DIGITALES ARCHIV

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

Hadad, Shahrazad

Article

Analyzing corporate social entrepreneurship specific to knowledge economy with a focus on the Romanian economic context

Management dynamics in the knowledge economy

Provided in Cooperation with: National University of Political Studies and Public Administration, Bucharest

Reference: Hadad, Shahrazad (2018). Analyzing corporate social entrepreneurship specific to knowledge economy with a focus on the Romanian economic context. In: Management dynamics in the knowledge economy 6 (2/20), S. 247 - 264. doi:10.25019/MDKE/6.2.04.

This Version is available at: http://hdl.handle.net/11159/3686

Kontakt/Contact ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: *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/termsofuse

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.





Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

Shahrazad HADAD

Faculty of Business Administration The Bucharest University of Economic Studies 2-2A Calea Grivitei, sector 1, Bucharest, RO

Academy of Romanian Scientists, Romania 5 Splaiul Independenței, 05009 Bucharest, RO shahrazad.hadad@fabiz.ase.ro

Abstract. The knowledge economy is defined, according to the World Bank, through the integration of its four main component elements: education and training, innovation systems, information infrastructure, economic incentives and institutional regime. The first part of the paper reconciles knowledge economy and corporate social entrepreneurship, while the second part focuses on the education and training, and innovation pillars of the knowledge economy, and more specifically it resorts to the framework of corporate social entrepreneurship as a transformational innovation strategy for company growth. The current investigation has been conducted by means of case study method having the following research question: "How does corporate social entrepreneurship manifest in corporations?"., accompanied by secondary research questions such as: "How does the company mobilize its resources to create an innovative product/service/approach in order to tackle the social issue?, How does the company contribute to local development?". The findings revealed that the social issue of high levels of nitrates in the waters inspired the company to combine a testing tool (technological innovation) with marketing communication which eventually resulted in an innovative approach for the company to increase the loyalty of their customers and to reach out for new ones. The present paper has been developed based on the author's doctoral research.

Keywords: knowledge economy; business models; corporate social entrepreneurship; innovation; business strategy.

Introduction and short literature review

The current paper attempts to reconcile two very new concepts: knowledge economy and corporate social entrepreneurship. In broad terms, knowledge economy refers to the generation and management of intangible resources, whereas corporate social entrepreneurship (CSE) is social entrepreneurship undertaken by large corporations. The more elaborate theoretical foundations of the presented

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

paper on CSE can be found in Hadad (2015), and on knowledge economy in Hadad (2017a, 2017b).

The knowledge economy has come to replace traditional economy, as societies have evolved and the emphasis has moved from tangible assets towards knowledge in all the processes of the economic, business and education sectors (Mehmood & Rehman, 2015). This shift is reflected in institutional transformations and long-run economic changes that are supported by the national innovation policies and, moreover, economists and scientist have arrived at the conclusion that they need to integrate knowledge in their theoretical models. This gave rise to "New growth theory" which is an acknowledged pursuit of different researchers who try to better understand the roles that both tech and knowledge play in enhancing economic growth (Mehrara & Rezaei, 2015).

Knowledge economy represents the stance in which knowledge creation and capitalization are paramount to the generation of wealth. One of the most direct definitions given to knowledge economy is the one pertaining to Brinkley (2006, p.3) "Knowledge economy is what you get when firms bring together powerful computers and well-educated minds to create wealth". This definition opens the stage for knowledge industries and brings into the discussion the characterization of such economy in which tech investments and highly skilled labor force (Bejinaru, 2016) are brought together to build sustainable business development.

OECD has recognized the importance of knowledge economy and has defined it as "economies which are directly based on the production, distribution, and use of knowledge and information" (OECD, 1996, p.7). As knowledge is one of the main drivers of the knowledge economy, the business sector started to develop and implement a series of knowledge strategies aiming at creation, acquisition, sharing, transformation and using intelligently the new intangible resources (Bolisani & Bratianu, 2017; Bratianu & Bolisani, 2015).

According to Hadad (2017b), Romania underscores in ICT, whereas it has a good standing in education and training. The paper revolved around finding strategies to improve ICT, followed by EIR, Innovation, and Education to ultimately ensure the development of knowledge economy in Romania which are listed below.

