
38. Szakály Z. Kovacs S, Peto K., Huszka, P., & Kiss, M. (2019). A modified model of the willingness to pay for functional foods. *Appetite*, 138, 94-101.
39. Thomassin, P.J. and Cloutier, L.M. (2001), “Informational requirements and the regulatory process of agricultural biotechnology”, *Journal of Economic Issues*, 35 (2), 323-333.
40. Urala, N., & Lähteenmäki, L. (2007). Changing Attitudes towards Consumer's Functional Foods (Vol. 18).
41. Van Kleef, E., Van Trijp, H. C. M., & Luning, P. (2005). Functional foods: Health claimfood product compatibility and the impact of health claim framing on consumer evaluation. *Appetite*, 44, 299–308.
42. Vida Económica, retrieved on March, 19, 2019 from: <https://www.agroportal.pt/wp-content/uploads/agrovida-julho-2017-br.pdf>
43. Yarar, N., & Orth, RH (2018). Consumer lay theories on healthy nutrition: AQ methodology application in Germany. *Appetite*, 120, 145-157.

NEW PERSPECTIVES ON FAMILY FIRMS AND CORPORATE GOVERNANCE

Fernando Nascimento Zatta

Universidade Presbiteriana Mackenzie, Brasil
zatta@hmzconsulting.com.br

Liliane Cristina Segura

Universidade Presbiteriana Mackenzie, Brasil
liliane.segura@mackenzie.br

Henrique Formigoni

Universidade Presbiteriana Mackenzie, Brasil
henrique.formigoni@mackenzie.br

Rute Abreu

Instituto Politécnico da Guarda, Portugal
ra@ipg.pt

Sandra Raquel Alves

CIC.DIGITAL, ESTG, Polytechnic Institute of Leiria, Portugal
raquel.alves@ipleiria.pt

ABSTRACT

The importance of family business in the world is unquestionable. Gersick et al. (1997) discuss the importance of family business in the economy and Blumenthal and Steinberg (2011) shows that 80% of the private companies in the world are owned by families, supporting their importance in the global business. However, a single concept about what is the family business and how it can be conceptualized it is still missing (Casillas Bueno et al., 2007). The purpose of this work is to analyze the publication about family business and corporate governance from 1945 to 2019. The methodology of this article consists of an exploratory-descriptive study, which provides a greater familiarity with the field of research proposed, using standardized techniques to raise and process the data to make the problem more explicit. This research is based on the bibliometric technique, which was used by Leonidou and Leonidou (2011), and is described as a set of laws and principles based on experience that makes the investigation of quantitative and statistical aspects of measuring indices of scientific production and disseminate the knowledge studied. The research process began with the definition of the database to be used, and the choice was made by the Web of Science, because it is a material with relevant references and publications in journals that are highly considered in an academic context.

Keywords: *Governance, Family Firms, Corporate Social Responsibility, Bibliometric Methodology*

1. INTRODUCTION

The importance of family business in the world is unquestionable. Anderson & Reeb, (2003) discuss the importance of family business in the economy and shows that the most part of the private companies in the world are owned by family, supporting their importance in the global business. One of the most important discuss in the literature in family business is how families manage their governance. Research on corporate governance in family businesses provides empirical data and shows that these companies differ significantly from non-family businesses

in some dimensions such as agency costs, competitive advantages and governance structures due to the complexities associated with their business because of the relationship of family members and their corporate governance (Siebels and Zu Knyphausen-Aufseß, 2012). However, approaches that combine different theoretical frameworks can help to improve understanding of family business (Siebels and Zu Knyphausen-Aufseß, 2012). The main feature of corporate governance in family businesses, which distinguishes it from non-family businesses, is the diversity of roles that family members share (Hiebl, Neubauer, Duller, and Feldbauer-Durstmüller, 2015; Tagiuri; Davis, 1996). This diversity of roles, combined with ownership and control, affects corporate governance structures and results in distinct and specific requirements compared to non-familiar counterparts (Bartholomeusz; Tanewski, 2006; Carney, 2005; Mustakallio et al., 2002; Witt, 2008). Along with management supervision and control, family businesses need to establish governance structures to increase cohesion and shared visions while reducing conflicts within the family (Mustakallio et al., 2002). Similarly, family governance is huge part of the family business governance structure (Klein, 2009). The intention of this work is to analyze the publication about family business and corporate governance from 1945 to 2019. To accomplish this objective, the methodology of this article consists of an exploratory-descriptive study, which according to Souza (2013) provides a greater familiarity with the field of research proposed, using standardized techniques to raise and process the data to make the problem more explicit. This research is based on the bibliometric technique, which was used by Leonidou and Leonidou (2011) and Fonseca (1986), and is described as a set of laws and principles based on experience that makes the investigation of quantitative and statistical aspects of measuring indices of scientific production and disseminate the knowledge studied. The research process began with the definition of the database to be used, and the choice was made by the Web of Science, because it is a material with relevant references and publications in journals that are considered in an academic context.

2. THEORETICAL FRAMEWORK

According to the systemic approach, Donnelley (1964) argues that family business governance is composed of two interaction subsystems (Gallo; Kenyon-Rouvinez, 2005): business and family governance (Aronoff; Ward, 1996). The business subsystem is defined as the management and control of company operations exercised by the senior management team, board of directors and shareholders' meeting (Gallo; Kenyon-Rouvinez, 2005; Neubauer et al., 1998). The family governance subsystem monitors and organizes cohesion within the family (Gallo; Kenyon-Rouvinez, 2005; Gersick et al., 1997; Mustakallio et al., 2002; Suaré; Santana Martin, 2004) and consists of a family council and at the shareholders' meeting (Gallo; Kenyon-Rouvinez, 2005; Neubauer et al., 1998). On the management side, the board of directors is one of the most important elements of corporate governance for aligning the interests of managers and shareholders specially in family firms (Voordeckers et al., 2007). Composing the board from non-family members, its diversity, and assigning ownership to internal employees diminishes the financial performance problem in the family businesses. However, the corporate governance structure needs to be adapted to the size of the family business structure to improve performance (Wellalage; Scrimgeour, 2012). Corporate governance in the family business aims to separate ownership and management in order to allow the balance of individual and collective interests of the parties involved within the controlling families, according to three instances of power: family, control and equity/company (Wong, 2011). Due to global changes resulting from the economic environment and the technological revolution, corporate governance has assumed a role of modernity and importance in the business sectors, as it performs relevant activities in the management of any type of company, in protecting the rights and maintaining the trust of shareholders and other stakeholders. Corporate Governance is a dynamic and complex system that brings together a set of mechanisms to play the role of monitoring

executive behavior (Larcker; Tayan, 2011). In addition, corporate governance refers to the set of laws, market regulations and voluntary practices of the private sector that enable a company to attract financial and human capital, operate efficiently, perpetuate itself in the long term, respecting stakeholders and society in general (Viegas, 2008). Corporate governance primarily concerns the relationships between management, family ownership, the board of directors, majority shareholders, minority shareholders and other stakeholders. Effective corporate governance is based on decisions that define the strategic direction of a company. It helps develop a sustainable economic environment by improving business performance and increasing their ability to influence the level of corporate information disclosure. This is done through a set of actions needed to monitor management performance by owners as well as relationships with the various stakeholders. An effective governance structure establishes a clear definition of the roles, rights, duties and expectations of each actor contributing to business management (Di Pietro, 2017). Many studies have been researching how corporate governance works in different countries and seeks to understand whether their practices may solve problems in the corporate world with regard to accountability and disclosure (Aguilera; Cazorra, 2009). In this context, La Porta et al. (2000) understand that corporate governance is a set of mechanisms for the protection of external investors, mainly against the expropriation of controlling shareholders by managers and insiders (internal investors). In this way, corporate governance refers to the way organizations are managed and controlled (Cadbury, 1992). Wu (2005) states that corporate governance is concerned with the appropriate distribution of power, privileges and economic benefits among stakeholders. Shleifer and Vishny (1997) argue that corporate governance mechanisms are economic and legal in nature and differ according to each country (Costa; Wood JR., 2012). In each country, corporate governance codes aim to indicate the best way to allocate resources, as well as to reinforce the implementation and application of information disclosure mechanisms in organizations (Wu, 2005). Ineffective corporate governance and weak internal control mechanism practices (Uwuigbe et al., 2014) result in unreliable financial reporting that inhibits the confidence of investors and other stakeholders (Rezaee, 2004; Kumar; Zattoni, 2014). The literature confirms that the disclosure of quality reports is one of the important mechanisms of corporate governance, to ensure business transparency, fraud prevention and safeguard against corporate failures and, thus, was an important reason for conducting research (Yusuf, 2016). In this sense, Schleifer and Vishny (1997) state that corporate governance seeks to ensure the return on investment made by investors and is of enormous practical importance. For example, in Brazil, corporate governance is defined as a system by which organizations are directed, monitored and organized, involving relationships between owners, the board of directors, the board of directors and control bodies (IBGC, 2008). It is a system that seeks to ensure to all involved the effective management monitoring, ensuring a relationship of equity, transparency, accountability and compliance with the country's laws (compliance) (Ribeiro, 2007). With regard to transparency, the IBGC (2016) emphasizes that it is a desire to make available to interested parties information that is of interest to them and not only that imposed by provisions of laws or regulations, including other information leading to the preservation of information and optimizing company value. Transparency is therefore assumed to foster the demand for disclosure mechanisms, which in turn can be established by adopting good corporate governance practices to improve the quality of reporting and facilitate performance monitoring business. According to IBGC (2015) governance practices apply to any type of organization, regardless of size, legal nature or type of control. To prevent minority or investor returns from being affected, a number of corporate governance mechanisms, including legal and voluntary, have been developed to help protect minority shareholders and investors from loss and improve disclosure. Corporate governance aims to reduce information asymmetry between managers and investors when capital ownership dispersion is high as a natural consequence of market

development (Jensen; Meckling, 1976), and to provide higher quality accounting information to the parties interested. Information asymmetry is diminished by quality accounting information between managers, shareholders and investors, resulting in more efficient investments (Biddle; Hilary, 2006). On the other hand, ownership structure acts as an effective control device for large shareholders (Shleifer; Vishny, 1997). Ribeiro and Colauto (2016) identified that companies that share directors with other organizations have differentiated earnings management practices, which compromise the quality of the accounting information disclosed, and that the reduction or increase in the number of board members is related to the earnings management practice. There are several ways that controlling shareholders can act to expropriate the interests of minority shareholders and external investors. This conflict of interest between internal and external investors is a well-known issue in academia. Corporate governance considers that people within organizations do not always act for the best result for capital investors. The study of Berle and Means (1932), considered the initial landmark of corporate governance, discussed the conflicting interest figure that pulverized ownership structures produce. Otherwise, if the internal and external parts act to maximize their individual utilities, there is reason to believe that the agent will not act to increase the interest of the principal (Jensen and Meckling 1976). Accordingly, corporate governance seeks to monitor and reduce the effects of how capital allocation among shareholders and the conflicting interests and objectives of individual participants within organizations can lead to a balanced situation (Coase, 1937, 1960; Preston, 1975; Klein, 1976; Wilson 1968; Ross, 1973; Heckerman, 1975). As can be observed, corporate governance is necessary when issues associated with agency problems arise, which occur when there are conflicts of interest between shareholders, managers, creditors and employees arising from the separation of ownership and control. Given the distinctive characteristics of ownership and control, family businesses face unique agency issues (Cheng, 2014). The board of directors, and especially the audit committee, control agency problems through the quality of accounting information reported to the various agents, shareholders and investors (Pascual-Fuster; Cladera, 2018). The separation of ownership and control results in the Type I agency problem, and the conflict of interest between insiders and non-controlling external investors results in the Type II agency problem. Strong governance advice can reduce the Type I agency problem, and can also mitigate the adverse consequences of the Type II agency problem. Consequently, the Type II agency problem in family businesses leads investors to demand more for high quality accounting information and greater disclosure transparency (Ali; Chen; Radhakrishnan, 2007; Srinidhi; Shaohua; Firth, 2014). In this context, voluntary disclosure of information plays an important role in managing the relationships between the various family business stakeholders (Cunha; Rodrigues, 2018). Quality governance is related to growth opportunities, the need for financing, and the protection of investor rights, according to the characteristics of each country (Doidge; Karolyi; Stultz, 2007). In Brazil, the existence of an overwhelming majority of family businesses, for example, 90% of the 300 largest private national economic groups are family businesses (Souza-Silva; Fisscher; Davel, 1999), besides the strong concentration of ownership, lead the need to analyze the influence of corporate governance on the quality of accounting information. In this context, appropriate governance structures present quality accounting information for this analysis (Lokman; Mula; Cotter, 2014), as well as increasing transparency and reducing the occurrence of fraud (Berglof; Pajuste, 2005), as well as reducing risk expropriation of the parties involved due to the occurrence of informational asymmetry (Donnelly; Mulcahy, 2008). Zafarullah and Rahman (2008) highlight the need for corporate governance to achieve stated goals and objectives in family businesses because they are not so well managed compared to non-family businesses. It is also worth mentioning that the image of family businesses, especially small ones, is linked to a type of organization that does not adopt formal control and management mechanisms (Machado; Grzybovski; Teixeira; Silva, 2013).

