
THE INFLUENCE OF E-SERVICE QUALITY TOWARDS CUSTOMER SATISFACTION AND CUSTOMER LOYALTY ON GOPAY ELECTRONIC WALLET USERS

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Abstract

The purpose of this study was to investigate the influence of electronic service quality towards consumer satisfaction using GOPAY electronic wallet on a daily transactions. In this study, the independent variables were application design, reliability, security/privacy, and customer service, while the dependent variables were customer satisfaction, and customer loyalty. The populations were customers who had used GOPAY electronic wallets for transactions. The total of collected respondents was 204 respondents and the researchers had successfully analysed 152 respondents as a sample. The data was collected through survey methods and questionnaires. The data then analysed by using SEM analysis model with Smart PLS 3. The results prove that the quality of electronic services have a significant influence on customer satisfaction. This study also finds that customer satisfaction has a positive effect towards customer loyalty.

Keywords: Electronic Service Quality, Customer Service, Customer Satisfaction, Customer Loyalty

INTRODUCTION

In recent years, almost all companies have begun to explore new digital technologies in pursuit of benefits. This typically entails changes in key business operations and impacted products, processes, and also organizational structures in the making (Matt, 2015). When it comes to electronic platforms, the use of internet technology, particularly in businesses for increasing sales and marketing and improving service delivery, becomes critical (Zeithaml et al, 2002). The presence of an internet network provides a variety of options and flexibility for users from all over the world to move in a global network, which, in associated with the demands of the times for data transmission efficiency and ease, is realized in the form of mobile electronic technology.

This transformation is felt across all business sectors, including finance and technology. Fintech is the name given to this industry (Financial and Technology). According to Thakor (2019), fintech is defined

as the use of technology to improve financial services. Furthermore, fintech can include credit and deposits, capital raising, payment and settlement, digital currency, investment, and insurance. According to Junger (2019), the digital transformation has caused the financial sector to become even more advanced, giving birth to new business processes and business models, as well as the creation of new and better products and services. Not only are products and services being transformed, but institutions are also being transformed into e-banking, e-government, e-money, and e-market (Junger, 2019). According to Anshari (2019), the new way of communicating and transacting between stakeholders will be on the digital marketplace. According to Anshari (2019), the digital marketplace will serve as an intermediary that can be accessed by all stakeholders from all sides, resulting in a simpler and shorter link between producers and consumers.

Peer-to-peer networks have been used since the development of electronic payment

systems. Immordino and Russo (2017) described electronic payment as a transaction between seller and final consumer using money via electronic platform. An instant transaction can be completed without the need for a time-consuming process or intermediaries (Durgun, 2015). Internet retailing and service competition is fierce, and retailers operate on profit margins. Cost-efficient processing and low working capital requirements are highly important for retailer competitiveness and profitability (Gruschow, 2016). Fintech players (in this case the overall industry competition) in 2015 to 2016 reached 78%, this is the most significant growth so far. In Indonesia, there are at least 140 Fintech companies, with 43% of them specializing in payment or financing.

There are numerous technologies that could improve customer satisfaction when doing online transactions. Kotler and Keller (2015) describe consumer satisfaction as the feeling of consumers being satisfied or dissatisfied with the quality after consuming an item, so that the assessment made on the product or service meets the expectations of consumers. One method is to use an electronic wallet (e-wallet) and the electronic commerce modelling language (ECML) (Kim, 2002). Companies use this technology to suggest similar items to customers based on their purchase preferences and personal profiles. It expedites the purchasing process by utilizing the intermediation of an e-wallet. Kim (2002) also stated that, while it is not guaranteed that customers who are satisfied with the user interface design of an online store will be loyal customers to that store, it is undoubtedly an important aspect of making customer satisfied. According to Kotler and Keller (2015), customer loyalty is defined as a commitment to repurchase a product or service for the next purchase although there is influence that causes the customer to switch into another product or service.

Additionally, Ruangkanjanes (2019) stated that mobile payment is one of the technological inventions found on smart

phones. Customers can pay with their mobile devices instead of cash, debit card, or credit card. Mobile payment methods include short message service (sms), unstructured supplementary service data (ussd), wireless application protocol (WAP), mobile wallets, and near field communication (NFC) (Shankar & Datta, 2018). Furthermore, Shankar and Datta (2018) emphasize that businesses can use mobile payments as a strategic tool to gain a competitive advantage. Some authors consider mobile payment to be the same as mobile banking, but they differ in terms of the number of parties involved. In mobile banking, banks are connected directly to customers, while third parties assist in completing the entire process in mobile payment. However, the study only focuses on information about the context of NFC (Near Field Communication). Yan (2015) describes the emergence of mobile payments from the perspective of user adoption.

