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Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

# e-CRM and Loyalty: A Mediation Effect of Customer Experience and Satisfaction in Online Transportation of Indonesia

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**Abstract** Sharing economy inspire people to share resources to produce more efficient economies. In Indonesia, Sharing economy is predicted to grow rapidly and become a very promising business model in the future. One of the most vibrant sharing economies in Indonesia today is the online transport business model. The specific purpose of the paper is to identify the mediating effect of experience and satisfaction between eCRM and Loyalty in online transportation. This paper contributes to broadening the application e-Customer Relationship Management, Customer Experience, Customer Satisfaction and Customer Loyalty. Data was collected from 190 respondents who used online transportation. Empirical Investigation was carried out to validate the framework through measurement reliability and validity, and testing the significant the mediating effect of experience and satisfaction between eCRM and Loyalty using partial least square-structural equation model (PLS-SEM). Result In the direct effect research suggests that customer experience fully mediated relationship between eCRM, customer satisfaction, and Loyalty.

Key words e-CRM, Customer Experience, Customer Satisfaction and Customer Loyalty

JEL Codes: L91, M31, R48

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#### 1. Introduction

In Indonesia, the concept of sharing economy has been widely accepted in society. Sharing economy inspire people to share resources to produce more efficient economies. Sharing economy is a business concept that provides access to resources owned by individuals or companies to use or consume with others operating on the basis of efficiency and the process of collaborating idle assets. Through the development of information technology and communications, sharing economy model becomes easier and more profitable than the conventional business model (Botsman and Rogers, 2010a; Kaplan and Haenlein, 2010). Sharing economy has an excess of widespread access to the availability of underutilized goods or services (Schor and Fitzmaurice, 2015). Sharing economy requires participation, mutual trust from various parties involved in empowering idle assets. Botsman and Rogers (2010b) divided the "Sharing Economy" into three main areas: product service systems, redistribution markets, and collaborative lifestyles. Sharing economy is predicted to grow rapidly and become a very promising business model in the future (Situmorang, 2016). This prediction is not surprising, because the sharing economy offers a number of advantages: lower prices, stronger communities, large numbers of players in the market, and greater access to services that were once considered a luxury (Ranchordás, 2015). The concept of economic sharing began to be discussed extensively since 2011 and 2012 with two success stories of companies namely Airbnb and Uber (Martin, 2016). In Indonesia, the concept of sharing economy began to be discussed since evolving online transport application platform such as Gojek, Uber, and Grab.

One of the most vibrant sharing economies in Indonesia today is the online transport business model. The Go-Jek app has been downloaded almost 10 million times on the Google Play Store, but it's also available on the App Store (iOS). As a tough competitor of Go-Jek in this business, Grab application has been downloaded almost 10 million times through Android smartphone. GO-JEK and Grab Uber is the most widely used online transportation in Indonesia and has become familiar in the life of Indonesian people especially in big cities. These applications are not only a compliment, but have become part of the lifestyle of urban communities and may even have caused dependence on many users. Easy of use, convenience and practice are among the reasons why people use online platforms (Shaheen *et al.*, 2012). If in the past, people had to go to the roadside or stop to use public transportation, now people can be directly picked up to a house or place that has been predetermined. This case certainly raises the interest of the people using online transport. In addition, online transportation also opens employment fields and reduces unemployment. Found, many online transport drivers are unemployed or retired.

In the midst of slowing domestic economic growth due to various factors, the digital-based economy contributes to the decline in the number of unemployed, especially in big cities. In addition to online transport, GOJEK, Grab, and Uber also provide a variety of food delivery and delivery services, ordering services, charging pulses and others. This encourages the development of small-medium enterprise in Indonesia. The home-based food industry was previously unknown, but after collaborating with Go-Food the market became more widespread. This collaboration creates a huge multiplier effect because it can trigger the emergence of industry and other economic activities. On the other hand, the entry of online transport has resulted in disruption and declining earnings net profit Blue Bird, a major player transportation taxi city in Indonesia. Even the bluebird as the biggest player taxi in Indonesia was forced to collaborate with the application GOJEK. In many cities in Indonesia, the phenomenon of online transport has sparked protests and demonstrations of traditional transportation. So it takes regulation from the government to set the model of online transportation business in Indonesia.

According to Hamari *et al.* (2016) although it has a growing practical interest, it takes a quantitative study of motivation factors that affect the attitude and intention of consumers to the sharing economy. Shankar *et al.* (2016) stated the rapid development of mobile technology and service innovation causes consumer behavior to evolve in terms of how consumers interact and access to service delivery channels. Based on data APJII (2017) the number of internet users in Indonesia has reached 143.26 million people. 72.41 percent of internet users are in urban areas and 60 percent of them have accessed the internet using smartphones. From a marketing perspective, mobile apps can provide a customized experience for users as well as be improving customer experience (Bellman *et al.*, 2011). To succeed and survive in this fierce competition, the online service provider must have a competitive advantage and deliver superior quality of service that is better than service ones given by its competitors (Yang and Fang, 2004).

This study discusses the influence of customer relationship electronics, customer journey, customer experience, customer satisfaction to customer loyalty and positive WoM on online transportation Gojek. Gojek was chosen because it is a start-up company from Indonesia. Initially, Go-Jek is a motorcycle-based transportation service application company then developed into one-stop service application. Gojek became the first Unicorn from Indonesia. Unicorn Start Up is a designation for the startup that has a valuation above USD 1M. The popularity of the Gojek brand even beat Grab and Uber (Situmorang 2017).