(Hadad, 2017b)			
Public policies for learning and	Public policies for ICT and		
education	Innovation		
Governmental program that will	Governmental program for the		
sustain life-long learning in Romanian	financial support of SME's investments		
SMEs by providing financial assistance	in hardware and software and the		
for employee training (S1.1)	development of webpages (S2.1)		
Governmental program that will	Governmental program for the		
sustain the development of knowledge	financial support of schools'		
repositories at the level of	investments in hardware and		

Table 1. Public policy strategies to enhance KE in Romania(Hadad, 2017b)

technological clusters, industry associations, and other professional organizations by providing financial assistance for hardware acquisition and software development in order to facilitate knowledge transfer (S1.2)	educational software and the training of staff for the use of ITC in teaching and learning (S2.2)
Governmental program that will sustain the development of professional schools (by providing support to the pupils, and companies hiring them) (S1.3)	Governmental program for the advancement of the e-government agenda (i.e. the digitalization of public services) and creation of SMEs (S2.3)

In the fast-paced changing environment, under threat of fierce competition and technological advancements, firms need to keep up in order to remain competitive in the market and for doing so they need to seek ways to increase the innovativeness of their employees and remain competitive by means of *corporate entrepreneurship* (Kuratko, Hornsby, & Hayton, 2015). They can as well remain competitive by generating knowledge - creating new business units, processes, products, services which stand for corporate entrepreneurship. A consistent body of researchers find Sharma's and Chrisman's (2007, p.88) definition most compelling, Corporate Entrepreneurship refers to the process through which individuals in already established companies recognize and exploit opportunities, "process whereby an individual or group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization".

The concept of Corporate Social Entrepreneurship (CSE) is a special type of corporate entrepreneurship and a newly emerging business paradigm that does not have evident boundaries from its context. CSE basically "aims to produce a significant and comprehensive transformation of the way a company operates" (Austin & Reficco, 2009, p.3). Being an emergent concept, literature is scarce in this respect and there is little evidence in order to conduct a statistical study, and this is why we choose to analyze the phenomenon of through case study research in order to derive an in-depth understanding of corporate social entrepreneurship set in the context of the knowledge economy.

Alongside strategies, knowledge economy deals with the creation of knowledge and CSE can easily be assimilated into the domain. Corporate social entrepreneurship emerged in 2005, in the research conducted by Hemingway and it referred to different personal values that could act as a catalyst for improving business while acting as a moral agent in the context of favoring external factors (Hemingway, 2013). Therefore, CSE is a combination of both personal traits and organizational culture (Ghinea & Bratianu, 2012), in a dynamic business environment. The enabling environment will prove to be the key condition for the success of CSE (Austin & Reffico, 2009). The only public document to attest how CSE can be enabled pertains to Crets (2012) but it only focuses on the issue of environmentally sustainable business, recycling and reducing waste.

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

According to Austin, Stevenson, and Wei-Skillern (2006, p.6), CSE represents "process of extending the firm's domain of competence and corresponding opportunity set through innovative leveraging of resources, both within and outside its direct control, aimed at the simultaneous creation of economic and social value". Hadad (2015, p.190) has defined three CSE strategies: CSE as transformational innovation tool; CSE as a market development tool; and CSE as a local development tool. We chose to focus on CSE as transformational innovation tool that resorts to the "R&D capabilities of the company in order to develop new services and products which target existing or emerging markets". In this case, the social issue becomes a catalyst and helps the company channel its capabilities into new directions by mobilizing the internal and external resources to create a new market space and reach out to new customer segments and non-traditional customers. This strategy exhibits similarities with a blue ocean strategy since it requires the company to venture into unexplored fields. Moreover, the emphasis is placed on the technological innovation meant to solve the social problem, and most of the times this innovation comes along with knowledge creation, a change in the business model or maybe an integration into the already existing structure of the company. The company performance depends on the nonlinear integrators of the intellectual capital (Bratianu, 2013), including the role of transformational leadership (Bass & Riggio, 2006; Bratianu & Anagnoste, 2011).

Methodology

Research questions

The purpose of the research is to develop an invaluable and deep understanding of CSE that will result in new evidence from the real—world behavior for the dyad practitioners-theoreticians. The choice for the case study research method mainly resides in the descriptive key research question that we address in this study: "How does CSE manifest in corporations?". There is evidence that the case study is being used with growing confidence as a rigorous research strategy in its own right (Hartley, 1994, 2004). Several secondary research questions were formulated, which were directly linked with the specificity of each case and were drawn from the literature explored as well, in order to get a clearer view on the ways CSE is regarded, it manifests and it is sustained throughout the organization:

- How does the company tackle the social issue?

- How does the company mobilize its resources to create an innovative product/ service/ approach in order to tackle the social issue?

- How does the company mobilize its resources to identify new unserved market segments in order to counteract the social problem?

- How does the company mobilize its resources to devise a new product to address an unserved market segment in order to counteract the social problem the community faced?

