The Effect of Electronic Service Quality on Customer Loyalty Through Customer Satisfaction of GO-JEK Application Users in Banda Aceh

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Abstract

This research aims to analyze the effect of electronic service quality on customer loyalty both directly and indirectly through customer satisfaction. The sampling technique used is purposive sampling with the size of respondents as many 200 GO-JEK application users in Banda Aceh. Data analysis technique used is Structural Equation Model (SEM). Special for the indirect effect, the model is tested using Sobel test calculator. The results showed that electronic service quality has a significant effect on customer satisfaction; customer satisfaction has a significant effect on customer loyalty; electronic service quality has a significant effect on customer loyalty both directly and indirectly through customer satisfaction. These all findings are supported also with the previous causality theories, and this model can be an update reference for the further research models. This is also enrich the realm of knowledge and social science especially in management and marketing fields. The originality resides in its model, which is a combination from previous causality research models. The limitation rests in the scope of object, and the amount of variables, that are only three. The implication also shows in several decision that can be taken by leaders related to the object.

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

1. Introduction

The development of e-commerce businesses in Indonesia in the last few years has developed very rapidly, including the transportation sector. At present, the transportation sector has undergone a change in concept from conventional to digital, or better known as online transportation. Among online transportation in Indonesia, GO-JEK is the first online application-based transportation service in Indonesia that was established in 2010. GO-JEK has more than 900,000 working partners in 50 major cities in Indonesia. GO-JEK began operating in the city of Banda Aceh since August 2, 2017 which until now has over 500 people working partners (GO-JEK Indonesia, 2018).

Based on the quality of the application, GO-JEK can be said to be very good, this is seen from the value of reviews from customers to the GO-JEK application, which is 4.4 (on a scale of 1 to 5). However, even though the quality of the GO-JEK application has been very good, customers are still not satisfied with the quality of services provided in the GO-JEK application, this is seen from the number of customer complaints in the review content on the GO-JEK application, as for complaints such as difficulty logging in applications, inaccurate pick-up points, unstable rates, long driver response, and many other complaints (Google Play, 2018).

Service quality on the application will certainly have an impact on customer satisfaction
and indirectly can also affect customer loyalty (Chang & Wang, 2011). Service providers must always maintain and improve service quality on an ongoing basis, because e-commerce is very easy for customers to switch to other service providers (Barutçu, 2010). Therefore, it is important for service providers to provide services that are better than competitors so that customers will feel satisfied and tend to be loyal customers (Muttaqin, Fatihudin, & Aisyah, 2016).

The results of research conducted by previous researchers also found that electronic service quality has a significant effect on customer satisfaction and customer loyalty (Puriwat & Triopsakul, 2017); (Sundaram, Ramkumar, & Shankar, 2017). However, there are also results of previous studies which found that electronic service quality has no significant effect on customer satisfaction and customer loyalty (K.-W. Wu, 2011); (Chang & Wang, 2011); (Chinomona, Masinge, & Sandada, 2014).

Based on the differences in the results of previous studies and the phenomena described earlier, it is necessary to conduct further research in order to explain the effect of electronic service quality on customer loyalty both directly and indirectly through customer satisfaction.

2. Literature Review

Customer Loyalty

Customer loyalty is the commitment of customers to buy back products consistently despite other alternative products. Customer loyalty consists of two aspects: attitudinal loyalty, which is the tendency that customers want for services and products obtained based on past experience, while behavioral loyalty, namely customer commitment to the products and services that are applied even though there are alternative services and products from other brands (Lenka & Suar, 2009).

Customer Satisfaction

Based on Expectancy Disconfirmation Theory stated by (Oliver, 1980), customer satisfaction is a summary of the psychological state that comes from a comparison between customer experience after using a product with customer expectations before using the product. If the product received does not meet expectations, the customer does not feel satisfied, but if the product received meets expectations, the customer will feel satisfied, whereas if the product received exceeds expectations, the customer will feel very satisfied (Lubis, Sucherly, Lubis, & Kaltum, 2015).