These arguments generally drive strategies for creating appropriate management structures, with strong governance mechanisms to guide managerial action and value creation (Mustakallio et al., 2002) driven by good practices and governance mechanisms. Corporate governance in family businesses is different in terms of the unification between ownership and control (Carney, 2005) and the quality of accounting information is differentiated when analyzed within family and non-family businesses (Santana; Klann, 2016). In this context, and due to the global view on the importance of family businesses, it is that over the years a set of business initiatives have emerged around corporate governance and the quality of accounting information of these organizations, to maintain their longevity. Accounting information is a topic of interest in the family business scenario, similar to the importance given to the role of accounting and financial information focused on the capital market. According to Ball et al. (2000) Accounting is a corporate governance mechanism of companies that receives influence from the models adopted by each country. Countries typically have considerable differences in the governance systems adopted, based on a set of factors related to social, economic and cultural issues, the legal, regulatory and institutional environment in which the organization is located (Silveira et al., 2003). According to Bushman et al. (2000) corporate governance practices are influenced by the nationally adopted accounting model and individual choices of methods adopted by companies. Similarly, this influence also occurs from governance to accounting (Ball et al., 2000), that is, the governance mechanisms present in a given environment play a fundamental role in influencing the quality of accounting information, as there is a strong link that occurs simultaneously between accounting and governance and vice-versa (Costa, 2005). In this regard, the seminal studies by Bushman et al. (2000) and Ball et al. (2000), portray that there is a lack of consensus on whether it is accounting that influences governance or if it would be otherwise. Songini, Gnan and Malmi (2013) report that the awakening of accounting for family business surveys has only recently begun. Also according to Songini, Gnan and Malmi (2013), the role of accounting in family businesses is relevant to family business, but the dynamics of how accounting practices affect family business outcomes and dynamics still need further study. To communicate with diverse stakeholders around the world, companies need to provide investors and lenders with relevant, reliable, and timely information, following the flow of essential components of quality accounting information, including accounting, auditing, and accounting practices audit and corporate governance structure (Imhoff, 2003). The author reports that the problems largely attributed to the quality of accounting and auditing should mainly be attributed to weak corporate governance mechanisms. Even with the argument that the quality of corporate accounting information is measured by the type of opinion expressed in audit reports (Garcia-Blandon; Argilés; Ravenda, 2019), it is important to consider that the quality of corporate governance mechanisms is considered as a source of information on how companies are run and thus provides additional decision support (Ariff; Ibrahim; Othman, 2007). Uyar, Haydar Gungormus, Kuzey (2017) state that the quality and reliability of accounting information is crucial for stakeholders, and that a fraud-free quality accounting information system improves the level of corporate governance in organizations, as well as how it helps business structures improve investor confidence and market efficiency. The explanation for this position is that the numbers produced by accounting systems may be more or less effective, impacting the governance mechanisms adopted, which may contradict the contractual agreements between the parties (Bushman; Smith, 2001). The particular characteristics of family businesses that include concentrated ownership, the power of the controlling family to pursue their goals, the family's involvement in governance, and the controlling family's interest in long-term survival, explain why they have accounting and rendering practices different accounts of non-family businesses. In addition to the close relationship between managers and the family and the relevance of non-economic factors such as reputation, family's emotional attachment to business, and family social capital, these characteristics impact overall business

decisions, and accounting decisions in general impact on the quality of accounting information (Carrera, 2017). The long-term alignment movement between family interests and those of other shareholders increases the quality of accounting information (Wang, 2006). Just as corporate governance influences the quality of accounting information, the alignment effect of interests explains the influence of family control on the quality of accounting information, and alignment therefore minimizes agency conflicts between managers and owners, because the company is directly level with better accounting information (Ali; Chen; Radhakrishnan, 2007; Salvaro; Moores, 2010). It is noteworthy that the quality of accounting information can also be influenced by normative, institutional factors and certain characteristics of the company, the sector and the country. In this context, Gaio (2010) investigated the aggregate earnings quality, using seven attributes of the quality of accounting information: quality of accruals, persistence, predictability, smoothness, value relevance, timeliness and conservatism. Isidro and Raonic (2012) found that the quality of financial reporting increases when there are strong corporate governance mechanisms, such as monitoring, concentration of ownership and the influence of institutional factors. Byard, Li and Weintrop (2006) examined the association between corporate governance and the quality of information available to financial analysts. The results indicated that the quality of information projected by financial analysts on and for future gains increases with the quality of specific corporate governance mechanisms. Study by Hassan et al. (2008) investigated the relationship between corporate governance, transparency and company performance, focusing on examining the effect of good corporate governance practices on 142 companies listed on the Malaysian Stock Exchange. The study adopted seven characteristics of corporate governance, namely, board independence, board leadership or dual roles, director quality, foreign ownership, debt financing, and audit quality. The result of the study revealed that corporate governance components have strong predictive power of company performance. Other studies have investigated the effect of corporate governance structures and the quality of accounting information on non-financial corporations (Cohen; Dey; Lys, 2008; Zhou, 2008). Other research has investigated the impact of corporate governance by considering: the impact of governance effectiveness on the financial performance of companies listed on the Palestinian Stock Exchange (Kabbajp, 2008); and the impact of governance on the dividend policy of industrial companies listed on the Amman Financial Market (Skim, 2009). Al-Shammari and Al-Sultan (2010) investigated the relationship between corporate governance characteristics and voluntary disclosure in the annual reports of 170 companies listed on the Kuwait Stock Exchange in 2007, and identified four key corporate governance characteristics: (i) proportion of non-executive directors in relation to the total number of directors; (ii) ratio of family members to the total number of directors on the board; (iii) duality of the CEO; and (iv) voluntary audit committee. Elgammal and Showery (2012) examined the effect of corporate governance represented by the board of directors and the audit committee to obtain high quality accounting information characterized by relevance, reliability, comparability and consistency. By investigating various global governance models taking into account corporate governance laws in some Asian countries, the authors concluded that each country has its own funding environment related to widely differing corporate, economic, social, cultural, legal and regulatory mechanisms between these countries. Fathi (2013) identified that the quality of accounting information is influenced by corporate governance mechanisms, such as the size of the board of directors, ownership structure, member participation in board meetings, the quality of external audit, company's presence on a stock exchange listing abroad, and approximate results by discretionary accruals. Several other researchers dedicated themselves to studying corporate governance, considering, for example: the value of the company (Leal, 2007); governance and performance mechanism (Sonza; Kloeckner, 2014; Srour, 2007; Silveira, 2004); corporate governance and succession process (Roth; Heinz Tissot; Gonçalves, 2017; Grisci; Velloso, 2014), corporate governance and family businesses (Belmiro; Santos; Cunha

Filho, 2014); cultural dimensions and corporate governance (Santema; Van De Rijt, 2001; Santema et al., 2005); corporate governance structure and agency theory (Lokman et al., 2014; Mallin; Ow-Yong, 2012; Turrent; Rodriguez-Ariza, 2012); quality of external audit and corporate governance (Eng; Mak, 2003), organizational and operational complexity and governance (Assunção; de Luca; Vasconcelos; Reboucas, 2014; Anderson; Reeb; Upadhyay; Zhao, 2011; Ferreira; Ferreira; Fox, 2011); influence of auditing on the relevance and timeliness of accounting information in Brazil (Silva et al., 2012); discretionary and non-discretionary accruals (Boina; Macedo, 2018). Given the important importance of the role played by family businesses, several researchers have investigated several issues related to the contribution of corporate governance in family businesses (Lemmonan and Lins, 2003; Wei and Geng, 2008; Bokpin, Isshaq and Aboagye-Otchere, 2011); Wong, 2011). Most recently, Owusu-Ansah; Leventis and Dimitropoulos (2013) stated that it is imperative to study the association between corporate governance and the quality of accounting information. In this context, Makhoul et al. (2013) examined the impact of corporate governance on the quality of accounting information, through a field study of industrial companies listed on the Amman Financial Market, to understand aspects of the interrelationship of governance with the quality of accounting information. Makhoul et al. (2013) highlight that the role of corporate governance and its impact on the quality of financial reporting, in accordance with the principles of corporate governance, has been investigated by researchers, and report that the principles of corporate governance are effective and affect the quality of financial reporting financial reporting, making the quality of accounting information more accurate for its users. Makhoul et al. (2013) report that the application of governance rules contributed to the strengthening of the role of accounting disclosure and the quality of financial reporting, and that the evolution of the governance culture reflects this achievement of objectives, integrated based on the board's credibility foundation of directors and other executives. Also according to Makhoul et al. (2013), the objective of the corporate governance principles is to establish confidence in the quality of accounting information, since this information produced by financial reports is the most important pillar that can be used to measure: market risk, risk of liquidity and interest rate; business risk management and price negotiation. Accounting information is a corporate governance mechanism, which is disclosed to inform the public interested in the company. The quality of accounting information affects the effectiveness of the capital market and the allocation of social resources. In this sense, according to Makhoul et al. (2013) there is a need for a definition of concepts of accounting information characteristics, so that they are used to evaluate the properties that determine their quality. Therefore, they can assist in the development of accounting standards, the preparation of financial statements, as well as the application of alternative accounting methods to the decision-making of the main users related to the company. For this, the information must be reliable be comparative, understandable and available at the appropriate time (Makhoul et al., 2013).

3. METHODOLOGICAL PROCEDURE

This study is based on bibliometric technique, treated as a set of laws and empirical principles that investigates the quantitative and statistical aspects of index measurement of scientific production and knowledge dissemination (Leonidou and Leonidou (2011); related to the theme from family businesses. The study quantified scientific production to identify the current stage of research on the theme of family businesses. The methodology of this study consists of an exploratory-descriptive study, which according to Souza (2013) provides greater familiarity with the theme, using standardized techniques to collect and treat data to make the problem explicit. To reach the proposed objective, the data collection procedures are characterized as bibliographic and documentary research (Martins; Théophile, 2007). To identify the evolution of the academic research of the present study, the bibliometric method adopted by Ramos-

4. EMPIRICAL RESULTS

In this section the main topics in family business are presented and discussed. From the 247 papers found, the most relevant subjects were extracted, which will be highlighted in Tables 1 to 5. Figure 1 and Table 1 illustrate this in more detail. The main subjects are aligned with the researched theme and comprehensively comprehend the results of the researched works. The first question that arises concerns the most studied topics in the current stage of research on family businesses identified in the articles surveyed (Table 1). For example, control and management (CEO duality), structure and ownership, socio-emotional wealth, succession, business life cycle, longevity, cultural factors, and management style, among others, were the most evident topics, among others. Our results are consistent with previous work on family businesses that are part of this study.

Topics	Number of papers	%	Topics	Number of papers	%
Structure	2	0,8%	Gender CEO (Male & Female)	1	0,4%
Property	48	19,4%	Succession	29	11,7%
Structure and Property	132	53,4%	Succession and Genealogy	1	0,4%
Control	13	5,3%	Succession and Family Protocol	1	0,4%
Control and Management	134	54,3%	Family Protocol	1	0,4%
Control, Management and CEO Duality	9	3,6%	Family Counseling and Governance	12	4,9%
Management	13	5,3%	Inovation and Inovative Activities	6	2,4%
Management and CEO Duality	2	0,8%	Entrepreneurship and Family Entrepreneurship	4	1,6%
CEO Duality	5	2,0%	Perpetuity, Perpetuity and Longevity	18	7,3%
Expropriation	8	3,2%	Life Cycle, Life Cycle Stages and Organisational Life Cycle	21	8,5%
Entrenchment	5	2,0%	Cultural Dimensions and Management Style	17	6,9%
Expropriation and Entrenchment	1	0,4%	Socioemocional Wealth	38	15,4%
Gender CEO (M - Male)	3	1,2%	3 Circles Model	1	0,4%
Gender CEO (F - Female)	5	2,0%	Family Business Definition	4	1,6%

Table 1: Main issues in family business

Journal	Number of Publications	Percentage
<i>Family Business Review</i>	48	19,4%
<i>Journal of Family Business Strategy</i>	28	11,3%
<i>Corporate Governance An International Review</i>	10	4,0%
<i>Accounting Choices in Family Firms</i>	4	1,6%
<i>Journal of Management & Governance</i>	4	1,6%
<i>Managerial Auditing Journal</i>	4	1,6%
<i>Organization Science</i>	4	1,6%
<i>SSRN Electronic Journal</i>	4	1,6%
<i>BRQ Business Research Quarterly</i>	3	1,2%
<i>Corporate governance: the international journal of business in society</i>	3	1,2%
<i>Journal of Business Ethics</i>	3	1,2%
<i>Journal of Financial Economics</i>	3	1,2%
<i>The American Economic Review</i>	3	1,2%

Table 2: Most published papers in Journals

Table 2 presents thirteen journals with the largest number of publications. Main highlight for Family Business Review - FBR (19.4% of articles), followed by the Journal of Family Business Strategy - JFBS (11.3%) and Corporate Governance An International Review (4%). FBR is the only journal that deals specifically with family businesses in the Web of Science database.