# 2. Literature review

# 2.1. Electronic Customer Relationship Management (e-CRM)

After the emergence of information and communication technology, customer relationship management (CRM) has been changed to electronic CRM (e-CRM). e-CRM has been considered as part of digital marketing, which is similar to conventional CRM tools but uses electronic channels with e-business implementation to shape organizational CRM strategies (Darabi et al., 2012). The more customers who use electronic channels, the more they make their information available to businesses to analyze and understand their behavior (Abu-Shanab and Anagreh, 2015). e-CRM is designed for people at all levels of business who wants to develop relationships with customers electronically (Azilla and Noor, 2011). eCRM has enabled organizations to attract new customers, increase customer value and service, retain customers, provide analytical customer preferences and behaviors, and use the proper methods to encourage customers loyalty (Zineldin, 2006, Tarhini et al., 2015). Chen (2004) sustains that CRM as a very important thing to achieve business success. According to Mishra and Padhi (2013), the purpose of the e-CRM process is to create powerful tools for profitability, customer ratings, customer retention, and customers' achievement. The primary focus of research has focused on the impact of e-CRM performance from the customer's perspective. The previous studies found several positive impacts of e-CRM such as customer satisfaction (Khalifa and Seen, 2005, Usman et al., 2012) customer lovalty (Azilla and Noor, 2011; Singh and Jain, 2017). Customer lifetime value (Al-Refaie et al., 2014). e-CRM In Mobile apps offer consumers an alternative channel for browsing and shopping. So, understanding e-CRM that influence the customer's experience, customer satisfaction, and customer loyalty are of significant value.

# 2.2. Customer Journey and Customer experience

Customer journey has many interpretation in the service literature such as "walk in the customer's shoes" (Holmlid and Evenson, 2008), "interconnected contact points" (Koivisto, 2009), "experience service interfaces along the time axis" (Miettinen, 2009), "user interaction with service" (Stickdorn and Schneider, 2011), Halvorsrud *et al.* (2016) defined customer journey is as a customer interaction with one or more service providers to achieve a particular goal. A customer's journey is modeled as a sequence of consecutive contact points; in terms of duration, may be short (hours) or long (weeks), depending on the service being researched. In a customer journey analysis, firms focus on how customers interact with multiple touch points, moving from consideration, search, and purchase to post purchase, consumption, and future

engagement or repurchase. The goals of the analysis are to describe this journey and understand the customer's options and choices for touch points in multiple purchase phases (Verhoef *et al.* 2016). Lemon and Verhoef (2016) conceptualize customer experience as a customer's "journey" with a firm over time during the purchase cycle across multiple touch points. They stated the increasing focus on customer experience arises because customers now interact with firms through myriad touch points in multiple channels and media, resulting in more complex customer journeys. Van Hagena and Brown (2013) recommends measuring customer experience and determining how strong the emotional level in various customer journey phases in different groups of passengers so that the customer experience of each customer journey phase is known.

Aaker and Joachiimsthaler (2000) stated the experience consumers get through participation and involvement on the internet has the possibility to be captured more strongly than the experience that consumers get from other conventional media, so it can be said that the quality of user experience on a site can affect the overall feeling (feeling), trust, that associate with brands can be embedded more strongly than experience through other media. Hence, the key to winning the competition and act as the differentiation value of other brands (Situmorang, 2016). Schmitt (1999) have identified five types of experiences such as sensory (sense), affective (feel), cognitive (think), physical (act), and social identity (relate) experiences. De Keyser et al. (2015) describe customer experience as "comprised of the cognitive, emotional, physical, sensorial, spiritual, and social Elements. Schmitt *et al.* (2015) suggest that every service exchange leads to a customer experience, regardless of its nature and form. Studied by Situmorang *et al.* (2017) showed customer experience have the positive impact on customer loyalty. Customer experience programs should only focus on the most sensitive touch points. Consumers who interact with a brand/product, then produce a positive or negative experience will share their experience in Social Media (Situmorang *et al.* 2016).

# 2.3. Customer Satisfaction and Customer Loyalty

Satisfaction has primarily been conceptualized as resulting from a comparison of the actual delivered performance with customer expectations. Satisfaction is defined as a person's feeling of pleasure or contentment from comparing his expectations with the provided products, outcomes and perceived performance (Kotler, 2016). It can be associated with customer emotion such as a feeling of happiness. Satisfaction, trust, re-visit intention, re-purchase intention and loyalty have all been outlined as outcomes of a positive customer experience (Verhoef *et al.*, 2009; Shobeiri *et al.*, 2015; Handoko *et al.*, 2017; Ferine *et al.*, 2017; Marhayanie *et al.*, 2017, 2018).

Loyalty is built and experience. Oliver (1999) defined customer loyalty as a deeply held commitment to rebuy a preferred product or service consistently in the future, causing repetitive same brand or same brand-set purchasing, despite situational influences and marketing efforts. Reicheld (1996) pointed out loyalty behavior affect business growth and companies get to profit from price premium, referrals, increase purchases and higher balances, reduced operating cost and customer acquisition cost. Reichheld (2003) strongly argues for replacing customer satisfaction with the Net Promoter Score (NPS). According to Srinivasan *et al.* (2002), loyalty in online behavior is attitudes that benefit the customer and his commitment to online companies that generate repurchase behavior. A truly loyal customer is a committed and attached customer with the retailer and is not easy to be bothered by more interesting alternatives (Shankar *et al.*, 2003).

# 3. Methodology of research

# 3.1. Research goal

The aim of the study is to identify the mediating effect of experience and satisfaction between eCRM and Loyalty in online transportation. To test propositions, a structured survey was used as a research instrument. Structured surveys are used because it allows researchers to reach larger samples and measure various factors (Figure 1).