Electronic Service Quality

Electronic service quality is all phases of customer interaction with a site and the extent to which a site can facilitate purchases and shipments efficiently and effectively. The quality of electronic services consists of the following dimensions: 1) efficiency, namely the ease of accessing and using applications, 2) system availability, namely the technical capability of the application, 3) fulfillment, namely the ability of the application to fulfill orders, and 4) privacy, namely application security in protecting customer information (Parasuraman, Zeithaml, & Malhotra, 2005).

Theoretical Framework

(Alpar, Porembski, & Pickerodt, 2001) said that the ease of use and information content contained in a site can determine customer satisfaction. Furthermore, (L. Wu & Lin, 2006) also said that a site that is easy to use will make customers feel satisfied so that it will have the opportunity for customers to revisit the site.

According to (Hsu, 2008), all aspects of electronic service quality are predictors of customer loyalty. (Jin, Park, & Kim, 2008) revealed that the quality of service on an online
site can positively affect customer loyalty, the more customers trust an online site, the more likely customers are to be loyal to the site.

(Srivastava, Chandra, & Shirish, 2015) said that if a customer is satisfied with the product or service received, it will lead to customer loyalty. Furthermore, (Schierz, Schilke, & Wirtz, 2010) said that if a customer is satisfied with a product, the customer will make a repeat purchase, convey positive information about the product, and will become a loyal customer.

The quality of electronic services contained on a site has a positive impact on increasing customer satisfaction and indirectly it can also affect customer loyalty (Chang & Wang, 2011). The results of research (Muttaqin et al., 2016) also concluded that the better the quality of electronic services available on a site, then it will increase customer satisfaction with the site which indirectly can also increase customer loyalty to the site.

Based on the theoretical framework, the research hypothesis is determined as follows:

**H1:** Electronic service quality has an effect on customer satisfaction.

**H2:** Electronic service quality has an effect on customer loyalty.

**H3:** Customer satisfaction has an effect on customer loyalty.

**H4:** Electronic service quality has an effect on customer loyalty through customer satisfaction.

### 3. Research Method

The population in this research is GO-JEK application users in Banda Aceh City, while the number of sample in this study is 200 respondents who were selected using purposive sampling. Data collection techniques used is questionnaires and documentation, while data analysis technique used is structural equation model (SEM) with SmartPLS version 3 software. SEM is a multivariate data analysis technique that combines the outer model which aims to determine the specification of the relationship between latent variables and the indicators, and the inner model which aims to determine the specification of the relationship between latent variables (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). Special for the indirect effect, the model is tested using Sobel test calculator.

### 4. Research Result

Research Results (Outer Model)

The results of the outer model in this research will be explained as follows:

With applications using SmartPLS (www.smartpls.com)—the primary software used in partial least squares structural equation modeling (PLS-SEM)—this practical guide provides concise instructions on how to use this evolving statistical technique to conduct research and obtain solutions. Featuring the latest research, new examples, and expanded discussions throughout, the Second Edition is designed to be easily understood by those with limited statistical and mathematical training who want to pursue research opportunities in new ways.
Based on the figure, it is known that all indicators of each variable are valid because they have a loading indicator value ($\geq 0.70$), meaning that all indicators of each variable can represent the measured variable. Furthermore, the measurement criteria for the measurement of other models can be seen in the following table:

**Table 1.Validity and Reliability**

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>R Square ($R^2$)</th>
<th>Q Square ($Q^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\xi$ Electronic Service Quality:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\xi_a$ Efficiency</td>
<td>0.655</td>
<td>0.824</td>
<td>0.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\xi_b$ System availability</td>
<td>0.623</td>
<td>0.796</td>
<td>0.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\xi_c$ Fulfillment</td>
<td>0.687</td>
<td>0.773</td>
<td>0.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\xi_d$ Privacy</td>
<td>0.772</td>
<td>0.852</td>
<td>0.911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\eta_1$ Customer Satisfaction</td>
<td>0.729</td>
<td>0.814</td>
<td>0.890</td>
<td>0.462</td>
<td>0.318</td>
</tr>
<tr>
<td>$\eta_2$ Customer Loyalty</td>
<td>0.638</td>
<td>0.858</td>
<td>0.898</td>
<td>0.471</td>
<td>0.281</td>
</tr>
</tbody>
</table>

Based on the table, it is known that the values obtained from the other assessment criteria are: AVE ($>0.05$), Cronbach's Alpha ($>0.7$), Composite Reliability ($>0.7$), $R^2$ ($>0.25$), and $Q^2$ ($>0.02$). Thus, the model in this study has fulfilled the minimum assessment criteria required so that the model in this study can be said to be fit.