JFBS is featured in the Elsevier database, publishes business research on aspects of how family influences business and business influences family. The various journals are in the areas of Management (180 articles, 72.9%), Accounting (23 articles, 9.3%), Multidisciplinary (30 articles, 12.1%), Business (14 articles, 5.7%). The countries with the largest number of publications are distributed on all continents. Table 3 shows the 20 countries with the largest number of publications. The first continent with the most publications is Europe (357), followed by Asia (235), South America (69), North America (43), Central America (38), Africa (26) and Oceania (12). In South America, Brazil is the country with the largest number of publications (29%) followed by Chile and Argentina and Colombina. Brazil worldwide has a 2.6% share (fourth position), with Italy, Malaysia, the United States and Spain being the countries with the largest number of publications, in this order.

Country	Continent	Countries in which family companies are more researched	Percentage (from 207 papers researching companies from several countries)
ITÁLIA	EUROPA	41	19,8%
MALÁSIA	ÁSIA	27	13,0%
UNITED STATES	AMÉRICA DO NORTE	26	12,6%
SPAIN	EUROPA	26	12,6%
BRASIL	AMÉRICA DO SUL	20	9,7%
TAIWAN	ÁSIA	20	9,7%
GERMANY	EUROPA	19	9,2%
CHINA	ÁSIA	18	8,7%
UK	EUROPA	16	7,7%
BELGIUM	EUROPA	15	7,2%
FRANCE	EUROPA	15	7,2%
PORTUGAL	EUROPA	15	7,2%
ÍNDIA	ÁSIA	15	7,2%
THAILAND	ÁSIA	15	7,2%
SWEDEN	EUROPA	14	6,8%
SWITZERLAND	EUROPA	14	6,8%
PAQUISTAN	ÁSIA	14	6,8%
SOUTH KOREA	ÁSIA	13	6,3%
HONG KONG	ÁSIA	13	6,3%
JAPAN	ÁSIA	13	6,3%

Table 3: Main Countries

Authors	Number of Publications	%	Authors	Number of Publications	%
Alessandro Minichilli	7	2,83%	Alfredo De Massis	3	1,21%
Danny Miller	6	2,43%	Andrea Calabrò	3	1,21%
Silvia Ferramosca	6	2,43%	Cristian Baú Dal Magro	3	1,21%
Alessandro Ghio	5	2,02%	Franz W. Kellermanns	3	1,21%
Isabelle Le Breton-Miller	5	2,02%	Lázaro Rodríguez-Ariza	3	1,21%
James J. Chrisman	5	2,02%	Omrane Guedhami	3	1,21%
Donata Mussolino	4	1,62%	Rafel Crespi Cladera	3	1,21%
Jess H. Chua	4	1,62%	Roberto Carlos Klann	3	1,21%
Thomas Markus Zellweger	4	1,62%	Rodrigo Basco	3	1,21%
Wim Voordeckers	4	1,62%	Ruth V. Aguilera	3	1,21%
			Stefano Cascino	3	1,21%
Number of Authors		548			
Number of publications		247			
Authors/publications average		2,22			
Authors with 3 or more publications		3,83%			
Publications by notorious authors		33,60%			

Table 4: Main Authors

Table 4 presents the most successful authors in family business research, and allows us to identify the authors' publication volume, as well as their relative participation in the group.

The top 5 most successful authors are Alessandro Minichilli, Silvia toolosca and Alessandro ghio, both from Italy, which shows alignment with the country that publishes most (Table 3), followed by Danny Miller (USA) and Isabelle Le Braton-Miller (Canada). They are authors who research in co-authorship. Table 5 shows the 24 authors with the highest number of citations, corresponding to 56% of the total citations. Analyzing the citations of the 247 papers used in the study, there is no large dispersion among the authors cited. Of the remaining 224 papers, 138 refer to articles published in 2017, 2018 and 2019, mostly without citations, but considered in the study due to their contemporaneity. Among the 548 authors, 9 authors addressed the largest number of family business themes described in Table 1: Mohammed Oudah et al. (2018), Leonardo Roth et. al. (2017), Hannes Houswald and Andreas Hack (2013), Thomas M. Zelleweger et al. (2012), Marianne Bertand et al. (2008), Josiane Fahed-Srei and Salpie Djoundouruian (2006), Je Ce and Ke Moores (2002), Andrea L. Santiago (2000), Ronald E. Berenheim (1990).

Author	Number of times cited	Author	Number of times cited
Pramodita Sharma	3.080	Cristina Cruz	984
Michael H. Lubatkin	2.842	Julio De Castro	939
Richard N. Dino	2.842	Luis R. Gomez-Mejia	939
William S. Schulze	2.842	Pascual Berrone	939
Ashok Robinb	2.377	Joseph P. H. Fan	880
Joanna Shuang Wu	2.377	Stijn Claessens	880
Ray Balla	2.377	Franz W. Kellermanns	628
Ann K. Buchholtz	2.267	Yan Ling	575
James J. Chrisman	1.942	Thomas Markus Zellweger	562
Jess H. Chua	1.786	Erkko Autio	523
Danny Miller	1.602	Mikko Mustakallio	523
Isabelle Le Breton-Miller	1.301	Shaker A. Zahra	523

Table 5: Most Cited Authors

5. DISCUSSION AND CONCLUSIONS

This study analyzed the bibliometric characteristics of 247 research papers and reached its main objective of mapping current scientific production on family businesses around the world, highlighting the main references and indicating the trend of development and growth of studies on the subject. As could be observed, it was found that in the general survey, conducted in all databases, the existence of research-related words with higher incidence rates are aligned with the researched theme and considerably understand the results of the researched articles. However, several words were highlighted. Words related to the themes of corporate governance and quality of accounting information are also highlighted, as several articles explore these themes within the field of family businesses. As for the main topics most studied, it was found in the general survey, carried out in the nine databases and in the four journals, which, both international and national, point predominantly, issues related to control and management (CEO duality), structure and ownership, socio-emotional wealth, succession process, business life cycle, longevity, cultural factors and management style, among others as the most evident themes, in the current stage of research on family businesses. Of all 247 papers surveyed, the two journals with the largest number of family business theme publications were Family Business Review with 48 publications corresponding to 19.4% of the total articles reviewed, followed by the Journal of Family Business Strategy with 28 publications corresponding to 11.3% of the total of articles analyzed, which deserve to be highlighted, as these are journals that deal specifically with research in the business field on family business issues.

There are publications on themes on family businesses on all continents. The continent with the most publications is Europe, followed by Asia, South America, North America, Central America, Africa and Oceania. In South America, Brazil is the country with the largest number of publications, followed by Chile, Argentina and Colombia. It is noteworthy that in countries under code law, such as Germany, France, Italy, Spain and Japan, presented a larger volume of publications with little dispersion among themselves. In countries under common law, such as England United States of America, Canada, Australia, New Zealand, presented a smaller volume of publications and greater dispersion among themselves, as well as in relation to the code law regime. As for the authors who published the most, it was found in the general survey, the existence of co-authorship groups, in cooperation with at least two researchers. Of the 247 articles analyzed, 17 (6.9%) were produced by only one author. Among the five authors and their countries with the largest number of publications, Italy is the leader with 18 publications, followed by the United States with 6 and Canada with 5 publications. Regarding the most cited authors, when it relates to the ones who published the most, Danny Miller stands out with 1,602 publications (11th position) and Isabelle Le Braton-Miller with 1,302 publications (12th position). The other most cited authors do not appear in the list of the 24 most cited authors (Table 5). Among the 12 most cited authors, 9 are North American and 3 Canadian. In all analyzes, about 6% of the 247 articles were published by a researcher. This issue can be considered a limitation for the development of the study theme, considering that it would be important for scientific research to be developed through the existence of co-authorship groups, due to the complexity of the theme and the formation of strong ties between the students and authors. In general, the cooperation between the authors was quite wide, especially among those with the largest number of publications. Another limitation of the study refers to the application of the bibliometric technique that presents qualitative aspects, not going to the bottom with quantitative questions of scientific production. Further analysis is recommended through studies with a qualitative and quantitative approach. The adoption of research with the grounded theory methodology. Depending on the problem, use data collection techniques such as observation and focus groups. Studies are also recommended that consider corporate governance structures that vary from country to country, as well as the quality of accounting and financial information within family businesses. With the development of this study, we contributed to the development of the field of academic and managerial study, presenting a "picture" of the main themes and bibliometric characteristics of research on family businesses around the world. This research is expected to assist in the development of future research by providing information for more detailed discussions on this emerging topic that requires further and continuing research.

LITERATURE:

1. Aguilera, R. V.; Cazorra, A. C. (2009) Codes of Good Governance. *Corporate Governance: An International Review*, v. 17, n. 3, p. 1-13.
2. Ali, A., Chen, T-Y., and Radhakrishnan, S. (2007). Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44, 238-286.
3. Al-Shammari, B. and Al-Sultan, (2010) W. *Int J Discl Gov* 7: 262.
4. Anderson, R.C., and Reeb, D.M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500, *Journal of Finance*, 58, 1301–1328.
5. Assuncao, R. R., De Luca, M. M. M., Vasconcelos, A. C., and Reboucas, S. M. D. P. (2014). Complexidade organizacional e governanca corporativa nas maiores companhias abertas do Brasil. *Enfoque: Repl exão Contábil*, 33(1), 105-122.
6. Ball, R. and Shivakumar, L. (2005). Earnings quality UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics* 39 (1): 83-128.

7. Bartholomeusz, S. and Tanewski, G.A. (2006). The relationship between family firms and corporate governance. *Journal of Small Business Management*, 44, pp. 245–267.
8. Belmiro & Santos, T.B.S. & Cunha Filho, W.G.. (2014). Research in Corporate Governance & Family Firms: A Research Agenda. *Revista Organizações em Contexto*. 10. 131-153.
9. Berglof, E., and Pajuste, A. (2005). What do firms disclose and why? Enforcing corporate governance and transparency in Central and Eastern Europe. *Oxford Review of Economic Policy*, 21(2), 178-197.
10. Berle, A.; Means, G. (1932) *The Modern Corporation and Private Property*. New York: Macmillan.
11. Biddle G, Hilary G. (2006). Accounting quality and firm-level capital investment. *The Accounting Review* 81(5): 963–982.
12. Blumenthal, J.; Steinberg, H. (2011) *A família empresária*. São Paulo: Gente.
13. Bokpin, G. A., Isshaq, Z., and Aboagye-Otchere, F. (2011). Ownership structure, corporate governance and corporate liquidity policy: Evidence from the Ghana Stock Exchange, *Journal of Financial Economic Policy*, 3(3), pp. 262-279.
14. Bushman, R.; Chen, Q.; Engel, E.; Smith, A. (2000). The sensitivity of corporate governance systems to the timeliness of accounting earnings. Working Paper. Chapel Hill, University of North Carolina, 63 p.
15. Bushman, R.; Smith, A. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32: 237-333.
16. Cadbury, A. (1992) *Report of the Committee on the Financial Aspects of Corporate Governance*, London, Gee Publishing.
17. Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship: Theory and Practice*, 29, pp. 249–265.
18. Carrera, Nieves. (2017). What Do We Know about Accounting in Family Firms? *Journal of Evolutionary Studies in Business-JESB*. 10.
19. Casillas, J. C., and Acedo, F. (2007). Evolution of the intellectual structure of family business literature: a bibliometric study of FBR. *Family Business Review*, 20(2), 141-162.
20. Cheng, Qiang. (2014). Family firm research – A review. *China Journal of Accounting Research*. 7. 10
21. Coase, R. (1937) The nature of the firm. *Economica*, v. 4, n. 16, p. 386-405.
22. Coase, R. (1960) The problem of social cost. *Journal of Law and Economics*, v. 3, n. 1, p. 1-44.
23. Cohen, D. A., Dey, A., and Lys, T. Z. (2008). Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods. *The Accounting Review*, 83: 757–787.
24. Costa, A. P. P. da; Wood JR, T. Fraudes corporativas. (2012) *RAE*, v. 52, n. 4.
25. Costa, F.M. (2005). *Ajustes aos US-GAAP: estudo empírico sobre sua relevância para empresas brasileiras com ADRs negociados na bolsa de Nova Iorque*. São Paulo, USP, Tese de Doutorado, 139 p.
26. Cunha, Vera and RODRIGUES, Lúcia Lima. (2018) Determinantes da divulgação de informação sobre a estrutura de governança das empresas portuguesas. *Rev. bras. gest. neg.*, vol.20, n.3, pp.338-360.
27. David F. Larcker, Brian Tayan. (2011) *Corporate Governance Matters: A Closer Look at Organizational Choices and Their Consequences*. FT Press, April 14.
28. Di Pietro Fabiana. (2017). L'innovazione nel family business. Dottorato in Management (XXIX Ciclo), Facoltà Di Economia. Università Degli Studi Di Napoli "Federico II" .
29. Doidge, C., Karolyi, G. A., & Stulz, R. M. (2007). Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86(1), 1-39.
30. Donnelly, R., & Mulcahy, M. (2008). Board structure, ownership, and voluntary disclosure in Ireland. *Corporate Governance: An International Review*, 16(5), 416-429.