#### 3.2. Sample, measure and data collection

Data were collected from 190 samples from the respondent who used transportation on of line. The collected data initially processed by factor and reliability analysis. Item used for our measurement scales on an empirically validated scale from the previous study. We measured the questionnaire's construct with five points Likert scale anchored by strongly disagree and strongly agree (Muda and Rafiki, 2014; Rasdianto *et al.*, 2014; Maksum *et al.*, 2014; Suriadi *et al.*, 2015; Sadalia *et al.*, 2017; Nasir *et al.*, 2017; Muda, 2017; Tarmizi *et al.*, 2016, 2017; Nasution *et al.*, 2018). We pretest our questionnaires to 30 customers of online transport and further refined questionnaire's on basis of comment. The mediating effect of experience and satisfaction between eCRM and Loyalty in online transportation was tested by structural equation model. Data processing technique were conducted through partial least square-structural equation model (PLS-SEM) by using SmartPLS 3.0 program. Structural equation model used to analyze the variables in the form of constructs and into latent variables whose assessment is measured indirectly through constructor-forming indicators (Sirojuzilam *et al.*, 2016; 2017, 2018; Yahya *et al.*, 2017; Muda *et al.*, 2018). The manifest variables in latent variables are reflective.

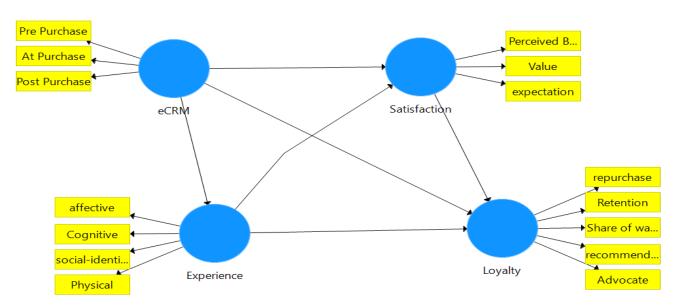


Figure 1. Proposed Research Model

# 3.3. Outer Model

Before performing hypothesis testing to predict relationships in the inner model, the outer model testing should be performed first for verification of indicators and latent variables that can be tested further. The tests include testing of construct validity (convergent and discriminant) and construct Reliability test (Cronbach's alpha and composite reliability). Construct validity shows how well the results obtained from the use of a measurement fit the theories used to define a construct (Sihombing *et al.*, 2015, 2018; Lubis *et al.*, 2016; Nurzaimah *et al.*, 2016; Erlina *et al.*, 2017; Tripriyono *et al.*, 2018; Muda and Nurlina *et al.*, 2018). A strong correlation between the construct and the question items and the weak relationship with other variables is one way to test the validity of the construct. Construct validity consists of convergent validity and discriminant validity. Convergent validity is related to the principle that the measurements of a construct should be highly correlated. Convergent validity test in PLS with the reflective indicator is assessed by loading factor as Fornell and Larcker suggested (1981). All indicator had significant loadings on the respective latent construct (P<0.01). In addition, The AVE for each construct was greater than 0.5, which further support the convergent validity of the construct.

Factor	Factor Loading	Cronbach's Alpha	Composite Reliability	R Square	AVE	T Statistics
eCRM		0,637	0,806		0,582	
pre-purchase	0,820					18,591
at-purchase	0,775					12,334
post-purchase	0,687					9,847
Customer Experience		0,725	0,828	0,062	0,548	
affective	0,683					9,568
cognitive	0,780					18,882
social-identity	0,805					25,298
Physical	0,685					10,375
Customer Satisfaction		0,688	0,819	0,134	0,601	
Perceived based	0,760					17,457
Value	0,800					22,899
expectation	0,764					18,393
Customer Loyalty		0,790	0,855	0,543	0,542	
repurchase	0,748			,		23,513
Retention	0,740					15,733
Share of wallet	0,714					18,255
recommendation	0,733					16,775
Advocate	0,745					17,070

Source: Results of Research, 2018 (Processed Data).

	Customer Experience	Customer Loyalty	Customer Satisfaction	eCRM
Customer Experience	0,740			
Customer Loyalty	0,453	0,736		
Customer Satisfaction	0,311	0,645	0,775	
eCRM	0,249	0,443	0,265	0,763

Tahla 2	Discriminant	Validity
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Source: Results of Research, 2018 (Processed Data).

Based on the cross-loading it can be concluded that each indicator present in a latent variable is different from the indicator in other variables indicated by its higher loading score in its own construct. Another method of assessing discriminant validity is to compare the AVEs for each construct with the correlation between the constructs in the model. The AVEs were greater than the squared correlation between any pair in construct, meaning that the indicator used in this study has met the criteria of discriminant validity. Discriminant validity implies that a construct is unique and captures phenomena not represented by other construct in the model. Structural model testing is performed to predict the causal relationship between variables or hypothesis testing. The structural model in the PLS is evaluated by using R Square for the dependent construct, the path coefficient value ( $\beta$ ) or t-values of each path significance test in the structural model (Mahdaleta *et al.*, 2016; Lutfi *et al.*, 2016; Azlina *et al.*, 2017; Nurlina and Muda, 2017; Syahyunan *et al.* 2017; Muda and Hasibuan, 2018). The value of R Square is used to measure the level of variation of the independent variable changes to the dependent variable. The higher the value of R Square means the better the prediction model of the proposed research model. The value of path coefficient ( $\beta$ ) or inner model indicates the level of significance in testing the hypothesis (Khaldun, 2014; Muda, 2014; Muda and Dharsuky, 2015; Hasan *et al.*, 2017; Dalimunthe *et al.*, 2016 & 2017; Hutagalung *et al.*, 2017; Kesuma *et al.*, 2018a, 2018b). Score coefficient path ( $\beta$ ) or inner model shown by T-statistic value or P-Value < 0.05).

