

# The Effect of E-Service Quality and E-Trust on Mobile Payment Application E-Customer Loyalty Through E-Customer Satisfaction as Intervening Variable

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## Abstract

Mobile payments are expected to provide opportunities for the community to be involved in the advancement of the digital economy. In addition, the public is expected to be able to experience the benefits of using mobile payments, such as faster transactions, cheaper transaction fees, and support for financial literacy. This research aims to observe the intervening effect of e-customer satisfaction on e-customer loyalty of Indonesian mobile payment customers.

**Keywords:** mobile payment, fintech, e-wallet, financial service

## 1. Introduction

In the context of *mobile payments*, loyalty is referred to as e-loyalty which is defined as a customer's beneficial attitude to an online site that results in a repurchase peril. Kim (2003), states that the key to competitive advantage in competitive situations is the company's ability to increase customer loyalty. Customer loyalty will be the key to the company's success and competitive advantage not only in the short term but also in the long run. Consumers who have strong *e-loyalty* will provide several benefits for the company, including increasing the company's sales growth. In line with the increase in sales, the company has a great opportunity to make a profit if the company's products have good sales growth. In *mobile payments*, *e-loyalty* is influenced by the satisfaction that consumers receive for the services provided by the *website*. In other words, the higher the customer's satisfaction with the website, the higher the loyalty will be.

Another aspect that fish should be aware of is customer satisfaction. Satisfaction is a feeling of senang or disappointment of a person that arises when comparing the perceived performance of the product (or result) to their expectations. Meanwhile, satisfaction in *the context of mobile payment*, which is often referred to as *satisfaction*, is defined by Pramadita (2021) as customer satisfaction in connection with previous transactions provided by *mobile payment* companies. It is these satisfied consumers who have a tendency to retransact, and recommend goods or services (Zeithaml *et al.*, 2013). Disgruntled customers, on the other hand, will more likely to resist the retailer's efforts to build closer relationships and make it more likely to take steps to reduce the retail's resilience. (Pramadita, 2021). *E-satisfaction* has a positive effect on *e-loyalty*, but *e-loyalty* will only be determined if other factors are also met. Therefore, *e-satisfaction* has an important role in the formation of *e-loyalty* and also has a relationship with other factors. In this eliteization, the factors that affect *e-satisfaction* are taken from the results of previous studies, namely trust (*e-trust*), and quality of service (*e-service quality*).

Quality of service is one of the main keys in determining the success or failure of a business. According to Zeithaml (2002, in Margaretha Pink, 2017) service quality in *e-commerce* or *eservice quality* can be defined as the extent to which a site can facilitate effective and efficient spending, purchasing and delivery. There are differences in the dimension of service quality in *e-commerce* with the dimension of service quality in the context of traditional or *offline* stores. This is because in the context of *e-commerce*, it also considers the technological aspect as well. In this study, the author will use six (6) dimensions of *e-service quality* proposed by Ladhari (2010) in his research which includes aspects of *reliability*, *responsiveness*, *privacy/security*, *information quality/benefit*, *ease of use*, and *web design*.

In relation to the quality of service, DANA itself is still new so there are still many who are not familiar with the compilation, but the service on the application is quite good. In addition to providing good service, it is also important to increase customer trust because trust is an important factor in business-business interactions and is an important aspect in electronic commerce. Trust is the center of economic transactions, whether carried out at retail stores offline or via the internet. Trust in an *online* site is often referred to as an *e-trust*. Corritore (2013) defines *e-trust* as an attitude of hope that believes in an online risk situation whose vulnerabilities will not be exploited. In the world of *e-commerce*, *etrust* is an important factor dalam many social interactions that involve uncertainty and dependence. Trust is therefore an important issue in the context of *online* transactions. For DANA's trust is still not optimal, this is due to the lack of users of the application so that it needs maximum delivery in promoting and expanding and develop such applications.

Research related to the variables that the author raised in this study has previously been carried out by Muhdiyanto and Diesyana with the title "Creating E-Loyalty On Online Shopping Transaction Through E-Service Quality And E-Trust". The results showed that *e-service quality* does not have a positive or significant influence on *e-loyalty*, while *e-trust* has a positive and significant influence on *e-loyalty*. However, other studies have shown that *e-service quality* has a positive and significant effect on *e-loyalty* and *e-trust* does not have a significant effect on *e-loyalty*. The research was conducted by Sativa with the title "Analysis of the Effect of E-Trust And E-Service Quality On Eloyalty With E-Satisfaction As An Intervening Variable".

## **2.1. Literature Review**

### **2.1. E-Service Quality**

According to Grabner and Faullant (2007) *e-service quality* is defined as a meeting between consumer expectations without direct interaction in the services provided *E-service quality is defined as meeting customer expectations without the service encounter relying on human-to-human interaction*. According to Anton (2013) *e-service quality* is a form of wider service quality with internet media that connects sellers and buyers to meet shopping activities effectively and efficiently.

The quality of service is that a seller has provided product quality in the form of goods or services the seller meets or exceeds customer expectations. Service quality is one of the main keys in determining the success or failure of a business (Tjiptono, 2019).