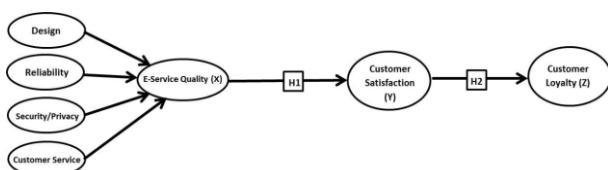
However, the research did not look into the perspective of e-service quality. E-service quality according to Chang (2009) described as an extent where software services through internet delivers a process of purchasing, shopping, and delivering products and services. While Zeithaml et al. (2002) stated that by using e-SERVQUAL model, the dimensions of E-service quality can be developed. Ojasalo (2010) stated that e-service quality comes from the customers' judgment and evaluations when they are doing the transaction through virtual marketplace. Service quality itself is defined as an interpretation of the overall impression of the consumer's assessment about the service or product offered (Hussain, 2014). According to Parasuraman et al. (1991), the Service Quality dimension is explained to have several dimensions, namely efficiency, reliability, privacy and security, and responsiveness and communication.

GOPAY is the most popular and publicly owned e-money in mobile payment form, according to the results of a Katadata survey (2019). GOJEK, an online transportation service provider, issued

electronic money to as many as 79.4% of those surveyed. While OVO from the Lippo Group is in second place with 58.4 %, T-cash (Telkomsel) is in third place with 55.5%. Dana, on the other hand, as a newcomer, has already grown by up to 34.2 %. The transformation of mobile payment can be seen through the lens of online transactions such as GOPAY. This electronic wallet application is currently popular among Indonesians. Especially for those who live near large cities, and Jakarta is one of Indonesia's largest.

There are only a limited number of studies that have examined further about specific payment methods, especially in the field of electronic payment services in the form of electronic wallets in Jakarta. As a result, it is deemed critical to discover more about GOPAY's problems in Jakarta as an e-wallet payment system, particularly in Indonesia. The benefits that can be taken from doing this research is to increase knowledge in the academic field, especially those related to electronic payment systems and services. In addition to industrial context, the implementation of this research can also become one of the company's considerations in decision making. Therefore, this study is formulated as follows.

Figure 1. Conceptual Framework



The measurements of this study were then adopted from the work of Wolfinbarger & Gilly (2003). The measurement for e-service quality are based on the website design, reliability, security/privacy, and customer service. However, in this context the website design is considered application design, due to the nature of the electronic wallet in a form of mobile application. Those dimensions, which are part of the independent variable, e-service quality (X) that can be controlled and used by a company to assist in increase customer satisfaction (Y). The variable customer loyalty

(Z) is measured by customer satisfaction. This study also tries to investigate whether satisfied users will have a positive intention to loyalty. Wolfinbarger & Gilly (2003) stated that, e-service quality can be measured from these dimensions: website design, reliability, security/privacy, and customer service.

Given that GOPAY as an e-service is an electronic channel through which consumers purchased services, using measurements such as: design, reliability, security and customer service, will be tested whether they really have influence on customer satisfaction, which leads to customer loyalty to GOPAY. The research model used to guide the study is shown in Figure 1, which suggests that design, reliability, security and customer service are all indirectly related to loyalty through satisfaction. This section elaborates on the theory base and derives the hypotheses.

Candra & Juliani (2018) examined the link between e-service quality, customer value, and customer satisfaction in LocalBrand. The results of this research highlighted the impact of e-service quality (ease of use, website design, reliability, privacy and responsiveness) dimensions on customer satisfaction. These results ultimately led the researchers to a conclusion that from a managerial point of view and to improve customer satisfaction, LocalBrandLocal Brand should focus on different dimensions of e-service quality especially on completing the service order attribute on the website.