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Direct Effect	. , ,				
Experience -> Loyalty	0,234	0,236	0,063	3,717	0,000
Experience -> Satisfaction	0,261	0,264	0,064	4,095	0,000
Satisfaction -> Loyalty	0,506	0,509	0,059	8,516	0,000
eCRM -> Experience	0,249	0,255	0,072	3,435	0,001
eCRM -> Loyalty	0,251	0,247	0,056	4,461	0,000
eCRM -> Satisfaction	0,200	0,198	0,072	2,765	0,006
Indirect Effect					
eCRM -> Experience -> Loyalty	0,058	0,060	0,023	2,525	0,012
eCRM -> Experience -> Satisfaction -> Loyalty	0,033	0,034	0,014	2,340	0,020
eCRM -> Satisfaction -> Loyalty	0,101	0,101	0,040	2,550	0,011
eCRM -> Experience -> Satisfaction	0,065	0,068	0,027	2,376	0,018
Total Effect					
Experience -> Loyalty	0,366	0,370	0,069	5,328	0,000
Experience -> Satisfaction	0,261	0,264	0,064	4,095	0,000
Satisfaction -> Loyalty	0,506	0,509	0,059	8,516	0,000
eCRM -> Experience	0,249	0,255	0,072	3,435	0,001
eCRM -> Loyalty	0,443	0,442	0,057	7,730	0,000
eCRM -> Satisfaction	0,265	0,266	0,069	3,845	0,000

Tabel 3. Path Coefficient

Source: Results of Research, 2018 (Processed Data).

#### 4. Conclusions, academic and managerial implications

#### 4.1. Conclusions

Result In the indirect effect research included fourth sub studies. The first to investigate the mediating effect customer experience, between e CRM and customer satisfaction. The second to investigate mediating effect customer experience, between e CRM and customer loyalty. The third to investigate the mediating effect customer satisfaction, between e CRM and customer loyalty. The third to investigate the mediating effect customer satisfaction, between e CRM and customer satisfaction and customer loyalty. The third to investigate the mediating effects customer satisfaction and customer satisfaction investigate the mediating effects customer satisfaction.

between e CRM and customer loyalty. When the mediating effects were observed, it was seen that customer experience fully mediated relationship between eCRM, customer satisfaction, and Loyalty. The mediating effect customer experience between eCRM and satisfaction has a positive and significant (P-Value =0,018). The mediating effect customer experience between eCRM and customer loyalty has a positive impact and significant (P-Value =0,012). The mediating effect customer satisfaction between eCRM and customer loyalty has a positive impact and significant (P-Value =0,012). The mediating effect customer satisfaction between eCRM and customer loyalty has a positive impact and significant (P-Value =0,011). The mediating effect customer satisfaction between eCRM and customer satisfaction between eCRM and customer satisfaction between eCRM and customer loyalty has a positive impact and significant (P-Value =0,011). The mediating effect customer satisfaction between eCRM and customer loyalty has a positive impact and significant (P-Value =0,011). The mediating effect customer experience and customer satisfaction between eCRM and customer loyalty has a positive impact and significant (P-Value =0,020)

#### 4.2. Academic Implication

From a theoretical perspective, The Mediating is to explain why the relationship between exogenous and endogenous constructs exists. A mediating effect is created when a third variable or construct intervenes between two or more another related construct. The path model consists of both direct and indirect effects. The direct effect is the relationship between two constructs with single arrow and indirect effect is those involve a sequence of relationship with at least one intervening constructs involved (Hair *et al*, 2014). Result In the direct effect research included six sub studies. The first to investigate the relationship between e CRM and customer experience. The second to investigate the relationship between e CRM and customer experience and satisfaction. The fifth to investigate the relationship between customer experience and satisfaction. The fifth to investigate the relationship between customer satisfaction and customer loyalty. The sixth to investigate the relationship between customer satisfaction and customer loyalty. Based on the result of coefficient path test, eCRM variable has positive and significant influence to customer experience (P-Value =0,001), satisfaction (P-Value =0,006) and loyalty (P-Value =0,000). Customer experience variable have a positive and significant effect on customer satisfaction (P-Value=0,000) and loyalty (P-Value=0,000).

#### 4.3. Managerial Implication

This study will be useful not only in academic research but also in marketing practice especially in industry online transport. The relationship discussed here can help manager to understand customer experience, satisfaction and loyalty. This result shows that e-CRM plays an important role in the online transport industry. Over the last 5 years, Indonesia has a penetration rate of internet and social media users are getting bigger and smartphone prices are getting cheaper to make the opening of online business opportunities in Indonesia. In addition, the emergence of new marketplace platforms enables the creation of new relationships that are no longer a form of consumer-corporate-worker but to become entrepreneur-consumers. The development of online transport business will depend on the growth of online transportation support business such as food delivery, delivery service, lifestyle, etc. On the other hand traffic jams; expensive taxis and very few public transports such as MRT make online transportation business will survive and grow. According to Hassenzahl and Tractinsky (2006), information systems should not only be useful but should also make users comfortable using the system. Verhoef et al. (2017) point out smartphones enable connections and facilitate different types of interactions across the network from transactions, to sharing social information, to people interacting with connected devices. The performance of e-CRM relies heavily on internet network, information system, and smartphone technology. In line with the research situmorang (2016), Customer experience is the key to winning the competition and acting as the value of differentiation from other brands. A memorable experience is more likely to create a positive emotional value for the customer. Therefore, customers will be more loyal, willing to buy back and recommend the brand to their friends or family. Therefore the company must continue to improve any aspect (physically and emotionally) in customer interaction. The number of online transport drivers makes it easier for customers to find transportation, make purchases or delivery of food and goods. They do not have to wait a long time to get service. They feel safe and secure despite not knowing the online drivers. Their expectations in accordance with the services provided.