- How does the company contribute to the local development, and in what the actual local development does consist?

- How does the company ensure a sustainable local development of the community whose social problem is addressed?

- How does the company ensure and secure its financial sustainability?

Use of theory

Concerning the use of theory, we only remind the previously identified corporate social entrepreneurship strategies: CSE as a transformational innovation tool, CSE as a market development tool and CSE a local development tool. As defined by Hadad (2015) CSE as transformational innovation tool represents stance in which the social problem targeted by the company acts as a mobilizer for the R&D resources and the focus is on creating a new product, service, approach, or a combination of all of them that solves the social problem.

Case study data collection and analysis

Our case study data collection was done by analyzing the documents available on each company's website, newspaper articles, blogs and different statistics and reports regarding the companies.

Among the techniques used for analyzing the case study data were key assumptions that we made when we defined our research questions and the case. Some examples of key assumptions made are given below:

- When designing a new business development strategy based on social principles the company is driven mainly by its interest in solving the social community issue identified;

- When designing a new business development strategy based on social principles the company considers mainly the degree of novelty of the product/ service/ approach developed to tackle the social issue;

- When designing a new business development strategy based on social principles the company considers mainly the opportunity for adapting existing products/services to the needs of the new unserved clients/ markets.

These assumptions have been implicit at the initial stage of analysis, so we anticipated and we planned. We developed a pattern of expected findings within an established theoretical framework (grounded on literature review and practice analysis) and we compared our empirically based pattern with the previously developed theoretical framework.

Based on the previously stated research assumptions, we decided to concentrate on companies for which we found sufficient information in order to make our case on corporate social entrepreneurship in the knowledge economy. The present paper will only focus on Aqua Carpatica which will serve to make the case for corporate social entrepreneurship as a transformational innovation tool, whereas the other two cases will be presented in subsequent papers.

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

Generalization from a case study

Case study generalization is done through analytic generalization, not through statistical generalization. The case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a "sample," and in doing a case study, "[the] goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)." (Yin, 2010, p.15). The findings contribute to the general theory of the corporate social entrepreneurship phenomenon.

Carpathian Springs - Aqua Carpatica - Testul Purității (the Purity Test)

Defining the case

Company description

During 1994-2002, Dorna Apemin SA is set up as the first action of the Valvis Holding. The main activity of this company was to bottle mineral water from its own spring in Dornelor Depression. The namesake of this location will become the name of the very successful DORNA brand. Throughout 1996 and 1999, Valvis Holding comes up with three new brands: Dorna, Poiana Negri, and Izvorul Alb. All of these three brands will be acquired by The Coca-Cola Company in 2002.

SC Carpathian Springs SA was established in 2000 by Jean Valvis based on the experience of the successful team that created Dorna mineral water and LaDorna brands. Carpathian Springs represents a daring project based on the experience in the field and on the knowhow of the company management.

The group also owns a division for dairy products, Dorna Lactate SA (acquired by the French multinational Lactis Group in 2008), distribution division, Dorna Hellas SA (acquired by the French multinational Lactis Group in 2008), a wine division, Viti-Pomicola Samburesti SA (2005), and two eco-agricultural production divisions, Dorna Agri SA (2007) and Agroelectrica SA (pilot project, it combines eco cultures, energy plants, solar energy, wind energy, bio fruits and vegetable greenhouses – with an energy co-generation system).

We are to focus our attention on the Carpathian Spring division of the Valvis Holding as a corporate social entrepreneurship case study regarded as an innovation tool. Aqua Carpatica, the only water in the world with 0 g nitrates per liter, was launched on the Romanian market at the end of 2010 and for several years it was among the first brands in the professional rankings attaining different EFFIE awards. In 2015, the company reached its peak for its Purity Test Campaign for which it has been awarded The Grand Effie Award Romania, the Golden Effie medal (non-alcoholic beverages category), and also a Bronze Effie medal (for the experienced brand's category) (Wall-Street, 2015). The portfolio (Figure 1) of the company includes: Aqua Carpatica Sparkling Water (0.5l and 1.5l – laboratory analyses have revealed the fact that this sparkling water is a natural mineral water, naturally sparkling, hydrogen-carbonated magnesian, and calcic without physico-chemical and microbiological indicators of impurities), Aqua Carpatica Forte Sparkling Water (PET: 0.5l and 1.5l; glass bottles glass bottles: 330ml and 750 ml – enriched in natural carbon dioxide), Aqua Carpatica Still Water (PET: 0.5l, 1.5l and 2l; glass bottles: 330ml and 750 ml), and Aqua Carpatica Still (5l).