31. Elgammal, W. and Showery, M. (2012). Corporate Governance and Quality of Accounting Information: The case of Lebanon. *The Business Review Cambridge Journal*, 19(2), 210-315
32. Eng, L. L., and Mak Y. T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting & Public Policy*, 22(4), 325-345.
33. Fathi, J. (2013). The determinants of the quality of financial information disclosed by French listed companies. *Mediterranean Journal of Social Sciences*, 4(2), p. 319-336.
34. Gaio, C. (2010). The relative importance of firm and country characteristics for earnings quality round the world. *European Accounting Review*, 19(4), pp. 693-738.
35. Gallo, M. and Kenyon-Rouvinez, D. (2005). The importance of family and business governance. In Kenyon-Rouvinez, D. and Ward, J.L. (eds), *Family Business. Key Issues*. Basingstoke: Palgrave/Macmillan, pp. 45–57.
36. Garcia-Blandon, Josep and Argilés, Josep & Ravenda, Diego (2019). Is there a gender effect on the quality of audit services?. *Journal of Business Research*. 96. 238-249.
37. Gersick, K.; Davis, J.; Hampton, M.; Lansberg, I. (1997) De geração para geração: Ciclo de vida da empresa familiar. 2ed. São Paulo: Negócio, p. 308.
38. Gobette Santana, André & Klann, Roberto. (2016). Conservadorismo contábil e a adoção das IFRS: evidências em empresas brasileiras familiares e não familiares. *Enfoque: Reflexão Contábil*. 35.
39. Grisci, C. L. I.; Velloso, S. P. Governança corporativa e empresas familiares em processo sucessório: a visão de consultores e de famílias empresárias. *BASE - Revista de Administração e Contabilidade da UNISINOS*, v. 11, n. 4, p. 367-381, 2014.
40. Hassan Che Haat Mohd, Rashidah Abdul Rahman and Sakthi Mahenthiran (2008), "Corporate Governance, Transparency and Performance of Malaysian Companies", *Managerial Auditing Journal*, Vol. 23, No. 8, pp. 744-778.
41. Heckerman, D.G. (1975). Motivating managers to make investment decisions. *Journal of Financial Economics*, v. 2, n. 3, p. 273-292.
42. Imhoff, Gene. (2003). Accounting Quality, Auditing and Corporate Governance. *Accounting Horizons*. 17. 10.
43. Instituto Brasileiro de Governança Corporativa. (2016). Governança da família empresária: conceitos básicos, desafios e recomendações / Instituto Brasileiro de Governança Corporativa. São Paulo, SP: IBGC, 48p.
44. Isidro, H., and Raonic, I. (2012). Firm incentives, institutional complexity and the quality of "harmonized" accounting numbers. *The International Journal of Accounting*, 47(4), pp. 407-436.
45. Jensen, M.; Meckling, W. (1976) Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, v. 3, n. 4, p. 305-360.
46. Klein, W. A. (1976). *Legal and economic perspectives on the firm*. Unpublished manuscript. Los Angeles: UCLA.
47. Kumar, P. and Zattoni, A. (2014) 'Corporate governance, information, and investor confidence', *Corporate Governance: An International Review*, Vol. 22, No.6, pp. 437-439.
48. La Porta, Rafael; Lopez-De-Silanes, Florencio; Shleifer, Andrei. (1999). Corporate Ownership Around the World. *The Journal of Finance*. v. 54, n. 2, p. 471–517.
49. Leal, R. P. C. (2007) *Governança corporativa: evidências empíricas na Brasil*. São Paulo: Atlas, p. 149-186.
50. Leal, R. P. C. (2007) Práticas de governança e valor corporativo: uma recente revisão da literatura. In: Silva, A. L. C. da.; Leal, R. P. C. *Governança corporativa: evidências empíricas na Brasil*. São Paulo: Atlas, p. 130-148.

51. Lemmon, M. L., and Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: evidence from the East Asian financial crisis. *Journal of Finance*, 58(4), pp. 1445-68.
52. Leonidou, C.N. Leonidou, L.C. (2011) Research into environmental marketing / management: a bibliographic analysis. *European Journal of Marketing*.
53. Lokman, N., Mula J. M., & Cotter, J. (2014). Importance of corporate governance quality and voluntary disclosures of corporate governance information in listed Malaysian family controlled businesses. *International Journal of Sustainable Development & World Policy*, 3(1), 1-24.
54. Lokman, N., Mula J. M., and Cotter, J. (2014). Importance of corporate governance quality and voluntary disclosures of corporate governance information in listed Malaysian family controlled businesses. *International Journal of Sustainable Development & World Policy*, 3(1), 1-24.
55. Machado, R., Grzybovski, D., Teixeira, E., & Silva, M. (2013). Governança de pequenas empresas familiares brasileiras: aspectos a considerar no modelo adotado. *Revista de Ciências da Administração*, 1(1), 198-210.
56. Makhoul, Mohammed. (2013). Corporate Governance and Its Impact on the Quality of Accounting Information in the Industrial Community Shareholding Companies Listed in Amman Financial Market- Jordan.. *International Journal of Humanities and Social Science*. 3. 184-195.
57. Mallin, C., and Ow-Yong, K. (2012). Factors influencing corporate governance disclosures: Evidence from alternative investment market (aim) companies in the UK. *The European Journal of Finance*, 18(6), 515-533.
58. Martins, Gilberto de Andrade; Theóphilo, Carlos Renato. (2007) Metodologia da investigação científica para ciências sociais aplicadas. São Paulo: Atlas.
59. Mustakallio, M., Autio, E. and Zahra, S.A. (2002). Relational and contractual governance in family firms: effects on strategic decision making. *Family Business Review*, 15, pp. 205–222.
60. Neubauer, F., Lank, A.G. and Ward, J.L. (1998). *The Family Business. Its Governance and Sustainability*. London/ New York: Macmillan/Routledge.
61. Pascual-Fuster, Bartolomé and Cladera, Rafel. (2018). Politicians in the boardroom: Is it a convenient burden?. *Corporate Governance: An International Review*. 10.1111/corg.12261.
62. Preston, L. E. (1975). Corporation and society: the search for a paradigm. *Journal of Economic Literature*, v. 13, n. 2, p. 434-453.
63. Ribeiro, F., and Colauto, R. D. (2016). A relação entre *board interlocking* e as práticas de suavização de resultados. *Revista Contabilidade & Finanças*, 27(70), 55-66.
64. Ribeiro, Milton Nassau. (2007) Aspectos Jurídicos da Governança Corporativa. São Paulo: Quartier Latin.
65. Ross, S. A. (1973) The economic theory of agency: the principal's problem. *The American Economic Review*, v. 63, n. 2, Papers and Proceedings of the 85th Annual Meeting Or The American Economic Association, p. 134-139.
66. Roth, Leonardo & Clara Heinz Tissot, Maria & Gonçalves, Roberto. (2017). Family Owned Business Succession and Governance: a multiple case study in Brazil. *Revista de Ciências da Administração*. 19. 96-107.
67. Salvaro, C., and Moores, K. (2010). Research on Accounting in Family Firms: Past Accomplishments and Future Challenges. *Family Business Review*, 23(3), 193-215.
68. Santema et al. (2005) Strategy disclosure in annual reports across Europe: a study on differences between five countries. *European Business Review*, Bradford, v. 17, n. 4, p. 352-366.

69. Santema, S.; Van De Rij T, J. (2001) Strategy disclosure in Dutch annual reports. *European Management Journal*, London, v. 19, n. 1, p. 101-108.
70. Shleifer, A., and Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52(3), 737–83.
71. Siebels, Jan Folke and zu Knyphausen Aufseß, Dodo (2012). A Review of Theory in Family Business Research: The Implications for Corporate Governance (September 2012). *International Journal of Management Reviews*, Vol. 14, Issue 3, pp. 280-304.
72. Silveira, A. Di M. da. (2004) *Governança corporativa e estrutura de propriedade: determinantes e relação com o desempenho das empresas no Brasil*. Tese (Doutorado em Administração). Universidade de São Paulo, São Paulo.
73. Silveira, A. M.; Barros, L. A. B. C.; Famá, R. (2003). Estrutura de governança e valor nas companhias abertas brasileiras. *Revista de Administração de Empresas*, v. 43, n. 3, p. 50-64.
74. Songini, Lucrezia & Gnan, Luca & Malmi, Teemu. (2013). The role and impact of accounting in family business. *Journal of Family Business Strategy*. 4. 71-83.
75. Souza, I. B.; Kloeckner, G. de O. (2014) Governança em estruturas proprietárias concentradas: novas evidências para o Brasil. *Rev. Adm*, v. 49, n. 2, p. 322-338.
76. Souza, Dalva Inês de. (2013) *Manual de orientações para projetos de pesquisa/ Dalva Inês de Souza et al. – Novo Hamburgo: FESLVC*.
77. Souza-Silva, J. C. de; Fischer, T.; Davel, E. (1999). Organizações Familiares e tipologia de análise: o caso da organização Odebrecht. In: Encontro Nacional de Pós-Graduação em Administração – ENANPAD, 23.
78. Srinidhi, Bin and He, Shaohua & Firth, Michael. (2014). The Effect of Governance on Specialist Auditor Choice and Audit Fees in U.S. Family Firms. *The Accounting Review*. 89. 2297-2329.
79. Srourou, G. Práticas diferenciadas de governança corporativa: um estudo sobre a conduta e a performance das firmas brasileiras. In: Carvalhal Da Silva, A. L.;
80. Tagiuri, R. and Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9, pp. 199–208.
81. Terence Machado Boina; Marcelo Alvaro da Silva Macedo. (2018) Predictive ability of accruals before and after IFRS in the Brazilian stock market. *Rev. contab. finanç.* vol.29 no.78. São Paulo Sept./Dec. 2018.
82. Turrent, G., and Rodriguez-Ariza, L. (2012). Corporate information transparency on the internet by listed companies in Spain (IBEX35) and Mexico (IPYC). *International Journal of Digital Accounting Research*, 12, 1-37.
83. Uwuigbe, U., Peter, D. S. and Oyeniyi, A. (2014) 'The effects of corporate governance mechanisms on earnings management of listed firms in Nigeria', *Accounting and Management Information Systems* Vol. 13, No.1, pp.159-174.
84. Uyar, Ali; Haydar Gungormus, Ali and Kuzey, Cemil. (2017). Impact of the Accounting Information System on Corporate Governance: Evidence from Turkish Non-Listed Companies. *Australasian Accounting, Business and Finance Journal*. 11. 9-27.
85. Viegas, Leonardo. (2008). Códigos voluntários de governança corporativa: os “Princípios da OECD” e as melhores práticas do IBGC. In: Melo, Marcelo; Pulo Lucena. *Acontece nas melhores famílias: repensando a empresa familiar*. São Paulo: Saraiva/Vigília, P.133-154.
86. Voordeckers, W., Gils, A. and Heuvel, J. (2007). Board composition in small and medium-sized family firms. *Journal of Small Business Management*, 45, pp. 137–156.
87. Wei, G., and Geng, M. (2008). Ownership structure and corporate governance in China: some current issues. *Managerial Finance*, 34(12), pp. 934-952.