According to Zeithaml, et al. in Tjiptono (2019) he put forward a conceptual model to understand and improve service quality and divide it into seven dimensions, namely *efficiency*, *reliability*, *fulfillment*, and *privacy* so as to form a *core scale of online service* or core scale. This scale is used to measure customer perceptions of the quality of services provided and as a

criterion used by customers to periodically evaluate services. While the other three dimes of responsiveness, compensation and contact are *the recovery* scale, which is a scale that plays a role when a customer experiences a problem or has a number of questions that want to be asked to get a solution to the question or problem.

From the definition above, the author can imagine that *e-service quality* is a service provided through the website to consumers in facilitating purchasing and distribution activities effectively and efficiently.

## **2.2 E-Trust**

At first the theory of *trust* or trust was widely studied from the discipline of psychology, since this is related to one's attitude. However, currently, *trust* is a study in various disciplines including being a study in economics, one of which is in the *e-commerce* business sector. The concept of trust is one of the most important elements for creating long-term relationships with customers. A business transaction between two or more parties will occur if both parties trust each other.

According to Crosby in Aminsya (2019) consumer trust is defined as the belief that the provider of a product or service can be relied upon to behave in such a way that the long-term interests of consumers can be met. According to Kim, et al. in Aminsya (2019) *e-trust* is defined as the basic beginning of a relationship of formation and maintenance between a customer and an online seller.

Based on the above understanding, it can be concluded that e-trust or electronic trust is a trust that does not appear suddenly, but must be built from the beginning. This trust will be a driving force in creating an effective relationship with customers.

## **2.3 E-Customer Loyalty**

*Loyalty* is the preferential response, attitude, and behavior of one or more to the brand in the product category expressed over a period of time set by the consumer. *Loyalty* is present when favorable attitudes for the brand are manifested in the behavior of repeat purchases. According to Anton (2013) *e-loyalty* is described as all about quality customer support, easy and affordable delivery and handling, timely in delivery, clear and trustworthy privacy policy, attractive product presentation. According to Chou, et al (2015) *e-loyalty* is a firmly held commitment to customers to revisit the website consistently, and the desire to stay more on the website for each visit, given the repeated visits.

*E-loyalty* is the possibility of repeated visits by the same individual. Therefore to retain consumers is a must for *e-vendor* finances because to attract new consumers is something expensive compared to traditional stores attracting new consumers (Luarn and Lin, 2003). Nonetheless, proving to customers that the company cares about them and wants to help them regardless of the short-term consequences of profit, helps create/strengthen the kind of relationships that gain customer loyalty (Anderson and Silivasan, 2003).

Anderson and Srinivasan in Hur et al (2011) define *e-customer loyalty* as a customer-benefiting attitude towards the electronic business that results in re-buying behavior. In addition, *e-loyalty* refers to the consumer's intention to buy from a website or the intention to return to a particular website.

Meanwhile, consumers' commitment to come back to a site consistently because they prefer to shop on that site instead of having to switch to another site is called *e-customer loyalty*.

Based on the definition of *e-customer loyalty*, it can be concluded that *e-customer loyalty* is the occurrence of customer repurchase activities for a product or service offered as a result of satisfaction with the product or service after use.

### 2.4 E-Customer Satisfaction

Ahmad in Junardi (2019) stated that *e-customer satisfaction* is when online products and services exceed consumer expectations, and exceed consumer satisfaction after comparing previous purchase experiences, and can also exceed the online purchase experience.

Satisfaction is a measure of how offerings such as *e-retailer* products and services exceed the expectations of online users. In the satisfaction literature there are two streams of research namely cognitive and emotional or affective approaches. In the first approach, satisfaction is formed following the paradigm of expectation discounts that argue that customers compare their expectations with the results obtained. Meanwhile, in the second approach, consumer emotions are considered in the evaluation of satisfaction. According to Peter and Olson (2010) said that consumer satisfaction is an important concept in marketing and consumer research. Consumers are considered satisfied if someone is inclined to continue making purchases and informing others about their experience. If not satisfied, consumers will turn to other products or brands and give complaints to manufacturers, retailers and other consumers. Thus, consumer satisfaction can be interpreted as the degree to which a product or service at least meets or may exceed consumer expectations. Consumer satisfaction and dissatisfaction is the overall feeling about a product after buying and using a product or service (Salomon, 2011). According to Chang, et al (2009). *E-satisfaction* is a customer's psychological reaction with respect to the previous experience with a comparison between expected and perceived performance. *E-satisfaction* as a cumulative construct based on the amount of satisfaction at each purchase and consumption experience (Anderson).