With the slogan "The purest mineral water in the world", Aqua Carpatica currently employs 71 workers. The philosophy behind the logo of the company resides in the fact that the naturally mineral water from Paltinis spring is a naturally sparkling (hydrogen-carbonated) and strongly mineralized (magnesium and calcium) water containing 0% nitrates. This water is pure from a physico-chemical and microbiological point of view and it is recommended in low-nitrate diets. On the other hand, the still mineral water is a weakly mineralized still water which does not contain carbon dioxide and the level of nitrates is 0.8mg/l (Bajenaru Spring) and 1.85mg/l (Haja Spring), it is pure from a physico-chemical and microbiological point of view and it low-nitrate diets.



Figure 1. Carpathian Springs portfolio (Aqua Carpatica, 2018)

According to Panaete (2015), Aqua Carpatica has exceeded in a number of sold units Izvorul Alb brand (also created by Valvis). Therefore, in January-May 2015 the most sold Romanian mineral water brand was Borsec with a 200-year old history, followed by Aqua Carpatica and Izvorul Alb. Aqua Carpatica has made its entrance in top three most sold mineral waters given the fact that the brand was created eight years ago (2010), while the other brands have a tradition of decades or even centuries in bottling and selling mineral water. According to the same source, also in 2013, the brand was ranked 19 in "Top 50 strongest Romanian brands", the following year having a spectacular increase being ranked 8 in the "Top 100 strongest Romanian brands" (Biz, 2014).

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

In a stagnant market, the turnover of the company speaks for itself, for Aqua Carpatica has registered spectacular turnover increases, and for 2015 their sales are expected to increase by 50% as compared to the previous year 2014. (Semeghin, 2015). A better evolution of the sales of the company is better depicted in Figure 2.

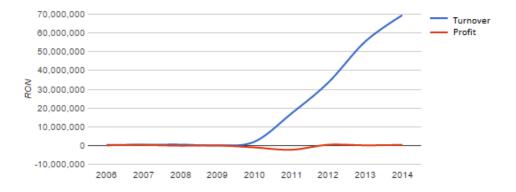


Figure 2. Carpathian Springs sales and profits evolution

The new development stage of the brand has been materialized through a series of stable contracts in countries such as: The United States of America, Great Britain (Whole Foods store chain), Japan (Metro Cash& Carry chain), China, all the Gulf countries (United Arab Emirates, Qatar, Kuwait, Bahrain Kingdom, Saudi Arabia Kingdom, and Oman Sultanate), Russia, Moldova, Germany, and Hungary. Starting July 2015, Aqua Carpatica is sold on the shelves of the Sprouts Farmers Market (supermarket chain in the United States of America owning more than 200 stores in 12 states) which commercializes fresh and organic products offering their customers an experience oriented towards health benefits. This brand is the only Romanian brand that has been certified and homologated as compliant with the US standards and that has partnerships with supermarket chains all over the American continent, and not only with convenience stores (Semeghin, 2015).

Identifying and defining the social problem

Water represents around 75% in the body mass of a baby, 60% of an adult and 50% of an elderly person. This is why babies need three times more the water adults need as reported to their weight. The daily body intake is around 120ml/body. In this vein, the still mineral waters with low mineralization (oligo-minerals) are the optimum choice according to the Ministry of Health Order No. 978/2006. Among these kinds of mineral waters, some are clinically attested by the Romanian Society of Pediatrics (Aqua Carpatica and Aquatique), The Institute for Child and Mother Protection "Alfred Rusescu" (Bucovina) or it self-recommends (Izvorul Minunilor) on the label "recommended for preparing babies' formula".

Careful attention should be paid to the level of nitrates contained by the water used to hydrate and prepare food for the babies. According to a study conducted in 2012 by a team of doctors from the Public Health National Institute Romania, throughout

1997-2005, 3314 cases of methemoglobinemia (also known as the blue baby disease which is, in fact, an acute intoxication with nitrates) were registered. Happily, for 2011 only 84 such cases were nationally reported, out of which 60% comes from the North-East part of the country. High nitrates concentrations can also be found in water from counties such as Dolj, Mehedinti, and Botosani, where 75% of the fountains have a high level of nitrates exceeding the legal limit of 50mg/l. The same study draws on the attention that for babies artificially fed with milk formula during their first 12 months, the possibility for that disease to occur increases due to the fact that they develop a low gastric acidity which allows for the development of nitratereducing bacteria that convert the nitrates into nitrites. Ergo, the toxicity of the nitrates is determined by their transformation into nitrites fostering methemoglobinemia (the methemoglobin results as a consequence of ferric iron oxidation of the hemoglobin at ferric iron, it cannot connect the oxygen determining in this manner a significant drop in tissue oxygenation). It clinically manifests as the brown cyanosis, dyspnea, anxiety, palpitations, confusion) which in 80% concentration leads to asphyxiation and eventually, to the baby's death (www.apcromania.ro). Therefore, infants below six months who drink water containing nitrate in excess of the maximum contaminant level (MCL) (n.a. 10 mg/L) could become seriously ill and, if untreated, may die, and symptoms include shortness of breath and blue baby syndrome (United States Environmental protection Agency, 2015).