Other study from Sundaram, Ramkumar & Shankar (2017) test the conceptual framework of customer perception on service quality online business and its impact on satisfaction and loyalty through e-commerce business in Tamilnadu State of India. This study revealed that the service quality factors like Responsiveness and Trust positively affected the Customer Satisfaction directly. This study matched to a great extent with the previous research results pointed out by Alam et al (2008); Henig and Klee (1997) Pratminingsih et al (2013); Ilias et al (2009); McMellon (2004); Gomez et al (2006); and Turk et al (2012).

Ali (2017) noted that there is a significant relationship between service quality dimensions and the impacts on customer satisfaction. The other two dimensions also stated that has a significant influence on customer repurchase intentions. Hammoud et al. (2018) concluded that E-service quality has an impact on customer satisfaction, even though in e-banking service context is still relatively new in Lebanon. Ayo Charles K. et al. (2016) implied that E-service quality has a positive impact towards customer satisfaction in an online transaction context. The study investigates the impact of innovation characteristics and also personal characteristics' impact on customer's attitude in compliment of the study. Chang (2009) described that e-service quality has positive association with customer satisfaction. Therefore, it can be hypothesized that:

H₁: E-service Quality has a positive influence towards Customer Satisfaction

Loyalty or positive behavioral/behavioural responses are developed over a period of time from a consistent record of the meeting, and sometimes even exceeding customer expectations (Teich, 1997). Satisfaction is yet another important trait which must be taken into account when shaping the overall loyalty of the customers toward their service providers (Afsar et al., 2010). Both service management and marketing literature suggest that there is a strong theoretical foundation for an empirical exploration of the linkages between customer satisfaction and customer loyalty (Famiyeh, 2017).

The service management literature proposes that customer satisfaction influences customer loyalty, which, in turn, affects profitability. Proponents of this theory include researchers such as Anderson and Fornell (1994), Gummesson (1993), Heskett et al. (1990), Heskett et al. (1994), Reicheld and Sasser (1990), Rust et al. (1995), Schneider and Bowen (1995), Storbacka et al. (1994) and Zeithaml et al. (1990). These researchers discuss the links between satisfaction, loyalty

and profitability. Customers satisfied with the products/services are more likely to be loyal to the provider (Anderson and Sullivan, 1993; Bolton and Drew, 1991).

Previous studies in various sector have been conducted, where conclusion can be drawn that customer loyalty was revealed to be significantly and directly affected by customer satisfaction (Khan and Rizwan, 2014; Ningsih and Segoro, 2014; Tung, 2013; Akhtar et al., 2011; Pratminingsih et al., 2013). Chinomona et al. (2014) study finds that e-customer satisfaction has an influence on customer loyalty when it comes to online shopping. The study tries to investigate the three antecedents of customer loyalty, which is e-service quality, customer perceived value, and customer satisfaction. Chang (2009) also supports the hypothesis that customer satisfaction has the positive effect on the customer loyalty. According to Asadpoor (2017), the customer satisfaction has a positive influence on customer loyalty in electronic transaction context. The study tries to investigate its impact on Saderat Bank's customer in West Azerbaijan. Therefore, it can be hypothesized that:

H₂: Customer Satisfaction has a positive influence towards Customer Loyalty

RESEARCH METHOD

The type of research conducted is associative research using survey method. The number of samples collected was 200 respondents. Respondents taken are consumers who have made transactions using GOPAY electronic wallets for at least 1 time in a week. The sampling technique used is non-probability sampling, namely by convenience sampling technique. The instrument used for sampling is a questionnaire with a 1-5 Likert scale. Testing is done by testing the outer model and inner model Structural Equation Model (SEM) using Smart PLS 3.0 software.

RESULTS & FINDINGS

The researchers obtained 204 responses in total. There were 152 usable responses

obtained from those responses. The research has a 74.5 %. According to the research, the majority of GOPAY users are men. GOPAY is used by 84 males (53.8 %) and 72 females (46.2 %). According to the data collected, the majority of consumers were adults. Demographics were quite young, with 41 people between the ages of 15 and 25, accounting for 26.3% of the population. Following that, 68 people between the ages of 26 and 35 were used to construct the age group. Thirty-three people aged 36 to 35, and thirteen people aged 46 to 55. This also depended on the ability of respondents to use electronic devices as a medium for using electronic wallets. According to data obtained, based on the type of work obtained by respondents, employees dominated 74.4% with a total of 116 people, then followed by 13 students.