88. Wellalage, N.H., Locke, S. and Scrimgeour, F. (2012). Does one size fit all? An empirical investigation of board structure on family firms' financial performance. *Afro-Asian Journal of Finance and Accounting*, 3(2), 182-194.
89. Wilson, R. (1968). On the theory of syndicates. *Econometrica*, v. 36, n. 1, p. 119-132.
90. Witt, P. (2008). Corporate Governance in Familienunternehmen. In Albach, H. (ed.), *Corporate Governance in der Praxis mittelständischer Unternehmen (Zeitschrift für Betriebswirtschaft Special Issue)*. Wiesbaden: Gabler, pp. 1–19.
91. Wong, L. (2011). Corporate governance in small firms: The need for cross-cultural analysis? *International Journal of Cross Cultural Management*, 11(2), 167–183.
92. Wu, X. (2005) 'Political institutions and corporate governance reforms in Southeast Asia', in leong, H. K. (ed.) *Reforming Corporate Governance in Southeast Asia: Economics, Politics and Regulation*, Singapore, ISEAS Publications, pp. 16-37.
93. Yusuf, Fatima (2016). The impact of political connectedness on corporate governance disclosure : empirical evidence from Pakistan. PhD thesis The Open University.
94. Zafarullah, H.; Rahman, R. (2008) The impaired state: assessing state capacity and governance in Bangladesh. *International Journal of Public Sector Management*, [S. l.], v. 21, n. 7, p. 739-752.

MOBBING AS A SOCIOLOGICAL AND COMMUNICATION PHENOMENON - NEED TO OPEN MOBBING VICTIMS CENTER

Stela Novak

*University North, Croatia
stenovak@unin.hr*

Mladen Greguras

*University North, Croatia
mlgreguras@unin.hr*

Damira Dukec

*University North, Croatia
ddukec@unin.hr*

ABSTRACT

This paper presents and describes the sociological problem of mobbing that has recently emerged among different populations and sociodemographic structures of the community. It should be emphasized that mobbing, besides being a sociological phenomenon, should also be considered in communication discourse. Almost every mobbing begins and ends with verbal communication, while in more complex situations non-verbal communication leads to serious health and psychological problems. The types and methods of mobbing are identified and defined and viewed in the context of the health consequences for individuals who are victims of mobbing. In this paper, we will endeavor to portray the need to protect each individual, especially at work, as an indispensable factor in defining the degree of social sensibility and empathy. A great prerequisite for achieving interpersonal tolerance and communication of respect is the legal regulation that we present through the prism of the Labor Law, the Gender Equality Act and the Anti-Discrimination Act. In particular, we will focus our research on the need to open a Mobbing Center. Through its activities, the Mobbing Center would provide education, research and advocacy and provide psychological and legal support to any person who needs assistance in this field. The main objective of the research is to prove the ethical, moral and social need to open a Mobbing Center. Given that this is an extremely complex problem, we will also open up opportunities for further research, especially in the context of the cognitive sciences, sociology as well as psychology of the media.

Keywords: *Center for Victims of Mobbing, communication, mobbing, Workplace Violence*

1. INTRODUCTION

One of the everyday occurrences in our society, which has been largely neglected and ignored by many state institutions, is the phenomenon of mobbing in the workplace¹. In Croatia, this term refers to specific defined situations that are repeated systematically over a period of time at work, while abroad, this term is also associated with other areas of interpersonal relationships, such as mobbing at school - where most peers harass one another and cyber mobbing - Internet harassment, for example, has been reported mostly through social networks, most notably Facebook. The media only write about the problem of mobbing as a reaction to an event, while education and education in terms of prevention are given little attention.

¹ Mobbing in the workplace is a phenomenon that is really the only one have been identified since 1990 and are the subject of scientific and legal attention, especially in Europe, but more recently are becoming the subject of increasing attention in the United States and Canada (Cottone & Tarvydas, 2002; Davenport, Schwartz, & Elliott, 1999; Westhues, 2005, 2006). The term mobbing was the first used by Leymann (1990) to describe the site of abuse behavior. He borrowed the term from a Conrad ethologist Lorenz (1963) whose discipline was to study animal behavior.

The seriousness of this topic in the Republic of Croatia² has not yet come to the public's attention, first of all, since there is no officially recorded data on the number of suicides in response to bullying, but the need to open a center for victims of bullying is more than alarming. With intuitive foreboding, as well as observing the trends at the world level, as well as following everything that is happening in our neighboring countries, it can already be assumed that it is only a matter of time before the need for opening a center for mobbing victims will arise in our country. This paper will cover the topic of mobbing as a phenomenon related to the business environment, with the wish that the hypotheses will be confirmed and thus create the basis for opening the center needed in this society for the society to achieve a higher degree of humanity, ethics and even morality. The research focuses on the experience of individuals regarding the term mobbing. The definition itself may not be fully known to all respondents, so the survey will provide insight into how well the respondents are familiar with the term and to what extent they have already experienced this unwanted phenomenon or witnessed it on their own skin and will find out how much plays the role of gender in taking on the role of victim. The question is how to regulate the situation at the state level, as well as at the interpersonal within the company as well as in front of the public reflectors. The need to protect every individual, especially at work, where there is a great fear of dismissal, is an indispensable factor in defining the degree of social sensibility and empathy.

2. DEFINITION AND TYPES OF MOBBING

Mobbing³ is a specific form of workplace behavior that systematically mentally abuses and humiliates another person or group of them in order to compromise their reputation, honor, human dignity and integrity, until elimination from the workplace. Such activities are considered mobbing if they are frequent and time-consuming - at least once a week, for at least six months. Mobbing is represented by: *Attacks on the possibility of expression - constant interruption in doing business, swearing loudly, criticizing how work is done, making oral and / or written threats, telephone terror, refusing to make contact through disparaging gestures, etc. *Attacks on social contacts - not talking, moving to premises away from former colleagues, banning work colleagues from talking to the victim of mobbing, treating the victim as "air". *Attacks on reputation - spreading rumors, gossip, mockery, mockery, imitation with the aim of making the victim ridiculous, accusing the victim of being mentally ill, forcing the victim to perform tasks that impair self-esteem, questioning the victim's decisions, shouting derogatory curses or other derogatory terms with the victim. *Attacks on the quality of life and work situation - not assigning work tasks to the victim, taking away all tasks in the workplace so that the victim cannot even design a work day, assigning meaningless tasks, assigning tasks far below the right knowledge / qualification, constantly assigning new tasks, assigning tasks that go beyond the victim's qualification in order to discredit her. *Attacks on health - forcing work that damages health, threatening physical violence, physical abuse, causing costs to harm the victim, committing physical harm in a person's home or workplace, sexual assault.

3. LEGISLATION AND LEGAL PROTECTION IN THE REPUBLIC OF CROATIA

In the legislation of the Republic of Croatia, there are several sources regulating the prohibition of discrimination, harassment, sexual harassment and protection of dignity in the workplace, but the term "mobbing" is not accepted in these sources. Apart from the Convention for the Protection of Human Rights and Fundamental Freedoms and the provisions of the Constitution

² About promoting health in the workplace The European Union adopted the Luxembourg Declaration 22 years ago. cf. 3. European Union (1997): The Luxembourg Declaration on Workplace Health Promotion in the European Union, European Union, Brussels.

³ *Anti-mobbing Protocol on the Procedure and Measures to Protect Employee Dignity and Discrimination Measures* (2016), Medicines and Medical Devices Agency, URL: http://www.halmed.hr/fdsak3jnFsk1Kfa/ostale_stranice/Anti-mobbing-protokolHALMED-2016.pdf, (accessed 29/09/2019)

of the Republic of Croatia, this matter is more or less extensively regulated by the Labor Law, the Anti-Discrimination Act, the Gender Equality Act and the Criminal Code. Article 7 of the Labor Law prescribes protection of workers against "mobbing". (4)⁴ Direct or indirect discrimination in the field of work and working conditions, including selection criteria and conditions for employment, promotion, vocational guidance, vocational training and further training and retraining, in accordance with this Act and special laws shall be prohibited. (5) The employer is obliged to protect the dignity of the worker while performing the work from the actions of superiors, associates and persons with whom the worker regularly comes into contact in the performance of their jobs, if such treatment is undesirable and contrary to this Law and special laws. The specific laws referred to in Article 7 in paragraphs 4 and 5 above are the Criminal Code, the Anti-Discrimination Act and the Gender Equality Act. Article 134 describes the procedure for protecting the dignity of workers. (1) The procedure and measures for the protection of the dignity of workers against harassment and sexual harassment shall be regulated by a special law, a collective agreement, an agreement concluded between the works council and the employer or a rulebook. (2) An employer employing at least twenty workers shall be obliged to appoint a person who, besides him, is authorized to receive and resolve complaints related to the protection of the dignity of workers. (3) The employer or the person referred to in paragraph 2 of this Article shall, within the period stipulated by the collective agreement, agree between the works council and the employer or the rulebook on work, and no later than eight days after the submission of the complaint, examine the complaint and take all necessary case-specific measures to prevent continued harassment or sexual harassment, if found to exist. (4) If the employer fails to take measures to prevent harassment or sexual harassment within the time limit referred to in paragraph 3 of this Article, or if the measures he has taken are manifestly inappropriate, the worker who is harassed or sexually harassed shall have the right to interrupt his work until he is protected, provided that he sought protection before a competent court within eight days. (5) If there are circumstances for which it is not justified to expect the employer to protect the dignity of the worker, the worker shall not be obliged to file a complaint with the employer and shall have the right to terminate the work, provided that he has requested protection before the competent court and informed the employer thereof within eight days of interrupts work. (6) During the termination of work referred to in paragraphs 4 and 5 of this Article, an employee is entitled to a salary remuneration in the amount of the salary that he would have earned if he had worked. (7) If, by a final court decision, it is established that the dignity of the worker has not been violated, the employer may request the reimbursement of the remuneration paid under paragraph 6 of this Article. (8) All information established in the procedure for the protection of the dignity of workers shall be confidential. (9) The conduct of workers constituting harassment or sexual harassment constitutes a breach of an employment obligation. (10) Employee harassment of conduct that constitutes harassment or sexual harassment does not constitute a breach of employment obligations or be a ground for discrimination. Article 133 of the Criminal Law also provides for criminal liability for anyone who violates the dignity of workers. (1) Whoever offends, humiliates, abuses or otherwise harasses or otherwise disturbs his or her health, he will be sentenced to up to two years in prison. (2) The criminal offense referred to in paragraph 1 of this Article shall be prosecuted on a proposal. Article 8 of the Anti – discrimination Law prescribes the scope. This Act shall apply to the treatment of all state bodies, bodies of the unit of local and regional self-government, legal persons with public authority, and to the treatment of all legal and natural persons, especially in the areas of (1) working and working conditions; opportunities to pursue an independent and self-employed activity, including selection criteria and conditions for employment and promotion; access to all types of vocational guidance, vocational training and retraining and retraining.

⁴ number of paragraphs

4. RESEARCH METHODOLOGY

The survey was quantitative and was conducted through an anonymous on-line survey, on a sample of 90 respondents. The questionnaire itself will list 15 questions (mostly closed). The questionnaire was composed of socio-demographic variables (age, gender education), as well as parts of the questions related to encountering the term "mobbing", experience with mobbing, whether the respondent witnessed mobbing, how many people knew whom they could turn to for help in the case of mobbing. The survey was conducted between June 23, 2019 and July 24, 2019. The questionnaire itself lists 15 closed questions: Sociodemographic issues (gender, age, education), A question related to employment, Encountering the concept of "mobbing", Personal experience of mobbing, A person witnesses mobbing against others, Educating the person on whom to turn for help in the case of mobbing, Are women more mobilized than men?, Should publicity about mobbing (workshops, TV broadcasts, campaigns conducted by the mobbing office) increase ethics in society?, Would establishing a "Mobbing Office" reduce mobbing? and Is there a need to set up a mobbing office? Two hypotheses were set in this paper:

- H1 Women are more mobbed than men
- H2 People believe that there is a need to set up a mobbing office

Chi – square test and Z – test were used to test the hypotheses.

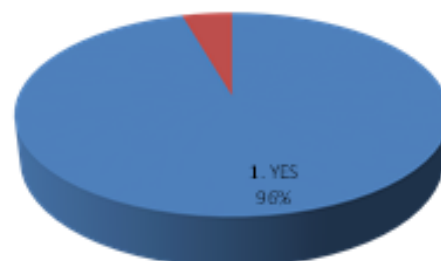
5. RESEARCH RESULTS

The first three questions relate to sociodemographic variables. The first question concerns the gender of the respondents. A total of 90 respondents were surveyed, of which 45 were female and 45 were male. The second question relates to the age of the respondents, so we have a total of 38 respondents up to the age of 30, in the next age group of 30-50 there are 42 respondents, and in the group more than 50 there are 10 respondents. The third education issue is divided into four groups. The first group was the SSS, which included 32 subjects, the second group was BC - 36 subjects, the third group MB - 20 subjects and the fourth group DO / C / PD - 2 subjects. The gender representation in this study is 50% female and 50% male. According to results of the survey 42% of the respondents are under 30 years of age, 47% are 30-50 years and 11% of are over 50 years. Also, 36% of the examinees have completed high school education, 40% of higher education od becholar's degree, 22% of high education or master degree and 2% of postgraduate studies. All respondents were employed or still working, which is important for this research.