Table 2 presents top 10 water brands recommended for hydrating and preparing baby formula with respect to the sodium content (mg/l). According to the team of experts from the Consumer Protection Authority coordinated by associate professor Ph.D. Costel Stanciu, the top clearly revels that Aqua Carpatica ranks second for this niche (Table 2).

Aqua Carpatica decided to embark on the journey of delivering low-nitrates mineral water for babies and in the fight against unclean waters in Romania by initiating Purity Test Campaign (Testul Purității).

Rank	Name	Sodium content in mg/liter	Equivalent in salt – mg/litre (1 mg Na = 2,5 mg salt)
1.	Izvorul Minunilor	0.74	1.85
2.	Aqua Carpatica	0.78	1.95
3.	Aquatique	1.2	3
4.	Vedda (Polonia)	1.25	3.125
5.	Jana (Croatia)	1.7	4.25

Table 2. Ranking of mineral water brands with respect tonitrates concentrations

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

6.	Hipp (Austria)	1.78	4.45
7.	Bucovina	2.88	7.2
8.	Humana (Germania)	5	12.5
9.	San Benedetto	6	15
10.	My Water (Greece)	6.27	15.675

Formulating the research question

The main research question is "How does Corporate Social Entrepreneurship manifest in a corporation?", while the secondary research questions relate to how did the company tackle the social issue and how the company mobilized its resources to create the innovative approach in order to tackle the social issue?

Presenting case study evidence

Corporate antecedents

Water Law. In the early spring of 2012, Aqua Carpatica initiated the Water Law campaign (http://www.legea-apei.ro) through which it aimed to reshape the legal environment with regards to the maximum nitrates concentrations admitted by the law in potable waters and their display on the labels of all mineral waters in Romania. The law has not yet entered into force because it needs 100,000 signatures in order to become official. Protecting the quality of the water is a key element in the environmental politics of the European Union. Because the quality of water sources is not effectively controlled within the limits of the natural frontiers, there emerged the need to create a legislative framework at European level for regulating this matter. Therefore, in 1991, the European Union Nitrates Directive (91/969/CEE) entered into force, and it was among the first legal documents meant to control pollution and to improve the quality of the water. This law stipulated that the maximum value of nitrates in drinkable water is 50mg/l, but many countries have considerably reduced this value for babies. Contrary to this trend, Romania took that upper limit for granted. Therefore, the current law is extremely permissive, according to Government Decision/1020/2005 and technical norms for commercializing mineral water in Romania, the upper accepted limit for the quantity of nitrates is 50mg/l, while for babies, pediatricians all around the world recommend a maximum of 10mg/l according to AFSSA (Agence Francaise de Securite Sanitaire des Aliments, 2001). So far, according to the official information provided by the company, the campaign has reached a number of 70,696 supporters.

The school for a greener Romania. "School for a greener Romania" corporate social responsibility program is an initiative meant to engage kindergartens, schools and

high schools with which Aqua Carpatica has developed partnerships in order to collect and recycle PETs (2012-2013), and paper and cardboard. Every year, the most hardworking schools got prizes in terms of money ranging from 1,500 euro (3^{rd} place) – 2,500 euro (1^{st} place). Beyond the environmental purpose of this project, the company places an important emphasis on fostering in children a special preoccupation towards the environment by asking them to do different homework on ecology in order to create an ecology manual. This campaign civically engages schools, professors, teachers, and last but not least, parents. The program is permanently open to suggestions from its stakeholders in order to improve it. The results of the three campaigns that have been developed so far can be traced in Table 3.

It is worth mentioning that even though, the first campaign had the fewest students and schools involved; they collected the highest quantity of cardboard and paper. The number of actively involved schools progressively increased during the three campaigns, the kilograms of collected and recycled paper and cardboard decreased throughout the years, while the quantity of collected and recycled PETs experienced an exponential increase, and the number of engaged students remained steady in the past two years.