The rest was 13 professions (doctors, teachers, etc.), and 8 entrepreneurs, and less than 1% are housewives, drivers, and creative workers. Domicile of Jakarta dominated the research respondents with 53.8% through 84 people. The rest was less than 10% with the domicile outside Jakarta such as Tangerang, Bogor, Bekasi, Depok, even outside Java such as Bali and Batam. The majority of respondents divide into two income categories: those earning more than 10 million rupiahs (34.6 % or 54 people), those earning between 5 million and 10 million rupiahs (44.9 % or 70 people), and those earning between 3,5 million and 5 million rupiahs (10,9%). The rest, a total of 15 people earning less than 1 million rupiahs, accounted for less than 10% of the total.

Measurement of validity is done to measure how much the indicators reflect an independent variable in a study. To see how much reflection the indicator is, the loading factor of the Outer model must be of good value, where the measurement is if the value of the loading factor is ≥ 0.500 (Hair et al., 1998).

Table 1. Loading Factor of Each Indicators

	APD	RL	SC	CSR	CS	CL
esq1	0.903					

esq2	0.932					
esq3	0.904					
esq4		0.752				
esq5		0.822				
esq6		0.703				
esq7		0.821				
esq8			0.81			
esq9			0.908			
esq10			0.932			
esq11			0.906			
esq12				0.894		
esq13				0.894		
esq14				0.935		
esq15				0.927		
cs1					0.842	
cs2					0.922	
cs3					0.927	
cs4					0.869	
cl1						0.9
cl2						0.862
cl3						0.805

The outer model measurements showed that all indicators had a loading factor value of 0.500, it can be concluded that all research indicators can be said to be valid.

Outer model measurements were also carried out through construct analysis from a research framework. In this measurement, the reliability of a variable was measured by looking at the value of Cronbach's Alpha values from a construct. If the Cronbach's alpha value of the independent variables is ≥ 0.600 , it can be said that the variable is reliable. From the perspective of Composite Reliability, the value of all constructs should be above 0.7

(Hair et al., 1998). Fornell & Larcker (1981) recommended that Convergent validity can be examined through the value of Average Variance Extracted (AVE) should be above 0.5 to be held reliable.

Table 2. Value of each variables' Cronbach's Alpha, Composite Reliability, and Average Variance Extracted

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
APD	0.9	0.937	0.833
RL	0.778	0.858	0.603
SC	0.911	0.938	0.792
CSR	0.933	0.952	0.834
CS	0.913	0.939	0.793
CL	0.821	0.892	0.734

The Cronbach's Alpha measurement showed that the five independent variables are reliable and can reflect their influence on the independent variables well. From the indicators of Convergent validity, the value of Composite Reliability and AVE are all can be held reliable.

Measurement of the structure model was done by testing the hypothesis of the parameters of a regression equation. It was done to measure whether there was influence between the dependent variable on the independent variable. As additional data, the researcher also added how strong the influence produced by the independent variable on the dependent variable. Measurements were made by looking at the value of P Value which is ≤ 0.05 in order to have an influence (Hair et al., 1998). Hair also implied that the value of T statistics recommended should be above 1.96 to measure if there is a positive influence of the constructs.

Table 3. Structural Model Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values

ESQ - > CS	0.756	0.759	0.035	21.667	0.000
CS - > CL	0.676	0.681	0.051	21.667	0.000

The researchers also analysed the effect of each variables using R Square. The results showed that the e-service quality (ESQ) had an impact of 57.2% to customer satisfaction (CS) and partially customer satisfaction had an impact of 45.7% to customer loyalty (CL).

Table 4. R Square Values of each variable

	R Square	R Square Adjusted
ESQ	1.000	1.000
CS	0.572	0.569
CL	0.457	0.454

Table 5. Path Coefficient

	ESQ	CS	CL
ESQ	0.756		
CS			0.676

Firstly, this research is to analyse the effects of e-service quality on customer satisfaction. The results of the calculations using the SEM analysis are consistent with the hypothesis that is developed (H1 was appeared to be proven). Previous authors have also discovered that the quality of e-services has a positive influence on customer satisfaction (Candra & Juliani, 2018; Chang, 2009; Alam et al., 2008; Henig & Klee, 1997; Pratminingsih et al., 2013; Ilias et al., 2009; McMellon, 2004; Gomez et al., 2006; Turk et al., 2012). The results of multiple regression testing show that satisfaction and loyalty influence Z-generation respondents' use of digital payment, with indicators indicating that digital payment sounds more convenient, cashless, and beneficial (Pradiatiningtyas, Dewa, Safitri, & Kiswati, 2020). The findings revealed that four independent variables, namely price, trust, lifestyle, and benefit, have a significant influence on Go-Pay application consumer satisfaction. However, convenience has no significant effect on Go-Pay consumer satisfaction (Azmy, Subakrie, & Azhari, 2020).