Graph 1: Familiarity with the term "mobbing"

5. Question: Have you encountered the term "mobbing" so far?

2. NO
4%

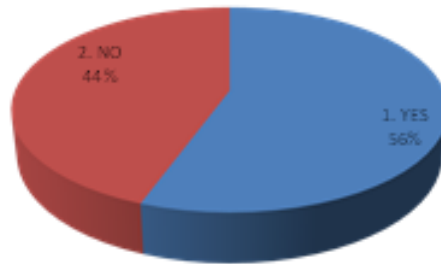


Source: authors research

It is evident from the results that 96% of the respondents stated that they had encountered the term "mobbing" and 4% had no experience with the term "mobbing".

Graph 2: Mobbing experience

6. Question: Have you ever personally experienced mobbing?

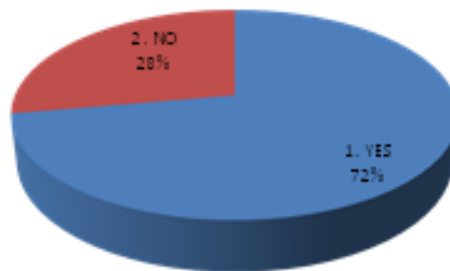


Source: authors research

Graph 2 shows that 56% of respondents have personally experienced mobbing and 44% of respondents have not experienced mobbing.

Graph 3: Mobbing witnessing

7. Question: Have you witnessed mobbing against others?

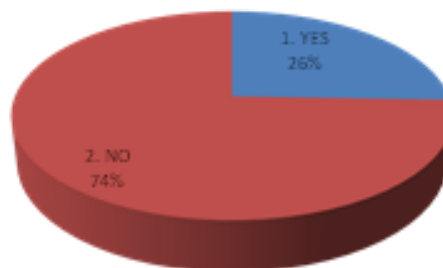


Source: authors research

Graph 3 shows that 72% of respondents witnessed mobbing over others, and only 28% of respondents did not witness mobbing.

Graph 4: Help for mobbing victims

8. Question: Do you know who you could turn to for help with mobbing?

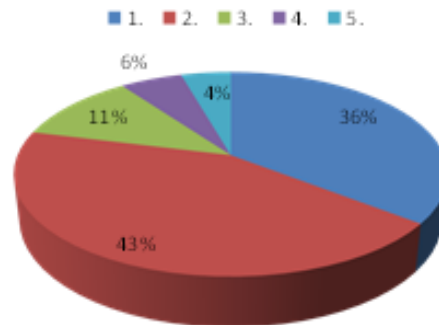


Source: authors research

Only 26% of respondents know who to turn to in case of mobbing, and as many as 74% of respondents do NOT. Questions 9 to 15 are focused on how the respondent can decide between the 5 offered answers and thus evaluate the claims.

Graph 5: Education and mobbing

9. People with lower education are more likely to become victims of mobbing.

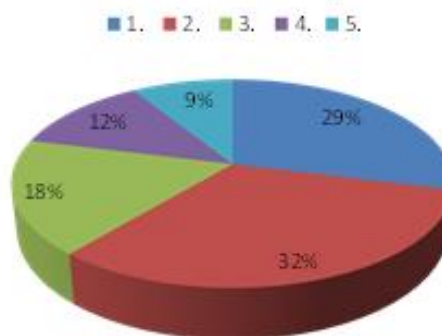


Source: authors research

Graph 5 shows that 4% of people completely disagree with the statement that lower education persons are more likely to become victims of mobbing, 43% disagree, 11% of respondents neither agree nor disagree, 6% agree and 36% the respondent fully agrees with the claim.

Graph 6: Bulling and mobbing

10. A person who was bullied at school is also likely to be a victim of mobbing.

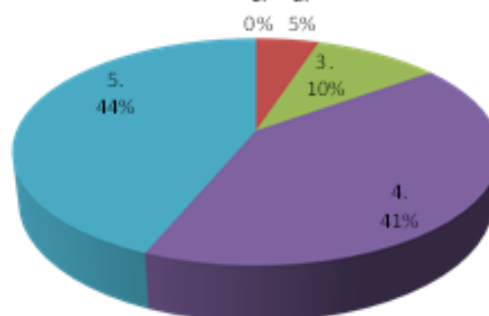


Source: authors research

Graph 6 shows that 9% of respondents completely disagree with the statement that a bullied person is likely to be a victim of mobbing, 32% of respondents disagree, 18% of respondents neither agree nor disagree, 12% of respondents agrees and 9% of respondents completely agree.

Graph 7: Self – esteem and mobbing

11. The less self-esteem a person is, the more likely they are to be the victim of mobbing.

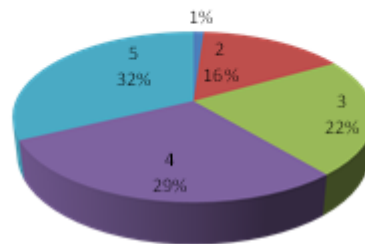


Source: authors research

Graph 7 shows that out of 90 respondents, no one answered that they completely disagreed with the statement that if a person has less self-esteem that they are more likely to be the victim of mobbing, 5% of respondents disagree, 10% of respondents neither agree nor disagree, 41% of respondents agree and 44% completely agree.

Graph 8: Mobbing information

12. Question: Do I think that informing the public about mobbing (workshops, TV broadcasts, campaigns conducted by the mobbing office) increases ethics in society?

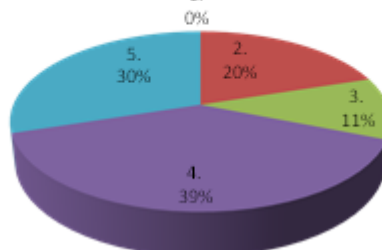


Source: authors research

Graph 8 shows that 1% of respondents completely disagree with the statement that informing the public about mobbing, increases ethics in society, 16% disagrees, 22% neither agrees nor disagrees, 29% of respondents agree, and 32 % of respondents completely agree with the statement.

Graph 9: Mobbing office and socially responsible behaviour

13. Question : Establishing a mobbing office affects the socially responsible behavior of every employee of a company.



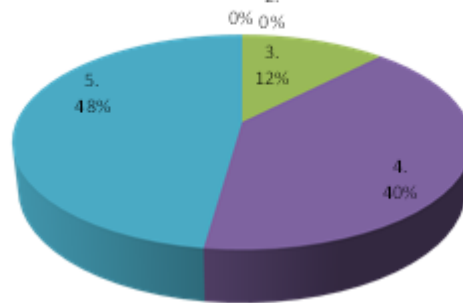
Source: authors research

The claim that the establishment of a mobbing office affects the socially responsible behavior of every employee of a company, no one answered that they disagreed completely, 20% of respondents disagreed, 11% of respondents neither agreed nor disagreed, 39% agreed agree and 30% completely agree.

Graph following on the next page

Graph 10: Mobbing office and mobbing reduction

Question: Establishing a "mobbing office" would reduce mobbing.



Source: authors research

By setting up a "mobbing office", none of the respondents answered that they completely disagreed with this statement, no one answered that they disagreed, 12% of respondents neither agreed nor disagreed, 40% of respondents agreed and 48% respondent fully agrees with the claim.

H1: Women are more mobbed than men

H1 - tested HI SQUARE TEST

1. Gender

2. Have you ever experienced mobbing in person?

Table 1: Results of the Chi - square test

	M	F	Total	
Not mob	25	15	40	0,444444
Mob	20	30	50	0,555556
Total	45	45	90	
Exp val				
Not mob	20	20		
Mob	25	25		
	P=0,033895	<0,05		

Source: authors research

The hypothesis is accepted. Of the 90 respondents, of whom there were 45 men and 45 women, all have work experience, in the sense that they have worked or are currently employed at least once in their lives, which gave them the opportunity to be exposed to different situations in a business environment where mobbing. It is intuitive to assume that women are more mobilized than men. When looking at the results where 20 men out of a total of 45 and 30 women out of a total of 45 women were mobbed, it is assumed that this is a generalized and realistic situation. By checking the chi-square test, we can confirm our assumption if the result is less than 0.05. Given that the result is indeed less than 0.05, we can confirm the assumption - the hypothesis that with over 95% confidence, women are more mobilized than men in the workplace. We tested the second hypothesis that people believe there is a need to set up a mobbing office. No one responded to the claim that there was a need to set up a mobbing office, completely disagreed with it, 2% of respondents disagreed, 12% of respondents neither agreed nor disagreed, 38% of respondents agreed and fully agreed 48% agree.

H2: People believe that there is a need to set up a mobbing office.

H2 tested with Z TEST:

$P=1,21 \cdot 10^{-12} < 0,05$

The hypothesis is accepted. With the help of the Z test, we were able to confirm the hypothesis that there is indeed a need for the establishment of a mobbing office in public. We can claim this with a confidence of over 95%, so we accept the final hypothesis that was most important to us for this research, at the same time the goal of the research.

6. CONCLUSION

This paper researched mobbing in the business environment. The research was conducted on a sample of 90 respondents using a questionnaire. Lack of such studies makes this research a valuable contribution to the field. This research is important for several reasons. Emotional wellbeing of workers is a highly significant factor that contributes to labor productivity. Also, a good working environment lessens the rate of absenteeism of workers which lowers the medical costs. The study confirmed both hypotheses set in this paper. Respondents confirm the need to open a mobbing office, but it was also confirmed that women are more mobbed than men, which is why special focus within the center should be placed on helping women. Opening an office for mobbing promotes a higher level of ethics in the company, as well as for corporate social responsibility of employees at the company level, thus reducing mobbing.

LITERATURE:

1. *Anti-Discrimination Law* (2008): URL: <http://www.zakon.hr/z/490/Zakon-o-suzbijanju-diskriminacije>, (accessed 29/09/2019)
2. *Anti-mobbing Protocol on the Procedure and Measures to Protect Employee Dignity and Discrimination Measures* (2016), Medicines and Medical Devices Agency, URL: http://www.halmed.hr/fdsak3jnFsk1Kfa/ostale_stranice/Anti-mobbing-protokolHALMED-2016.pdf, (accessed 29/09/2019)
3. *Criminal law* (2019), URL: https://narodne-novine.nn.hr/clanci/sluzbeni/2018_12_118_2355.html, (accessed 29/09/2019)
4. Duffy, M. and Sperry, L. (2007): *Workplace Mobbing: Individual and Family Health Consequences*, The family journal Vol. 15 No.4, p.398-404. URL: https://www.researchgate.net/publication/258193133_Workplace_Mobbing_Individual_and_Family_Health_Consequences (accessed 09/09/2019)
5. European Union (1997): *The Luxembourg Declaration on Workplace Health Promotion in the European Union*, European Union, Brussels.
6. *Gender Equality Law* (2008 and 2017), URL: <https://ravnopravnost.gov.hr/UserDocsImages/dokumenti/Zakoni/2018/Zakon%20o%20pravnopravnosti%20gender%20HRV.pdf>, (accessed 20/09/2019.)
7. Knezevic, V. (2017): *The victims of mobbing are most often women and assistants*, URL: <http://www.vecernji.hr/english/zrtve-mobinga-najcesce-su-zene-i-asistenti470546>, (accessed 26/09/2019.)
8. Koprek, I. and Beck, C. (eds.) (2009): *Business Ethics, Debt, Mobbing: Psychological, Ethical and Theological Aspects*, Philosophical-Theological Institute of the Society of Jesus in Zagreb, Zagreb.
9. Kostelić - Martić, A. (2005): *Mobbing - Psychic Bullying in the Workplace*, Školska knjiga, Zagreb.
10. *Labor Law. Law on Amendments to the Labor Law* (2004 and 2017), URL: https://narodne-novine.nn.hr/clanci/sluzbeni/2017_12_127_2877.html (accessed on 21/9/2019)

11. Laklija, M., & Janković, J. (2010): *Mobbing - personal, family and work problems and its prevention*, in: *Criminology & Social Integration*, 18 (1), p. 65-77. URL: <https://hrcak.srce.hr/57984> (Accessed: 05/09/2019)
12. Leymann, H., (1990): *Mobbing and Psychological Terror at Workplaces*, *Violence and Victims*, 1990., Vol. 5, No. 2, str. 119-126., URL: [http://www.mobbingportal.com/LeymannV&V1990\(3\).pdf](http://www.mobbingportal.com/LeymannV&V1990(3).pdf), (accessed 29/09/2019)
13. Petar, K. (2017): *Online Anti-Mobbing Campaign*, URL: <http://mojzagreb.info/zagreb/english/online-kampanja-pro-mobbinga>, (accessed 19/09/2019)
14. Turčin, K. (2014): *Mobbing compensation of HRK 200 thousand. The Professor Mentally Abused the Assistant Professor*, URL: <http://www.jutarnji.hr/vijesti/hrvatska/odsteta-za-mobbing-od-200-tisuca-kunaprofesoricapsihicki-zlostavljena-docentica/680629/>, (accessed 24/09/2019)
15. *What is mobbing?* (2013); Law Clinic Faculty of Law, University of Zagreb, URL: <http://klinika.prav.unizg.hr/content/sto-je-mobbing>, (accessed 21/09/2019)

MOROCCAN-AFRICAN REVIEW: WHAT ARE THE RESULTS IN 2017-2019?