**Research Results (Inner Model)**

The results of the inner model in this research can be seen in the following table:

**Table 3. Coefficient And Significance.**

<table>
<thead>
<tr>
<th>Inter-Variable Effect</th>
<th>$\rho$</th>
<th>$p$-value</th>
</tr>
</thead>
</table>

Based on the table, it is known that the effect between electronic service quality, customer satisfaction, and customer loyalty is as follows:

Electronic service quality has a positive and significant effect on customer satisfaction, known from the value of the path coefficient of (0.680) with a significant value that is (0.000).

Electronic service quality has a positive and significant effect on customer loyalty, known from the value of the path coefficient of (0.339) with a significant value that is (0.000).

Customer satisfaction has a positive and significant effect on customer loyalty, known from the value of the path coefficient of (0.339) with a significant value that is (0.000).

Electronic service quality has a positive and significant effect on customer loyalty through customer satisfaction, known from the value of the path coefficient of (0.339) with a significant value (from Sobel test) that is (0.000).

Based on the results of the research, the information received or not the hypotheses formulated can be seen in the following table:

**Table 4. Hypothesis Test Result**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Electronic service quality has an effect on customer satisfaction</td>
<td>accepted</td>
</tr>
<tr>
<td>H2</td>
<td>Electronic service quality has an effect on customer loyalty</td>
<td>accepted</td>
</tr>
<tr>
<td>H3</td>
<td>Customer satisfaction has an effect on customer loyalty</td>
<td>accepted</td>
</tr>
<tr>
<td>H4</td>
<td>Electronic service quality has an effect on customer loyalty through customer satisfaction</td>
<td>accepted</td>
</tr>
</tbody>
</table>

**Hypothesis Test Explanation**

**H1 (Accepted) : The Effect of Electronic Service Quality on Customer Satisfaction**

The results of research shown that electronic service quality has a significant effect on customer satisfaction, its concluded that the quality of electronic services provided by the GO-JEK application has a significant contribution in increasing customer satisfaction. The results of this research are in accordance with the opinion of (Alpar et al., 2001) which said that the ease of use and information content contained in a site can determine customer satisfaction. The results of this research are in accordance with the results of the research by (Heidari, Mousakhani, & Rashidi, 2014) (Ting, Ariff, Zakuan, Sulaiman, & Saman, 2016),
and (Saeedeh & Abolfazli, 2016) who also found that the electronic service quality has a positive and significant effect on customer satisfaction.

These results indicate that the satisfaction of GO-JEK application users in Banda Aceh can be improved by providing good quality electronic services in the GO-JEK application. If viewed based on the characteristics of the respondents, the respondents in this study were dominated by respondents who work as students whose respondents were the millennial generation categories. Therefore, it is important for GO-JEK management to continue to maintain and improve the quality of electronic services in the GO-JEK application in order to increase the satisfaction of GO-JEK application users in Banda Aceh, because in general the millennial generation is more focused on assessing business services in terms of technology than other aspects.

**H2 (Accepted) : The Effect of Electronic Service Quality on Customer Loyalty**

The results of research shown that electronic service quality has a significant effect on customer loyalty, its concluded that the quality of electronic services provided by the GO-JEK application has a significant contribution in increasing customer loyalty. The results of this research are in accordance with the opinion of (Jin et al., 2008) which said that the quality of service on an online site can positively influence customer loyalty. The results of this research are in accordance with the results of the research by (Awan & Asghar, 2014), (Puriwat & Tripopsakul, 2017), and (Sundaram et al., 2017) who also found that the electronic service quality has a positive and significant effect on customer loyalty.