According to another study, service quality, perceived value, and perceived usefulness all have a positive and significant impact on customer satisfaction (Pangestu MT & Sukresna, 2021), the quality of e-services has a positive and significant influence on e-satisfaction (Nasution, 2019).

The second major framework is the influence of customer satisfaction on customer loyalty. The SEM analysis results show that the calculation is consistent with the hypothesis. Where the previous research also implied that customer satisfaction is proven to be the antecedent of customer loyalty (Khan and Rizwan, 2014; Ningsih and Segoro, 2014; Tung, 2013; Akhtar et al., 2011; Pratminingsih et al., 2013). This research concludes that the customer satisfaction has significant impact on customer loyalty. This study also extends the literature on customer loyalty construct that fits in the e-service quality and customer satisfaction model (Kim, 2002). Trust has a significant influence on consumer satisfaction of Go-Pay application. However, convenience has no significant influence on consumer satisfaction of Go-Pay. The quality of e-services has a positive and significant effect on e-loyalty. E-satisfaction has a positive and significant effect on e-loyalty, while e-service quality has a positive and indirect effect on e through e-satisfaction (Nasution, 2019). Customer satisfaction has a positive influence on e-service quality, and customer satisfaction has a positive influence on customer loyalty, but there was no positive effect on e-service quality on customer loyalty (Berliana & Zulestiana, 2020).

CONCLUSIONS

There are limitations of the study that should be considered from the findings of the study. The research did not include another construct such as sales promotion and brand perception that could be affecting the result of customer satisfaction and customer loyalty. This limitation may be worth investigating in the future. This research only applies in the settings of electronic wallet via mobile

application, which uses the medium of the internet connection. Another context that does not require internet connection such as electronic money in many forms such as card and NFC should also be worth investigating.

Thirdly, the dimension of customer loyalty could be explored further using the dimensions of repurchase intentions and word of mouth (WOM) or even electronic word of mouth (e-WOM), considering this product is categorized as a digital product in a form of mobile application. Finally, in the broad market of electronic payments in Indonesia, especially in big cities such as Jakarta, this study considers the specific product that is GOPAY that is integrated within the application of GOJEK. This study could have a different when applied in another electronic wallet product. The limitations of the study point out several interesting milestones of potential future research findings, which, the study could be applied in another context of electronic wallet or different kind of product to complete the actual framework.

In its practice, this study draws a theoretical concept about the importance of e-service quality in order to achieve customer satisfaction. In details, the manager could achieve better satisfaction by focusing on application design, reliability, security/privacy, and customer service. For application design, the user interface (UI) and user experience (UX) play a significant role to increase the e-service quality. The interface that is easy to understand, effective and efficient is very important in forming a great application design. Reliability can be drawn by the consistent service provided, and also can serve every single customer by the correct order of command. Another insight that the researchers get from the study is the reliability of the service when the network connection is weak has not that great of importance for the customers. Electronic wallet application owner should take attention in security and privacy, especially the customers' data that are used and generated by the application. The customers will use the mobile application when the feel

safe and secure about their data, money, and their transaction pattern. However, the electronic wallet application manager could still emphasize the great importance of customers' data for company's targeting purpose. Lastly, another key point that should the manager's considered is customer service. This tells how the company took the notice of each customer after they use the electronic wallet, or after they put their money in the electronic wallet application.

SUGGESTIONS

Furthermore, the study also confirmed that customer satisfaction has a positive impact towards customer loyalty. The study found that if we satisfy the customers, they are more likely to be loyal to the electronic wallet application company when compared to the other electronic wallet product. The customers also would likely to do a repeat transaction using the electronic wallet application they are satisfied with. More importantly, the attitude of the customer that are loyal is reflected by the fact that they are not likely to be tempted by the offerings of another electronic wallet product.

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