#### References

Abu-Shanab, E & Anagreh, L. (2015). Impact of electronic customer relationship management in banking sector, International Journal of Electronic Customer Relationship Management. 9(4), 10-21.

Al-Refaie, A., Al-Tahat, M.D. and Bata, N. (2014). CRM/e-CRM effects on banks performance and customer-bank relationship quality, *International Journal of Enterprise Information Systems*, 10(2), 62-80.

Azila, N&. Noor, M. (2011). Electronic Customer Relationship Management Performance: Its Impact on Loyalty From Customers' Perspectives. *International Journal of Education, e-bussiness, e-management and e-learning.* 1(1), 77-85.

Azlina, N. A.Hasan, Desmiyawati & Muda, I. (2017). The Effectiveness of Village Fund Management (Case Study at Villages in Coastal Areas in Riau). *International Journal of Economic Research*. 14(12), 325-336.

Bellman, S., Potter, R. F., Treleaven-Hassard, S., Robinson, J. A., & Varan, D. (2011). The effectiveness of branded mobile phone apps. *Journal of Interactive Marketing*, 25,191–200.

Botsman, R., & Rogers, R. (2010a). Beyond Zipcar: Collaborative consumption. Harvard Business Review, 88(10), 30-41.

Botsman, R., & Rogers, R. (2010b). What's Mine Is Yours: The Rise of Collaborative Consumption, HarperCollins, New York,

Chen, Q. &.-M. (2004). Exploring the Success Factors of ECRM Strategies in Practice. *Journal of Database Marketing & Customer Strategy Management*. 333-343.

Dalimunthe, D.M.J., and Muda, I. (2017). The Empirical Effect of Education and Training to the Performance of Employees. *International Journal of Applied Business and Economic Research*. 15(24). 5423-5437.

Dalimunthe, D.M.J., Fadli, and Muda, I. (2016). The application of performance measurement system model using Malcolm Baldrige Model (MBM) to support Civil State Apparatus Law (ASN) number 5 of 2014 in Indonesia. *International Journal of Applied Business and Economic Research*. *14*(11). 7397-7407.

De Keyser, A., Lemon, K.N., Keiningham, T. and Klaus, P. (2015). A Framework for Understanding and Managing the Customer Experience, *MSI Working Paper* No. 15-121. Cambridge, MA: Marketing Science Institute.

Erlina, A.Saputra & Muda, I. (2017). Antecedents of Budget Quality Empirical Evidence from Provincial Government In Indonesia. *International Journal of Economic Research*. 14(12). 301-312.

Erlina. A.Saputra & Muda, I. (2017). The Analysis of the Influencing Factors of Budget Absorption. International Journal of Economic Research. 14(12). 287-300.

Ferine, K.F; Ermiaty, C. & Muda, I. (2017). The Impact of Entrepreneurship and Competence on Small Medium Enterprises Tangan Di Atas (TDA) Medan Entrepreneurs' Work Performance. *International Journal of Economic Research*. 14(16). 380-393.

Hair, J.F., Hult, G.T.M., Ringle, C.M., and Sastedt, M. (2014). A Primer on Partial Least Squares Stuctural Equation Modelling, Sage Publication, London.

Halvorsrud, R, Kvale, K, & Følstad, A. (2016). Improving service quality through customer journey analysis, *Journal of Service Theory* and *Practice*. 26(6). 840-867.

Hamari, J, Sjöklint, M & Ukkonen, A. (2016). The Sharing Economy: Why People Participate In Collaborative Consumption, *Journal Of The Association For Information Science And Technology*, 67(9). 2047–2059

Handoko, ,Bagus. Sunaryo & Muda, I. (2017). Difference Analysis of Consumer Perception of Motorcycle Product Quality. *International Journal of Economic Research*. 14(12). 363-379.

Hasan, A, Gusnardi & Muda, I. (2017). Analysis of Taxpayers and Understanding Awareness Increase in Compliance with Taxpayers Individual Taxpayers. *International Journal of Economic Research*. *14*(12). 75-90.

Hassenzahl, M., And Tractinsky, N. (2006). User experience – a research agenda. *Behaviour & Information Technology*. 25(2). 91 – 97. Holmlid, S. and Evenson, S. (2008). Bringing service design to service sciences, management and engineering", Service Science, Management and Engineering Education for the 21st Century, Springer pp. 341-345.

Hutagalung, B.; Dalimunthe, D.M.J, R., Pambudi, A.Q. Hutagalung & Muda, I. (2017). The Effect of Enterpreneurship Education and Family Environment Towards Students' Entrepreneurial Motivation. *International Journal of Economic Research*. 14(20). 331-348.

Kaplan, A.M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1). 59–68.

Kesuma, S, I., Erlina & Muda, I., (2018). Influence of Beverages and Tobacco Export and Raw Material Export on the Economic Growth. *Emerald Reach Proceedings Series*. Vol. 1 pp. 335–341. Emerald Publishing Limited. ISSN. 2516-2853. DOI 10.1108/978-1-78756-793-1-00060.

Kesuma, S, I., Erlina & Muda, I., (2018). Influence of Natural Rubber Latex Export and Food and Animals Export to the Economic Growth. *Emerald Reach Proceedings Series*. Vol. 1 pp. 607–613. Emerald Publishing Limited. ISSN. 2516-2853. DOI 10.1108/978-1-78756-793-1-00061.