Years	Schools	Students	Cardboard and paper collected and recycled (kg)	PETs (kg) collected and recycled
2012- 2013	425	95,214	175,159	1,320
2013- 2014	750	125,000	163,225	-
2014- 2015	1100	125,000	116,662	150,000

Table 3. Results of the School for a Greener Romania

The company, through the Valvis Foundation has taken different actions to support and help sectors of society in need: it contributed to Children with Disability UNICEF program by helping children with special needs (since 2002), supporting breast cancer fighting program "Fighting Breast Cancer" launched by the independent, nongovernmental, non-profit organization "Renasterea Botoseneana", supporting "Crina Foundation Program" developed by Crina Foundation with the purpose of collecting product donations on a monthly basis for the children of the actual foundation (since 2006), supporting Greek communities in Iasi, Braila, Galati (since 2000); supporting 450 children from Valea Plopului - involving donations of products (since 2011), and Valvis Class – scholarship program for children with high intelligence and abilities but of modest social conditions (since 2008). Moreover, the vision of the company is articulated in five clearly-stated principles: creating guaranteed high-quality products (premium) compliant with European standards, developing the potential of Romania with respect to bio-products; developing the group based on human resources' potential and professionalism; orienting their products towards the health sphere and exporting quality products and gaining their international

recognition. All these principles are based on the core business intention of the corporate entrepreneur, which is sustainability, and which is going to be the catalyst in order to put into practice the vision of the company.

Testul purității. As part of the company's social responsibility endeavors, Aqua Carpatica has launched the Purity Test Campaign in 2014 with the slogan "Together we fight for the purity of all waters in Romania". But ever since it was launched, the water has had low nitrates concentrations being called the "purest water". Through this campaign, the company draws the attention to the high levels of nitrates from both surface and deep waters in our country. All this given to the fact that, in the first year half, nitrates, used in agriculture as fertilizers are dissolved in rain water and get into the water sources, and from here, in everyone's glasses, ergo in their bodies. Then nitrates are chemical compounds that come to being when the mineralization of nitrogenous organic substances from plants and animals occurs. Nitrates are partially absorbed by plant roots and serve as feedstock for the synthesis of proteins and other nitrogen compounds. The remaining surplus contaminates underground water (as it can be found in rivers, lakes, and groundwater).

The first part of the campaign resulted in a map containing all the waters in Romania and their nitrates content (impurity indicator). In order to do so, Aqua Carpatica offered nitrates tests and professor's Gheorghe Mencinicopschi "Do you think you know what you drink" brochure that could be found in chain stores such as Carrefour, Cora, Auchan, Kaufland and Mega Image. The test is a paper band that has at one of its ends a sensitively treated indicator for recognizing the value of water nitrates. A sample of such test can be seen in Figure 3. The test is introduced in the to-be-tested water (deep waters – wells/fountains, surface waters – rivers, lakes, springs, tap water and bottled water) for two seconds. Subsequently, the test is taken out of the water, and after two minutes it can be observed how it changes its color. The color at the end of the tests has to be compared with the benchmark printed on the package in order to be able to tell the level of nitrates the test belongs to.

The second step of the campaign was to register the value of the test on the Facebook application "Purity test" or on the official website of the campaign, alongside with the place where the test has been taken and the type of water on which the test has been carried on. Every registered test contributed to making the nitrates map complete and it could be accessed by anyone who was interested in the cleanness of the water they consumed.



Figure 3. Purity test (Testulpurității.ro, 2018a)

The campaign resulted in 2496 tests that have been carried out, of which 1676 tests were for tap water (Figure 4), 127 tests were for streams, rivers, and lakes (Figure 5), 693 tests were for fountains and springs (Figure 6).



Figure 4. Tap water map (Testulpurității.ro, 2018b)

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context



Figure 5. Streams, rivers and lakes map (Testulpurității.ro, 2018c)



Figure 6. Fountains and springs (Testulpurității.ro, 2018d)

Case study data analysis – CSE as a transformational innovation strategy in the knowledge economy - Discussion

What is actually intriguing is that even though through this campaign the company has invested large amounts of money and also time and human resources, they did not predict a future course of action for the results that they got, they have not centralized them, they have not indicated the areas which had the highest concentrations of nitrates and they did not establish what measures should be taken or how this issues can be counteracted.

