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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 e-CRM have positive and significant predictor of customer experience, satisfaction and loyalty. 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 loyalty (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 Joachimssthaler (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. Reichheld (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.

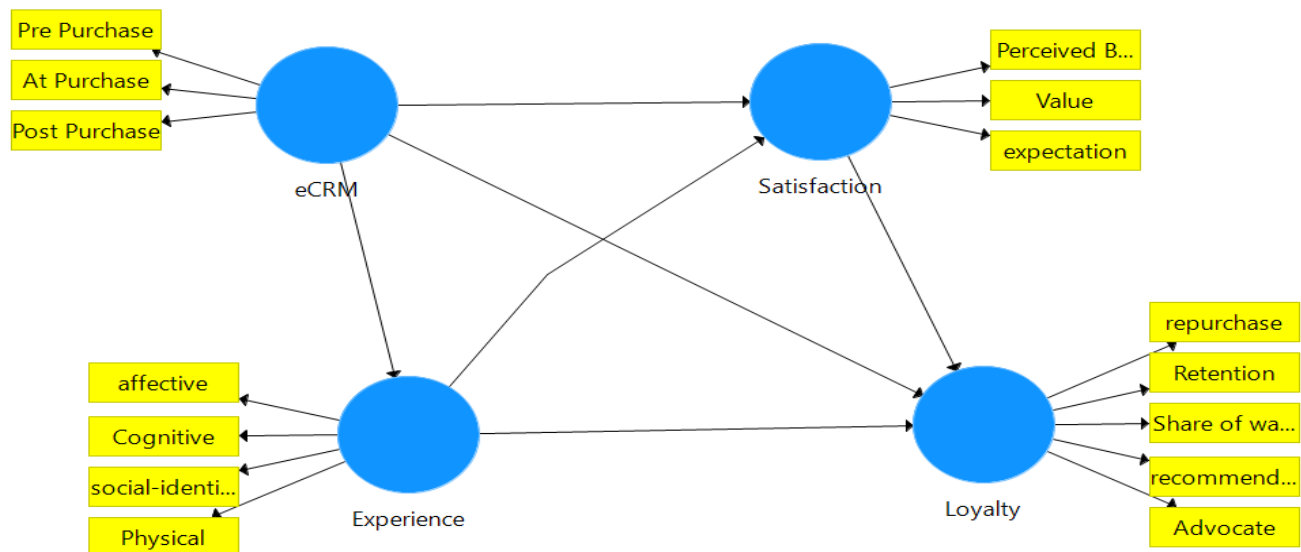


Figure 1. Proposed Research Model

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.

Table 1. Reliability and Factor Analysis

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).

Table 2. Discriminant Validity

	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

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 (β) 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 (β) 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 (β) or inner model shown by T-statistic value or P-Value < 0.05).

Tabel 3. Path Coefficient

	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

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 Fourth to investigate the mediating effects customer experience and 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 =0,011). 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 satisfaction. The third to investigate the relationship between e CRM and customer loyalty. The fourth to investigate the relationship between customer experience and satisfaction. The fifth to investigate the relationship between customer experience 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). Customer satisfaction variable have a positive and significant effect on customers 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.

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