Khaldun, K. I. & Muda, I. (2014). The Influence of Profitability And Liquidity Ratios on The Growth of Profit of Manufacturing Companiesa Study of Food And Beverages Sector Companies Listed on Indonesia Stock Exchange (Period 2010-2012). *International Journal of Economics, Commerce and Management*. 2(12). 1-17.

Khalifa, M & Shen, N. (2005). Effects of Electronic Customer Relationship Management on Customer Satisfaction: A Temporal Model," *Proc.* 38th Annual Hawaii International Conference on System Sciences. 171-178.

Koivisto, M. (2009). *Frameworks for structuring services and customer experiences*, in Miettinen, S. and Koivisto, M. (Eds.) Designing Services with Innovative Methods, University of Art and Design, Helsinki, Helsinki, pp. 136-14

Lemon,K.N & Verhoef,P.C (2016) Understanding Customer Experience Throughout the Customer Journey, *Journal of Marketing*: AMA/MSI Special Issue. 80. 69–96

Lubis, A., Rustam and Muda, I. (2016). Factors Affecting The Cost of Agency of Village Owned Enterprise (BUMDES) in Indonesia. *International Journal of Economic Research*. 14(16). 334-348.

Lubis, A., Rustam and Muda, I. (2018). Analysis of Ownership and Stock Composition of Vocational Business Enterprises (BUMDES) and Its Impact on "Omset" of Business Owned Enterprises. *Advances in Economics, Business and Management Research (AEBMR), 1st Economics and Business International Conference 2017 (EBIC 2017).* 46. 274-277.

Lubis, A., Torong, Z.B., and Muda, I. (2016). The urgency of implementing balanced scorecard system on local government in North Sumatra – Indonesia. *International Journal of Applied Business and Economic Research*. 14(11). 7575-7590.

Lubis, A.F., Lubis, T.A., and Muda, I. (2016). The role of Enterprise Resource Plan (ERP) configuration to the timeliness of the financial statement presentation. *International Journal of Applied Business and Economic Research*. 14(11). 7591-7608.

Lutfi, M., Nazwar, C., and Muda, I. (2016). Effects of investment opportunity set, company size and real activity manipulation of issuers in Indonesia Stock Exchange on stock price in Indonesia. *International Journal of Economic Research*. 13(5). 2149-2161.

Mahdaleta, E.; Muda, I. and Gusnardi, M. (2016). Effects of Capital Structure and Profitability on Corporate Value with Company Size as the Moderating Variable of Manufacturing Companies Listed on Indonesia Stock Exchange. *Academic Journal of Economic Studies*. 2(3). 30–43.

Maksum, A., Hamid, R., & Muda, I. (2014). The Impact of Treasurer's Experience And Knowledge on The Effectiveness of The Administration and Preparation of The Accountability Reporting System in North Sumatera. *Asian Journal of Finance & Accounting*, 6(2), 301-318. http://dx.doi.org/10.5296/ajfa.v6i2.6341.

Marhayanie, M. Ismail and Muda, I., (2017). Impact of the Online Car Rental Service Order System on Sales Turnover with Financial Literacy Customer as Intervening Variables. *International Journal of Economic Perspectives*. 14(16). 317-332.

Marhayanie, M.Ismail and Muda, I., (2018). Impact of Smartphone Features on "Omset" Services Online Car Rental. Advances in Economics, Business and Management Research (AEBMR). 46. 278-281.

Martin, C.J., (2016). The sharing economy: a pathway to sustainability or anightmarish form of neoliberal capitalism? *Ecology and Economy*. 121, 149–159.

Miettinen, S. (2009). Designing services with innovative methods", in Miettinen, S. and Koivisto, M. (Eds.) Designing Services with Innovative Methods, University of Art and Design, Helsinki, Helsinki, pp. 10-25

Mishra, M. and Padhi, P. (2013). Impact of E-CRM technology in Indian banking sector: an appropriate towards development', Golden Research Thoughts, 2(1). 1–6.

Muda, I. and Dharsuky, A. (2015). Impact of Region Financial Information System (SIKD) Quality, Role Ambiguity And Training on Precision of Financial Statement of Local Government Presentation In North Sumatra. *International Journal of Applied Business and Economic Research*, 13(6). 4283-4304.

Muda, I. (2014). Analysis on the Timeliness of the Accountability Report by the Treasurer Spending in Task Force Units in Indonesia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4). 176-190.

Muda, I. and A. Rafiki. (2014). Human Resources Development and Performance of Government Provincial Employees: A Study in North Sumatera, Indonesia. *Journal of Economics and Behavioral Studies*. 6(2).152-162.

Muda, I., & A. N. Hasibuan. (2018). Public Discovery of the Concept of Time Value of Money with Economic Value of Time. *Emerald Reach Proceedings Series*. Vol. 1 pp. 255–261. DOI 10.1108/978-1-78756-793-1-00050.

Muda, I., & Nurlina. (2018). Influence of Manufacture of Textiles, Clothing and Leather and Manufacture of Paper, Printing and Publishing to The Economic Growth. *Emerald Reach Proceedings Series*. Vol. 1 pp. 105–111. DOI 10.1108/978-1-78756-793-1-00048.

Muda, I., & Rasdianto, M. S. L. (2014). Implementation of the Cash Revenue System: A Case Study in the Local Government Task Forces' Units of North Sumatera Province, Indonesia. *Information Management & Business Review*, 6(2). 96-108.

Muda, I., (2017). Perception of capital, profit and dividends affect the stock purchase intention in Indonesia public company. *Junior Scientific Researcher*, 3(1). 9-18.