Analyzing corporate social entrepreneurship as a transformational innovation strategy brings about an interesting fact about the campaign and the company as a

whole: Aqua Carpatica chose a very rational approach in a category in which the other brands choose to tackle emotions. With this campaign, the company went a step forward and they physically gave their customers a demo product. They created a high level of loyalty among their consumers because that was among the few moments when the customers were actually given the opportunity to test the product they bought. The campaign had as a central theme the interactivity provided by the actual testing. The tests were not invented by Valvis Holding, but they were bought from the United States. Cohn & Jansen JWT agency that was in charge of designing this campaign came up with the idea of using the tests for communication (Wall-Street, 2015).

This was a high exposure action (high risk profile) with different potential repercussions because many customers wanted to test for themselves if Aqua Carpatica products are compliant with the actual markings on the labels, so the company had to be sure they knew what they were advertising for. In this manner, the company opened up to the public and became even more transparent than it used to be. The main objective of the campaign was to influence the buying behavior of the customers in regions with high levels of nitrates and to educate the customer more for them to become more aware of the need to read the labels and become more informed. So the social issue of high levels of nitrates in the waters inspired the company to combine a testing tool (technological innovation) with marketing communication which eventually resulted in an innovative approach for the company to increase the loyalty of the customers and to reach out for new ones.

Moreover, the company made a step further by raising the bar and challenging the competition to provide the market products which ought to be more competitive. By raising the bar that high the company made use of its competitive advantage represented by the natural resources it has at its disposal (the springs with a low level of nitrates) and became an irrefutable benchmark.

Conclusions

One of the lessons that can be drawn from this case study is that when the company has an ultimate competitive advantage, it has to use it, and by using it, it will increase competition on the market and the competitiveness of the products offered. This does not come easy and it requires the mobilizing of both internal and external resources. Moreover, CSE materializes in this present case in transformational innovation and it benefits not only the company but also the local community in which it acts. This initiative did not imply a change in the business model of the company, but it certainly made the competition rethink their business models.

The social problem the company was facing acted as a catalyst for the mobilization of the resources of the company and translated in developing a new approach that targeted educating the population and empowering it. An educated consumer is an informed consumer and he will not settle for less than qualitative products. Aqua Carpatica acknowledged the need of creating a mutually beneficial teaching-learning loop: the company learned from the population about the high levels of nitrates in

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

waters, and then the population learned from the company how to test the water. This side of the strategy provides alignment with the education and training pillar of the knowledge economy.

Disclaimer

Product or corporate names may be trademarks or registered trademarks and are used only for identification and explanation without intent to infringe.

Acknowledgements: The present paper has been financially supported by the Academy of Romanian Scientists, Program No. 15/2018 "Strategies for Implementing Knowledge Economy in Romania".

References

Agence Francaise de Securite Sanitaire des Aliments (2001). AVIS de l'Agence française de sécurité sanitaire des aliments relatif à la fixation de critères de qualité des eaux minérales naturelles et des eaux de source embouteillées permettant une consommation sans risque sanitaire pour les nourrissons et les enfants en bas âge. Retrieved from

http://www.anses.fr/Documents/EAUX2001sa0257.pdf.

Aqua Carpatica (2018). Aqua Carpatica. Retrieved from: www.aquacarpatica.ro.

- Austin, J., Stevenson, H., and Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both?. *Entrepreneurship Theory and Practice*, 30(1), 1-22.
- Austin, J.E., and Reficco, E. (2009). Corporate social entrepreneurship. Retrieved from https://www.hbs.edu/faculty/Publication%20Files/09-101.pdf.
- Bass, B.M., and Riggio, R.E. (2006). *Transformational leadership* (2nd Edition). New Jersey: Lawrence Erlbaum Associates Publishers.
- Bejinaru, R. (2016). Knowledge dynamics impact on intellectual capital in organizations, *Management Dynamics in the Knowledge Economy*, 4(4), 515-534.
- Biz (2014). Top 100 most powerful brands, Retrieved from http://blog.aquacarpatica.com/locul-8-top-100-cele-mai-puternicebranduri-romanesti/aqua-carpatica.
- Bolisani, E., and Bratianu, C. (2017). Knowledge strategy planning: an integrated approach to manage uncertainty, turbulence, and dynamics. *Journal of Knowledge Management*, 21(2), 233-253.
- Bratianu, C. (2013). Nonlinear integrators of the organizational intellectual capital. In Fathi, M. (Ed.). *Integration of practice-oriented knowledge technology: trends and perspectives* (pp.3-17). Heidelberg: Springer.
- Bratianu, C., and Anagnoste, S. (2011). The role of transformational leadership in mergers and acquisitions in emergent economies. *Management & Marketing*, 6(2), 319-326.
- Bratianu, C., and Bolisani, E. (2015). Knowledge strategy: an integrated approach for managing uncertainty. In Garlatti, A., and Masaro, M. (Eds.), *Proceedings of*