These results indicate that the quality of electronic services provided by the GO-JEK application is what can determine the loyalty of GO-JEK application users in Banda Aceh. Because the majority of respondents in this research are millennials, the quality of electronic services in the GO-JEK application must be improved, maintained and improved by GO-JEK management, because e-commerce is very easy for customers to switch to other service providers. Moreover, for millennial generations, the quality of electronic services in an application can be said to be an important factor in determining the decision to reuse the application.

**H3 (Accepted) : The Effect of Customer Satisfaction on Customer Loyalty**

The results of research shown that customer satisfaction has a significant effect on customer loyalty, its conclude that the satisfaction felt by GO-JEK application users has a significant contribution in increasing customer loyalty. The results of this research are in accordance with the opinion of (Schierz et al., 2010) which said that if a customer is satisfied with a particular product or service, then the customer will make a repeat purchase, convey positive information about the product or service, and will become a loyal customer. The results of this research are in accordance with the results of the research by (Chinomona et al., 2014), (Saeedeh & Abolfazli, 2016), and (Puriwat & Tripopsakul, 2017) who also found that customer satisfaction has a positive and significant effect on customer loyalty.

These results indicate that the loyalty of GO-JEK application users in Banda Aceh is largely determined by the satisfaction felt by the users of the application. When GO-JEK application users in Banda Aceh are satisfied with the GO-JEK application of course this will greatly determine the user to spread positive information about the GO-JEK application to the people around him and will also reuse GO-JEK application and will be loyal to continue to use the GO-JEK application, especially for millennial generations who are more accustomed to electronic devices it will be easier to spread positive information about GO-JEK applications (e-WoM), and it is easier to reuse GO-JEK application, and has a greater
opportunity to become a loyal user of the GO-JEK application.

**H4 (Accepted)**: The Effect of Electronic Service Quality on Customer Loyalty through Customer Satisfaction

The results of research shown that electronic service quality has a significant effect on customer loyalty indirectly through customer satisfaction, its concluded that the better the quality of electronic services provided by the GO-JEK application, the customer satisfaction with the application will also increase which also has a significant contribution in increasing customer loyalty.

The results of this research are in accordance with the opinion of (L. Wu & Lin, 2006) which says that a site that is easy to use will make customers feel satisfied so that it will have the opportunity for customers to revisit the site. Furthermore, (Chang & Wang, 2011) also said that the quality of electronic services has a positive impact on customer satisfaction and indirectly can also affect customer loyalty. The results of this research are in accordance with the results of the research by (Muttaqin et al., 2016) which also found that electronic service quality has a positive and significant indirect effect on customer loyalty through customer satisfaction.

Based on the results of the research, its known that customer satisfaction acts as a partial mediator between the effect of electronic service quality on customer loyalty. This is in accordance with the opinion of (Hair, Hult, Ringle, & Sarstedt, 2016) which said that if exogenous variables (electronic service quality) has a significant effect on endogenous variables (customer loyalty) both directly and indirectly through variable intervening (customer satisfaction), then customer satisfaction can be said to be a mediating variable that has a partial role in mediating the effect of electronic service quality on customer loyalty.

5. Conclusion

The result shows that electronic service quality has a significant effect on customer satisfaction; customer satisfaction has a significant effect on customer loyalty; electronic service quality also has a significant effect on customer loyalty both directly and indirectly through customer satisfaction. These all findings are supported also with the previous causality theories, and this model can be an update reference for the further research models. This is also enrich the realm of knowledge and social science especially in management and marketing fields. The originality resides in its model, which is a combination from previous causality research models. The limitation rests in the scope of object, and the amount of variables, that are only three.

The implication also shows in several decision that can be taken by leaders related to the object. The electronic service quality is one of the factors that greatly determines the level of customer satisfaction and customer loyalty, therefore it is recommended that GO-JEK management continue to maintain and improve the quality of electronic services on the GO-JEK application continuously in order to improve and maintain the satisfaction and loyalty of GO-JEK application users. One way that can be done by GO-JEK management is to prioritize aspects of customer privacy, because so far the GO-JEK application has not been able to maintain and keep confidential the customer's personal contact.

References