Muda, I., (2018). Influence of Assets and Investments on Investment Yield Sharia Insurance in Indonesia. *Emerald Reach Proceedings Series*. Vol. 1 pp. 563–569. Emerald Publishing Limited. ISSN. 2516-2853. DOI 10.1108/978-1-78756-793-1-00059.

Muda, I., (2018). Influence of Gross Domestic Product and Population on the Investment Yield Sharia Insurance in Indonesia. *Emerald Reach Proceedings Series*. Vol. 1 pp. 517–522. DOI 10.1108/978-1-78756-793-1-00055.

Muda, I., and A. H. Harahap, Erlina, S.Ginting, A. Maksum & E.Abubakar (2018). Factors of quality of financial report of local government in Indonesia. *IOP Conference Series: Earth and Environmental Science*. 2018. 126 doi:10.1088/1755-1315/126/1/012067. Muda, I., and Nurlina. (2018). Influence of Manufacture of Non-metals, Except Petroleum and Coal, and Manufacture of Basic Metals on

Economic Growth. *Emerald Reach Proceedings Series*. Vol. 1 pp. 185–192. DOI 10.1108/978-1-78756-793-1-00049. Muda, I., Rafiki, A., & Harahap, M. R. (2014). Factors Influencing Employees' Performance: A Study on the Islamic Banks in Indonesia. *International Journal of Business and Social Science*, 5(2). 73-80.

Muda, I. (2017). Role of Dividend of Power to Buy Shares in Companies in Indonesia Stock Exchange. Academic Journal of Economic Studies. 3(2), 41–47.

Muda, I. (2017). User Impact of Literacy on Treatment Outcomes Quality Regional Financial Information System. *Management Dynamics in the Knowledge Economy*. 5(2). 307-326; DOI 10.25019/MDKE/5.2.08.

Muda., I., R. B., Nasution., Erlina., H. S. Siregar., & S. Katircioglu. (2018). The Effect of The Existence of Large and Medium Industries on The Absorption of Labor in Sumatera Utara. *Advances in Economics, Business and Management Research (AEBMR), 1st Economics and Business International Conference 2017 (EBIC 2017).* 46.253-257.

Muda., I., Rahmanta., Marhayanie., & A.S. Putra. (2018). Institutional Fishermen Economic Development Models and Banking and Financing Institution Support in The Development of The Innovation System. *Advances in Economics, Business and Management Research (AEBMR)*, 46. 263-268.

Nasir, A. Yesi Mutia Basri, Kamaliah & Muda, I. (2017). Effectiveness of Potential Tax Region as the Real Local Revenue Sources in Riau Coastal Area. *International Journal of Economic Research*. 14(12). 313-324.

Nasution, R.B., Muda, I., Erlina, Siregar, H.S. & Katircioglu, S. (2018). Variation of Industrial Type Contributions on Working Performance. Advances in Economics, Business and Management Research (AEBMR), 1st Economics and Business International Conference 2017 (EBIC 2017). 46. 258-262.

Norton, D. (2007). What You Need to know about e-CRM., Retrieved from http://www.techrepublic.com. Accessed on, 01 June, 2018.

Nurlina & Muda, I. (2017). The Analysis of the Effects of Capital Expenditure and Human Development Index on Economic Growth and Poverty in East Aceh Regency. *International Journal of Economic Research*. 14(16). 395-409.

Nurzaimah, Rasdianto & Muda, I. (2016). The skills and understanding of rural enterprise management of the preparation of financial statements using Financial Accounting Standards (IFRs) financial statement on the Entities without Public Accountability (ETAP) framework on the implementation of village administration law. *International Journal of Applied Business and Economic Research*. *14*(11). 7417-7429.

Oliver, R.L. (1999). Whence consumer loyalty?, Journal of Marketing. 63. 33-44.

Ranchordás, S. (2015). Does sharing mean caring? Regulating innovation in the sharing economy. *Minnesota Journal of Law, Science, & Technology*, 16(1), 413-375.

Rasdianto, Nurzaimah & Muda, I. (2014). Analysis on the Timeliness of the Accountability Report by the Treasurer Spending in Task Force Units in Indonesia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*. 4(4). 176– 190. http://dx.doi.org/10.6007/IJARAFMS/v4-i4/1304.

Reichheld, F. (1996). The Loyalty Effect: The Hidden Force Behind Growth, Profits and Lasting Value, Harvard Business School Press. Boston.

Sadalia, I., Bi Rahamani, N. A. & Muda, I. (2017). The Significance of Internet Based Financial Information Disclosure on Corporates' Shares in Indonesia. *International Journal of Economic Research*. 14(12). 337-346.

Schmitt, B.H, Brakus, J.J. and Zarantonello, L. (2015). From Experiential Psychology to Consumer Experience. *Journal of Consumer Psychology*, 25. 166–71.

Schmitt, B.H. (1999). Experiential Marketing. New York: The Free Press.

Schor, J.B. & Fitzmaurice, C.J., (2015).Collaborating and connecting: the emergence of the sharing economy. In: Reisch, L., Thogersen, J. (Eds.), Handbook of Researchon Sustainable Consumption. Edward Elgar, Cheltenham, UK.

Shankar, V., Smith, A., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in daring and offline environments. *International Journal of Research in Marketing*, 20(2). 153–175.

Shankar, V., Venkatesh, A., Hofacker, C., & Naik, P. (2010). Mobile marketing in the retailing environment: Current insights and future research avenues. *Journal of Interactive Marketing*, 24,111–120.

Sharenl (2015). Opportunities and Challenges for European Cities: Amsterdam Sharing City, Retrieved from http://www.sharenl.nl/ nieuws/ opportunities -and-challenges-for-european-cities-amsterdam-sharing-city. Accessed on, 01 June, 2018.