the 16th European Conference on Knowledge Management (pp.169-177). Reading: Academic Conferences and Publishing International. Brinkley, I. (2006). *Defining the knowledge economy*. London: The work foundation. Crets, S., (2012). Enterprise 2020: don't stifle your corporate social entrepreneur. Retrieved on April 6, 2018 from http://www.csrwire.com/blog/posts/415enterprise-2020-dont-stifle-your-corporate-social-entrepreneur. Ghinea, V.M., and Bratianu, C. (2012). Organizational culture modelling. Management & Marketing, 7(2), 257-276. Hadad, S. (2015). Analytic hierarchy process analysis for choosing a corporate social entrepreneurship strategy. *Management & Marketing*, 10(3), 185-207. Hadad, S. (2017a). Knowledge economy: Characteristics and dimensions. *Management dynamics in the Knowledge economy*, 5(2), 203-225. Hadad, S. (2017b). Strategies for developing knowledge economy in Romania. *Management & Marketing*, 12(3), 416-430. Hartley, J. (1994), Case studies in organizational research, In Cassell, C., and Symon, G. (Eds.). Qualitative methods in organizational research, a practical guide (pp.208-229). London: Sage. Hartley, J. (2004), Case study research, In Cassell, C. and Symon, G. (Eds.). Essential *quide to qualitative methods in organizational research* (pp.323-333). London: Sage. Hemingway, C.A. (2013). Corporate social entrepreneurship. In Idowu, S.O., Capaldi, N., Zu, L., and Gupta, A.D. (Eds). *Encyclopedia of corporate social responsibility* (pp.544-551). Heidelberg: Springer. Kuratko, D.F., Hornsby, J.S., and Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality. Small Business Economics, 45(2), 245-253. Mehmood, B., and Rehman H.U. (2015). Aggregate Production Function for Knowledge Economies in Asia: System Gmm Inference. Pakistan Economic and Social Review, 53(1), 97-112. Mehrara, M., and Rezaei, A. (2015). Knowledge Economy Index (KEI) in Iran and comparison with other countries of region: the vision 1404 document. International Journal of Applied Economic Studies, 3(2), 1-7. OECD (1996). The knowledge based economy. Retrieved from https://www.oecd.org/sti/sci-tech/1913021.pdf. Panaete, M. (2015), Jean Valvis Aqua Carpatica sales have overtaken Izvorul Alb. Retrieved from: http://www.zf.ro/companii/aqua-carpatica-a-lui-jeanvalvis-a-depasit-in-vanzari-izvorul-alb-14671090). Semeghin, D. (2015). Aqua Carpatica premium export product. Retrieved from: http://www.mariustuca.ro/actualitate/apa-minerala-aqua-carpaticaprodus-premium-romania-export-11472.html. Sharma, P., and Chrisman, S.J.J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. In Cuervo, Á., Ribeiro, D., and Roig, S. (Eds.), Entrepreneurship (pp.83-103). Heidelberg: Springer. Testulpurității.ro (2018a). About purity [Despre puritate]. Retrieved from

- http://testulpuritatii.ro/video.php.
- Testulpurității.ro (2018b). Tap water map [Harta pentru apa de la robinet]. Retrieved from http://testulpuritatii.ro/pins.php?water=1.

Analyzing Corporate Social Entrepreneurship Specific to Knowledge Economy with a Focus on the Romanian Economic Context

- Testulpurității.ro (2018c). Streams, rivers and lakes map [Harta pârâurilor, râurilor și lacurilor]. Retrieved from http://testulpuritatii.ro/pins.php?water=2.
- Testulpurității.ro (2018d). Fountains and springs [Harta fântânilor și izvoarelor]. Retrieved from http://testulpuritatii.ro/pins.php?water=3.
- United States Environmental protection Agency (2015). Contaminants. Retrieved from

http://water.epa.gov/drink/contaminants/basicinformation/nitrate.cfm.

- Wall-Street (2015). They created the most efficient marketing campaign of the year to come. Retrieved from https://www.wall-street.ro/articol/Marketing-PR/185492/ei-au-creat-cea-mai-eficienta-campanie-de-publicitate-a-anului-ce-urmeaza.html.
- Yin, R. (2010). Analytic generalization. In Mills, A.J., Durepos, G., and Wiebe, E. (Eds.), *Encyclopedia of case study research* (pp.21-23). Thousand Oaks, CA: SAGE Publications.

Received: April 12, 2018 Accepted: June 16, 2018