Bahha Meryeme

*PhD student at ENCG, Tangier, Morocco
meryeme.bahha2@gmail.com*

Nechad Abdelhamid

*Professor at Abdelmalek Essaadi University,
ESCA School of management, Morocco
nechad22@yahoo.fr*

ABSTRACT

We are living in a new era, contrary to the long-standing ideas that the economic diplomacy no longer concerns the developing countries, which are trying to integrate into the world economy through economic diplomacy, developed countries and international powers also adopt in their own way a diplomacy that allows them to open up to the world. This diplomacy comes in many forms, in many ways that enable the big decision-makers to defend their economic interests through political means. In this sense, the highlight of this year is the beginning of a thin but open diplomacy during the G7 grouping in Biarritz in August 2019. Emmanuel Macron and D. Trump have managed to identify common positions on the Iranian crisis, the trade war with China and the taxation of the digital giants also. In the era of globalization and these events that push to reflect on the importance of the negotiations imposed by the international context, Morocco is also called to take advantage of this new era by appealing its many strengths namely: its strategic position, the relations maintained with Europe, the reintegration of the African Union in 2017, the political stability... to adopt a strategy which aims, ultimately, to project an image of a Morocco open to negotiations aimed at defending its economic interests in Africa and political like the Sahara issue. In sight of its integration into the world economy, Morocco should arm itself with the instruments and means to strengthen its position as African leader following the example of its French ally (Constable of Africa) considered as a pioneer of economic diplomacy which is the battle horse of French foreign policy. Promoting exports, enhancing attractiveness, attracting foreign direct investments and increasing the number of actions in Africa are actions on which the kingdom should focus in order to increase its chances of becoming an active player in economic diplomacy. The central question of this article is: What are the results for the diplomatic actions undertaken by Morocco after the reintegration of the African Union? To answer this central question, we will start by studying Moroccan foreign policy towards its foreign political allies in general and African in particular by focusing on all actions undertaken by Morocco in this direction at the dawn of a trend of negotiations started around the world. Then, highlight the strengths and opportunities for improvement that the kingdom should focus more on to move forward and present an image of an open and attractive Morocco.

Keywords: *Economic diplomacy, Economic intelligence, International relations, Foreign direct investment, Morocco-Africa, Foreign policy, Exportation, Economic war, Market intelligence, Influence*

1. INTRODUCTION

Located at the junction of the Atlantic and the Mediterranean, the Kingdom of Morocco enjoys a unique geostrategic position allowing it to be at the crossroads of several civilizations and to position itself as a true Euro-Mediterranean-African zone close to the Arab world and Europe, compared to its limited resources Morocco enjoys a favorable position allowing it to maintain

relatively correct relations with its neighbors. However, its borders are threatened and represent a source of fragility: in the north, Spain still has two enclaves located on Moroccan territory, Ceuta and Melilla, and several territorial disputes continue to affect relations between the two countries. The resources of the Atlantic Ocean bordering Morocco, such as fish or oil, fuel the greed of Spain, supported by the European Union. In the east, the borders with Algeria are still closed, which is only the visible part of more complex diplomatic problems. In the south, finally, disputes remain with Mauritania, and the status of Western Sahara is still not defined by the UN, although Morocco considers from the outset this territory as its "southern provinces"¹. Aware of this situation, after negotiations that lasted more than five years, Morocco has been able to reintegrate the African Union the goal is not only to resolve the disputes noted before but also to diversify the external markets by offering Moroccan entrepreneurs a regulatory framework and adequate legal These fields are economic diplomacy that did not replace classical diplomacy but has become its inseparable complement, it covers the fields of investing beyond borders, to negotiate, to support the companies that work in the field. And thus, the promotion of national interests. Under South-South cooperation, Morocco continues to develop its relations with African confreres during the reign of His Majesty King Mohamed VI who has increased visits to Africa and emphasized the importance of developing public partnerships. -private, facilitating technology transfer in a mutually beneficial framework and co-development in a fair, just, accountable, balanced and supportive relationship.

2. THE NEW STRATEGIC ORIENTATIONS

"In line with this logic of sharing and solidarity, His Majesty the King has put in place an innovative strategy of cooperation with the rest of the African continent, materialized by the signing of more than 1,000 conventions and agreements during 50 years, and Royal visits to 30 countries during the last 20 years. These actions resulted in Moroccan investments in Africa amounting to US \$ 3 billion during the period 2008-2017, i.e. 80% of Moroccan investments abroad. The Kingdom thus became the 2nd largest African investor on the continent, the leading African investor in West Africa. In sum, Morocco's cooperation with Africa is integrated and multidimensional, combining the economic, the social, the cultural and the cultural."² The Moroccan Minister Delegate for African Affairs says that the economic strategy developed by Morocco aims to prepare our country as a regional hub for co-development in various key areas. Leaving the African Union in 1984 to protest against the RASD (State proclaimed in 1976 by the Polisario Front and sits for the first time as a member of the OUA), a message was delivered by Ahmed Reda Guedira following the decision of the late Hassan II: "Here, and I deplore it, is the time to separate. Waiting for wiser days, we say goodbye and we wish you good luck with your new partner."³ This separation has deprived Morocco of several opportunities to defend its economic interests, nevertheless Morocco has always been present on the continent in transition through foreign direct investment, signing agreements and partnerships. King Mohammed VI has made 51 visits to 26 African countries since 2002, while Morocco has been visited by African heads of state less than 31 times since 2000, and no fewer than 31 times by heads of state. African. Nacer Bourita (Minister of Foreign Affairs in Morocco) said during the celebration of Africa Day: "As the sovereign announced when Morocco returned to the African Union, 952 agreements were concluded between the kingdom and its African partners, with 80% of the continent's countries. This pace of signing agreements has accelerated since 2014, thanks to the royal tours, with the conclusion of 426 agreements with 15 countries, involving

¹ Les relations internationales du Maroc : Le Maroc à la recherche d'une identité stratégique, Y. Abourabi, Le Maroc au présent 2015, Ed. Centre Jacques-Berques, p : 569

² Mohcine Jazouli, Moroccan Minister Delegate for African Affairs, during one of his interventions at the CAPP Conference, "in Paris, on Tuesday, June 11, 2019.

³ <https://www.jeuneafrique.com/188357/politique/jour-maroc-a-quitte-lorganisation-de-lunite-africaine/>

80 Moroccan public and private economic operators and 30 African partners. Since 2014 also, some 34,000 housing units have been launched by Morocco on the continent, in addition to 24 social projects and projects for the benefit of small and mid-companies. (...)»⁴ To support its strategy, Morocco has developed extensive diplomatic coverage in Africa to better serve the countries of the continent by mobilizing human and material resources to carry out the missions entrusted to them. Promoting the development of the African continent is one of the main missions attributed to diplomatic representations. Indeed, Morocco has 91 diplomatic representations worldwide including 29 Moroccan embassies in Africa, the last is inaugurated in Pretoria in South Africa, some of which have economic advisers. The latter are considered as active actors of the Moroccan economic diplomacy in the country of accreditation, their role is not limited to reassemble the information but also to accompany the national companies and to advise them for a better implantation in the countries of 'Home. Morocco has also played an important role in maintaining and consolidating peace in Central Africa and Congo. Rabat's behavior in Africa aims to promote Morocco's image abroad and increase the influence of Moroccan companies. For Charles Saint-Prot: "Morocco has increased aid to several countries in Africa (...) and canceled the debts of the least developed countries."⁵ Such offensive diplomacy also allows the kingdom to access African resources at competitive prices, to reduce the cost of production and to conquer new markets by diversifying foreign markets. The activities mentioned above enable Morocco to ensure its presence and strengthen its position within the international and more specifically African system. Africa today is at the heart of the concerns of international powers, as China, which has become the world's leading economic power since the end of 2014⁶, is constantly increasing its actions in the continent in transition. China's transition from a communist economy to a market economy opens to the world via an aggressive trade policy aimed at redrawing the map of world trade. The Silk Road is proof of this. To conquer Africa, several actions have been led by Beijing including the multiplication of meetings that have led to the realization of many bilateral and multilateral free trade agreements.

3. SOME FIGURES

Anxious to develop its position of African leader and aware of the importance of the development of South-South relations considered a key factor of success, Morocco has made investment in Africa a major concern especially in the telecom sectors, banks, building and public works (BTP). It should be noted that Moroccan banks are operational in 30 African countries. The list of projects conducted by the public and private operators of the kingdom is far from stopping there. "Over the next few years, there are already about 4 billion dirhams [about 357 million euros] investment commitments of Moroccan companies to African countries," says Abdou Diop, managing partner at the firm Mazars and President of the Africa Commission of the General Confederation of Enterprises of Morocco (CGEM). Banks and telecoms with an envelope of 5.9 billion DH account respectively for 53 and 17% of investments injected into Africa, while the industry accounts for 11% of these flows against 5% for holdings. The financial sector is experiencing a real boom with the Moroccan banks that weave and consolidate their networks, Attijari Wafabank, the Moroccan Bank of Foreign Trade (BMCE) and the Banque Centrale Populaire (BCP) are very active in the continent, the latter has bought 50% of the capital of the Atlantic Bank which totals for Morocco an investment portfolio of 43.7% in 2015 and a stock of 6.9 billion (latest figures released). The statistics of the Office des Changes give Moroccan direct investments in Africa which reached a record level in 2010 with 4.6 billion dirhams, or 92.2% of total Moroccan direct investment abroad.

⁴ Oumar Baldé, Publication : 13 juin 2017, Affichages : 5363, les Echos

⁵ Charles S. Prot, 2014, « La Diplomatie africaine du Maroc : un exemple de coopération Sud-Sud », Tribune n°504

⁶ FMI

This clearly means that Morocco concentrates its investments abroad to Africa. They recorded an average annual growth of 4.4% over the period 2008-2015. They represent an average of 89.5% of total FDI inflows from Morocco to the mainland and 53.1% of total Moroccan FDI abroad in 2008 and 2015. Investments in sub-Saharan Africa more than doubled in 2015 to 3 billion dirhams against 1.2 billion dirhams in 2014 and represent 40% of total Moroccan direct investment abroad and 97.2% of direct investment in Africa. West Africa is the leading recipient of Moroccan direct investment in Sub-Saharan Africa, with an average of 64.7% over the last five years followed by Central African countries (25.3%) and East Africa (10%)⁷. By country, Côte d'Ivoire is the first recipient country of Moroccan investment stock in sub-Saharan Africa in 2015 with 4.8 billion dirhams. This amount represents 10.5% of the stock of foreign direct investment held abroad and 28.4% of the stock of FDI in Sub-Saharan Africa. It is followed by Mali with an outstanding amount of 4.2 billion DH, Benin (1.6 billion DH) and Gabon (1.4 billion DH). The outstanding amount of these four countries represents 70.5% of the stock of Moroccan direct investment in sub-Saharan Africa. These figures reflect the involvement of the Sherifian kingdom in the continent in transition, supporting its strategic vision based on balanced and win-win relationships. In this strategy, its instruments of conquest of these different African markets are diversified and constitute a powerful tool of influence on a continental scale that allows Morocco to consolidate its achievements abroad.