Shobeiri, S., Mazaheri, E., & Laroche, M. (2015). Creating the right customer experience online: The influence of culture. *Journal of Marketing Communications*. 1–21.

Sihombing, M., Muda, I., Jumilawati, E., Dharsuky, A. (2015). The Implementation of Oil Palm Based Regional Innovation System (SIDA) In Supporting The Masterplan For The Acceleration And Expansion Of Indonesia's Economic Development (MP3EI) of The Economic Corridor Of Sumatera-Indonesia. *European Journal of Business and Innovation Research*. 3(5),13-24.

Sihombing., M., Muda., I., E.Jumilawati & Dharsuky, A. (2018). Effectiveness of Market Results Diversified Palm Products and Constraints of Capital, Financing and Marketing. *Advances in Economics, Business and Management Research (AEBMR)*. 46. 269-273. Sirojuzilam, Hakim, S., and Muda, I. (2016). Identification of factors of failure of Barisan Mountains Agropolitan area development in North Sumatera – Indonesia. *International Journal of Economic Research*. 13(5). 2163-2175.

Sirojuzilam, Hakim, S., and Muda, I. (2017). Effect of Private Collaborative as a Moderation of Success of Agropolitan Program. *International Journal of Economic Research*. 14(16). 304-315.

Sirojuzilam., S.Hakim., and Muda, I, (2018). Role of Planning And Budget to The Development of Agropolitan Area. Advances in Economics, Business and Management Research (AEBMR), 46. 138-142.

Situmorang, S.H., Gen C. and Gen Y: (2016). Experience, Net emotional Value and Net Promoter Score, Advances in Social Science, *Education and Humanities Research (ASSEHR)*, 81(1). 259-265.

Situmorang, S.H, E.S Rini & Muda, I. (2017). Customer Experience, Net Emotional Value and Net Promoter Score on Muslim Middle Class Women in Medan. *International Journal of Economic Research*. 14(20). 269-283.

Situmorang, S.H., Annisa,M., & Hadian, A. (2016). Generasi Millenial: Net Promoter Score dan Net Emotional Value, Paper Proceeding Dies Natalis Faculty Economic and Business Universitas Sumatera Utara.

Srinivasan, S. S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*. 78(1). 41–50.

Stickdorn, M. and Schneider, J. (2011). This is service design thinking: Basics tools-cases, BIS Publishers, Amsterdam.

Suriadi, A., Kasyful Mahalli, R., Achmad, N. and Muda, I. (2015). The Applicative Model of The Village\_Owned Enterprises (BUMDES) Development In North Sumatera. *Global Journal of Arts, Humanities and Social Sciences* 3(12), 48-62.

Syahyunan, Muda I, Siregar, H.S, Sadalia, I. & Chandra G. (2017). The Effect of Learner Index and Income Diversification on the General Bank Stability In Indonesia. *Banks and Bank Systems*. 12(4). 171-184.

Tarhini, A., Mgbemena, C., Trab, M.S.A. and Masa'deh, R. (2015). User adoption of online banking in Nigeria: A qualitative study, *Journal of Internet Banking and Commerce*. 20(3).1–24.

Tarmizi, H.B., Daulay, M and Muda, I. (2016). The influence of population growth, economic growth and construction cost index on the local revenue of tax on acquisition of land and building after the implementation of law no. 28 of 2009. *International Journal of Economic Research*. 13(5). 2285-2295.

Tarmizi, H.B., Daulay, M., and Muda, I. (2017). Impact of the Economic Growth and Acquisition of Land to the Construction Cost Index in North Sumatera. *IOP Conference Series: Materials Science and Engineering.* 180. DOI: 10.1088/1757-899X/180/1/012004.

Tripriyono., A. Purwoko., Erlina and Muda, I, (2018). The Effect of The Political Environment and The Economic Environment on The Welfare of Community. Advances in Economics, Business and Management Research (AEBMR), 1st Economics and Business International Conference 2017 (EBIC 2017). 46. 49-53.

Usman, M.Z.U., Jalal, A.N. and Musa, M.A. (2012). The impact of electronic customer relationship management on consumer's behavior, *International Journal of Advances in Engineering and Technology*. 3(1). 500-504.

Van Hagena, M, & Brona, M (2013). Enhancing the experience of the train journey: changing the focus from satisfaction to emotional experience of customers. *Transportation Research Procedia*. 1 253–263, 41st European Transport Conference, Frankfurt, Germany.

Verhoef, P.C., Stephen, A.T., Kannan, P.K., Luo, X., Abhishek, V., Andrews, M., & Hu, M. (2017). Consumer Connectivity in a Complex, Technology Enabled, and Mobile-Oriented World with Smart Products. *Journal of Retailing*, 85(1), 42–51.

Verhoef, P., Lemon, K., Parasuraman, A., Roggeveen, A., Schlesinger, L., & Tsiros, M. (2009). Customer experience: Determinants, dynamics and management strategies. *Journal of Retailing*, 85(1). 31–41.

Verhoef, P.C., Kooge, E and Walk, N. (2016). Creating Value with Big Data Analytics: Making Smarter Marketing Decisions. New York: Routledge

Yahya, I, Torong, Z.B., and Muda, I. (2017). Influence Behavior in Legislature Budget Development of Regions in the Province of Aceh and North Sumatra. *International Journal of Economic Research*. 14(8). 147-159.

Yang, Z., & Fang, X. (2004). Daring service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services. International Journal of Service Industry Management, 15(3). 302–326.

Zineldin, M. (2006). The Royalty of Loyalty: CRM, Quality and Retention. Journal of Consumer Marketing. 23(7). 430-437.