4. THE STATUS OF REGIONAL POWER OR AFRICAN LEADERSHIP

The richest countries need the poor countries to ensure the continuity of their growth through access to raw materials always cheap and without competition⁸. Africa represents for the rich countries a source of raw materials, one speaks now of France-Africa, China-Africa or others. France has a special status in Africa, former colonizer of 19 countries in sub-Saharan Africa⁹ it is appropriate to speak, not of colonialism¹⁰ strictly speaking, but of colonialist exploitation. French foreign policy is also expressed by means other than military, the French-speaking world is a major piece of French diplomacy in Africa: the development of French culture with many French institutes that promote French cinema and art in the world. Since 2000, an unmissable event has been created, to seal their unions, Chinese and African are found every three years in the framework of the China Africa Cooperation Forum (FOCAC). These regular meetings have resulted in many bilateral and multilateral free trade agreements. In 2007, China created an investment fund exclusively dedicated to development projects in Africa, with \$ 1 billion at its launch and regularly abandoned. This privileged partnership will promote access to scarce raw materials (hydrocarbons, scarce resources, timber) whose development is in great need and allow China to easily find business opportunities. Thanks to its price competitiveness, China has become since 2009 the first trading partner of Africa¹¹. Just like Africa, Latin American countries also had their share of exploitation - for example through debt - like Colombia, Panama, Ecuador and Venezuela. The latter is a concert example of a poor country enriched by oil¹², Hugo Chavez elected president of Venezuela in 1998, Chavez immediately adopted draconian measures taking over the control of courts and other institutions, and he denounced the shameless imperialism of the United States and spoke vehemently against globalization¹³. Thanks to natural resource revenues, H. Chavez was able to finance a set of social policies: education and health for the poor in Venezuela.

⁷ Les investissements marocains à l'étranger : 90% pour l'Afrique, La Tribune published on 31.07.2017

⁸ Gunder, Frank André, Le développement du sous-développement : Amérique Latine, Maspero, 1970.

⁹ Bénin, Burkina Faso, Guinée, Cote d'Ivoire, Mali, Mauritanie, Niger, Sénégal, Togo, Tchad, Congo, Gabon, Cameroun, Madagascar, Comores, Iles Maurice, Seychelles, Djibouti, République Centrafricaine

¹⁰ Perspectives diplomatiques, les politiques étrangères au XXIe siècle, Ed. Du Net 2017

¹¹ F. Kemache, 2017

¹² Venezuela was the 4th largest exporter of oil and 3rd supplier of the United States in 2002

¹³ J. Perkins, The confessions of a financial assassin, Ed. Alterre 2005

He was a model of a regional leader who had stood up to the United States but had good relations with dictators something that tainted his image as a leader. Venezuela is currently on the verge of chaos because of the sanctions imposed on it. Moroccan diplomats should study deeply the cases of third world countries that wanted to acquire the label of regional leader and draw lessons allowing them to stand out and go forward in the steps taken by the Moroccan monarch in economic diplomacy regional. *"Some argue that through this commitment, Morocco would seek to gain leadership in Africa. I answer to them that it is to Africa that the kingdom seeks to give the leadership"*¹⁴, the vision of the monarch is very clear compared to its intervention in Africa the policy adopted by Morocco is part of a logic win-win not aiming at reproducing the mistakes of developing countries or taking advantage of Africa's natural resources at half-price, but rather of being a continuation of technology transfer and of sustainable investment to promote the exchange relations established in a south-south direction. Morocco was congratulated by the international opinion for the efforts made by the monarch during the reintegration of the African Union, a remarkable entry qualified even as exceptional marked by the cancellation of the debts of 25 least developed countries of Africa Sub-Saharan Africa and the exemption of their products from customs duties. As mentioned before, Morocco enjoys good diplomatic relations with its Western allies that facilitate a better integration in sub-Saharan Africa and encourage it to assume the role of leader in the continent in transition. Morocco under Mohamed VI puts on the economy as the engine of the diplomatic action, the conflict of the Sahara is for a long time a subject of discord within the African international community which the monarch tries to solve by making use of the approaches éco-diplomatiques allowing him to strengthen his friendships on the question of the Sahara judged as a sacred cause by his Majesty as his father. Being active in economic diplomacy is not enough to have a status of regional power, in North Africa for example this status naturally suits military powers such as Egypt or Algeria¹⁵.

5. INFORM YOURSELF, PROTECT YOURSELF OR INFLUENCE: INTEGRATION OF EI

In a context of fierce economic war, economic intelligence has become a weapon by which any country should arm itself to maintain its position in the international context. Obviously, states and companies are the stakeholders of an economic war that hides its name¹⁶. Didier Lucas and Christian Harbulot put forward the following: "Aggressive strategy based on the use of economic allocations to achieve national objectives".¹⁷ Perceived as a tool of competitiveness, developed countries have made economic intelligence a battleground. The combination of several mutations - globalization, digitization and market opening-produces an unstable economic environment characterized by the frequency, amplitude and aggressiveness of competitive interactions. Countries must therefore develop a sophisticated intelligence that enables them to defend their economic interests by means other than war. Claudine Revel¹⁸, in a repository that she produced, the definition of the most updated EI according to the global economic context is as follows: "The economic intelligence, commonly called IE, can be defined in France as the mastery, the protection and exploitation of information, to understand and anticipate the external environment, its actors, its risks and opportunities, protect the strategic information heritage and act on national, European and international levers of influence, all in from open sources and in compliance with the rules to ultimately contribute to creating value.

¹⁴ delivered by His Majesty during the Royal Address on 31.01.2017

¹⁵ F. Kemache, *l'Art de la Diplomatie économique*, l'Hamattan 2017

¹⁶ J.M. Houissoud, F. Menier, *Guerre économique, guerre en temps de paix ?*, 2009, Ed. PUF, 2009, p.239

¹⁷ D. Lucas et C. Harbulot, *la guerre économique est-elle un paradigme des rivalités INTERNATIONALES ? La France a-t-elle une stratégie de puissance économique ?*, La Vauzelle 2004,

¹⁸ The interministerial delegate for economic intelligence until 2015

It is often summarized by the triptych watch / anticipation, economic security, influence.¹⁹ EI is different from economic espionage, they are two different concepts from a legal and ethical point of view. EI is a way for states to protect local businesses in their innovation strategies and to conquer new markets against a backdrop of harsh economic war. Indeed, the States remain more than ever decisive actors in the evolution of the economic field, like the other countries, Morocco begins to become aware of the importance of the economic intelligence component after years of ignorance the workings of the international environment. The integration of this parameter is manifested in the creation of departments of strategic intelligence at the level of the ministries like the Ministry of Foreign Affairs and Cooperation, this department has for main mission the processing of the strategic information collected by the embassies for develop a culture of watch and protection to cope with changes and crisis situations, a report by country and by sector is periodically available to interested Moroccan exporters. This service will also collect as much information as possible on the economic activities of Morocco's competitors in certain priority sectors, including Aeronautics, Textile, Automotive, Wire and Cable²⁰. Another institution with a strength of proposal and defending the interests of Moroccan companies by ensuring a prosperous and optimal environment for the Moroccan economy²¹: the General Confederation of Enterprises of Morocco has created a special commission dedicated to the management of Morocco-Africa relations. This commission works to continue and reinforce the actions carried out by the CGEM to enable Moroccan companies to internationalize in the wake of national champions and to take advantage of their field expertise, through a network of public and private partners. It also works to strengthen business relations with its foreign counterparts²², among the projects drawn by this commission: the monitoring of international relations and agreements signed by Morocco, the support of Moroccan companies with focus on SMEs, facilitation access to financing... It should be noted, however, that the Economic Intelligence dimension has also been integrated into the curricula within Moroccan universities and colleges in order to make future managers aware of the importance of this aspect. Abdelmalek Alaoui²³ sees in EI the ambition of an approach that would allow the Kingdom to strengthen its competitiveness while allowing calm expression of national solidarity. Sub-Saharan Africa has become a highly coveted region, with multinational companies not settling at random. A preliminary study of the existing potential takes place, an analysis of the outlets is also essential what matters is not only the information but also its treatment at the right moment, its analysis and its diffusion are also variables of a crucial importance for the success of any market research process. For their part, some sub-Saharan countries have created investment promotion agencies (IPAs) to attract foreign investment to enable certain international groups to establish themselves there. This initiative is included in the field of economic intelligence as it allows Sub-Saharan countries to learn about market needs and protect themselves. FDI in Africa has risen sharply in recent years, as FDI inflows have become a source of external financing for African countries, which in turn have increased their vigilance in collecting information. its treatment, analysis and security. Morocco, for its part, has embarked on the path of strengthening relations with sub-Saharan countries in order to defend the national interest at the heart of African diplomatic action through a foreign policy based on economic intelligence considered as a means of competitiveness and performance. Note that there is still more to be done in terms of Moroccan economic intelligence, it is essential to launch specialized programs to train executives in economic intelligence and endow them with technical and managerial skills of future executives.

¹⁹ A. Guillon, N. Moinet, *Intelligence économique*, Pearson 2016, p : 12

²⁰ A. Dafir, G. Salam, *L'intégration de la diplomatie économique dans un dispositif national d'intelligence économique: Quels enjeux pour le Maroc?*, R2IE Vol.8 (2/2016)

²¹ Official website of the CGEM, <http://www.cgem.ma/fr/cgem>

²² Official website of the CGEM, <http://www.cgem.ma/fr/cgem>

²³ President of the association of IE in Morocco

6. CONCLUSION

The new Moroccan dynamic goes hand in hand with the changes made in Africa. The forgotten continent is no longer so, it is rather a spectacular success and today attracts the largest foreign investors in the world through the developed countries to the emerging countries that are also beginning to take an interest in the wealth of the world. Africa that make e continent in transaction a niche market. The monarch of the Kingdom of Morocco has opened encouraging prospects for South-South cooperation and has undertaken several actions in this direction allowing the country to open to the world starting with the African door. That said, there is still potential that Morocco should exploit to improve and develop its position on foreign policy. This area should no longer be reserved only for the high authorities of the kingdom, diplomats should be trained in economic diplomacy and economic intelligence allowing a major opening on the international scene. The strategic orientations aiming at multiplying the external outlets of Morocco, ensuring the security of its supplies of raw materials and promoting the internationalization of Moroccan companies²⁴ should be studied more to boost the actions carried out in this space with high potential. As a coveted area, Morocco must also take into account the fierce geopolitical and geostrategic competition currently taking place in Africa by adopting drastic measures by integrating the economic intelligence dimension into the process of economic diplomacy for a better conquest of African markets.

LITERATURE:

1. A. Bamba & D. Alassane Mohamed VI : la diplomatie économique au service du règlement de la question du Sahara occidental (1999–2015),
2. A. Dafir, G. Salam, L'intégration de la diplomatie économique dans un dispositif national d'intelligence économique: Quels enjeux pour le Maroc? , R2IE Vol.8 (2/2016),
3. A. Dafir, La diplomatie économique et l'insertion internationale: le cas du Maroc, 2013
4. A.Guilhon, N. Moinet, Intelligence économique, Pearson 2016, p : 12
5. B. ACHCHAB, D. HARRIZI, Les défis de l'intelligence économique au Maroc, 2013
6. Charles S. Prot, 2014, « La Diplomatie africaine du Maroc : un exemple de coopération Sud-Sud », Tribune n°504
7. D. Lucas et C. Harbulot, la guerre économique est-elle un paradigme des rivalités INTERNATIONALES ? La France a-t-elle une stratégie de puissance économique ?), La Vauzelle 2004
8. Echanges Maroc-Afrique Subsaharienne, Département des Statistiques des Echanges Extérieurs, Rabat 2017,
9. F. Kemache, l'Art de la Diplomatie économique, l'Hamattan 2017
10. G.C. Delacarrière, la diplomatie économique le diplomate et le marché, Economica, 1998
11. Gunder, Frank André, Le développement du sous-développement : Amérique Latine, Maspero, 1970.
12. J. Perkins, Les confessions d'un assassin financier, Ed. Alterre 2005
13. J.M. Houissoud, F. Menier, Guerre économique, guerre en temps de paix ?, 2009, Ed. PUF, 2009, p.239
14. S. Dkhissi et al, 2012, « Les relations Maroc-Afrique : les voies d'une stratégie globale et renouvelée » Programme d'études compétitivité globale et positionnement du Maroc dans le système mondialisé, rapport général de l'étude thématique, Novembre 2012, Institut Royal d'Etudes stratégiques, p : 12
15. Y. Abourabi, Les relations internationales du Maroc : Le Maroc à la recherche d'une identité stratégique, Le Maroc au présent 2015, Ed. Centre Jacques-Berques, p : 569

²⁴ S. Dkhissi et al, 2012, « Les relations Maroc-Afrique : les voies d'une stratégie globale et renouvelée » Programme d'études compétitivité globale et positionnement du Maroc dans le système mondialisé, rapport général de l'étude thématique, Novembre 2012, Institut Royal d'Etudes stratégiques, p : 12.



Supported by: THE CITY OF VARAŽDIN