## 3. Methods

Out of the 100 questionnaires distributed to DANA users in Pekanbaru Riau City, it turned out that there were 55 people or with a percentage of 55% of male respondents and 45 people or with a percentage of 45% of respondents female. Based on this data, the majority of DANA users are men. The data can be seen from the table below:

**Table 1** DANA User Data

Gender	Number of Users	Percentage
Man	55 people	55%
Woman	45 people	45%
Total	100 people	100%

Source: Primary data processed in 2022

### 3.1 Characteristics of Respondents

Of the 100 questionnaires distributed to DANA users in Pekanbaru Riau City, there were 44 respondents who were in the age interval of 22-24 years or with a percentage of 44%. Based on these data, the majority of DANA users are age intervals of 22-24 years. The data can be seen from the table below:

**Table 4.2 DANA User Age Data**

Age	Number of Users	Percentage
16 – 18 years old	17 people	17%
19 – 21 years old	23 people	23%
22 – 24 years old	44 people	44%
25 – 27 years old	12 people	12%
28 – 30 years	4 people	4%
<b>Total</b>	<b>100 people</b>	<b>100%</b>

Source: Primary data processed in 2022

Of the 100 questionnaires distributed to DANA users in Pekanbaru City, it turned out that there were 39 respondents or 39% of high school / equivalent education levels, 10 respondents or 10% of D3 education levels, 49 respondents or 49% of S1 education level, and 2 respondents or 2% of S2/S3 education level. Based on this data, the majority of DANA users are S1 education levels. The data can be seen from the table below:

**Table 4.3 Dana User Education Level Data**

Education Level	Number of Users	Percentage
High School/ Equivalent	39 people	39%
D1	-	-
D3	10 people	10%
S1	49 people	49%
S2/S3	2 persons	2%
<b>Total</b>	<b>100 people</b>	<b>100%</b>

Source: Primary data processed in 2022

Of the 100 questionnaires distributed to DANA users in Pekanbaru Riau City, it turned out that there were 52 respondents or 52% who had made DANA transactions 1-2 times, 14 respondents or 14% have made transactions 3-4 times, and 34 respondents or 34% have made transactions more than 4 times. These transactions are carried out every day. Based on this data, the majority of DANA users have made transactions at DANA are 1-2 times transactions. The data can be seen from the table below:

**Table 4.4 DANA User Transaction Data**

Number of Transactions	Sum	Percentage
1 - 2 times	52 people	52%
3 – 4 times	14 people	14%
More than 4 times	34 people	34%
<b>Total</b>	<b>100 people</b>	<b>100%</b>

Source: Primary data processed in 2022

## 4. Research Results

### 4.1 Hypothesis Test

Hypothesis Test is a test that is carried out to find out whether there is an influence between variables and to prove the hypothesis formulated earlier. This test is carried out using multiple analysis and *path analysis*. In this study, there were two regression models, and *path analysis* was carried out to determine the influence of direct variables and indirect variables.

**a. Model I Regression Analysis**

**1) Coefficient of Determination test ( $R^2$ )**

The coefficient of determination test is a test carried out to determine the ability of independent variables to explain dependent variables. The following are the results of the coefficient of determination test seen from the table below:

**Table 4.14** Coefficient of Determination Test Results ( $R^2$ ) Model I

Model Summary				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.096 <sup>a</sup>	.609	.621	1.816

a. Predictors: (Constant), e-service quality, e-trust

Source: Spss output processed 2022

Based on the table above, that the value of the coefficient that has an R Square value of 0.609 or 60.9%. From this value, it can be interpreted that the *e-satisfaction* variable can be explained by the variables *e-trust* and *e-service quality* with an R Square of 60.9%, which is the amount of 39.1 is described by other variables not studied.

**2) Simultaneous Test (F)**

Simultaneous Test is a test performed to find out whether all free variables have a joint influence on dependent variables. The basics in making decisions in the F test are:

- a) If the F-calculated value is greater than the F-table and has a significant value of less than 0.05, then the independent variables together (simultaneously) affect the dependent variable
- b) If the value of F-count is smaller than that of F-table and has a significance value above 0.05, then the independent variable has no influence on the dependent variable

The following are the results of the simultaneous test (F) seen from the table below:

**Table 4.15** Simultaneous Test Results (F) Model I

ANOVA <sup>a</sup>						
Type	Sum of Squares	Df	Mean Square	F	Sig.	
1 Regression	2.963	2	1.481	4,449	.000 <sup>b</sup>	
Residual	319.997	97	3.299			
Total	322.960	99				

a. Dependent Variable: e-satisfaction

b. Predictors: (Constant), e-service quality, e-trust

Source: Spss output processed 2022

Based on the results from the table above, the F-calculated value is 4.449 and greater than the F-table value of 3.09 and the significant value is 0.000 or less than 0.05, so that it can be concluded that the variables *e-trust* and *e-service quality* together (simultaneously) have a significant effect on the variable *e-satisfaction*.

**3) Partial Test (t)**

Partial Test is a test carried out to determine the influence of one independent variable individually in explaining the dependent variable. In the research hypothesis on the t test, namely  $H_0 =$  has no significant effect and  $H_1 =$  has a significant effect. There are several basic decision-making in the partial test, namely:

- a) If the calculated value of  $t$  is smaller than  $t$ -table and has a significant  $> 0.05$ , then  $H_0$  is accepted and  $H_1$  is rejected
- b) If the calculated value of  $t$  is greater than  $t$ -table and has a significant  $< 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted

The following are the results of the simultaneous test (F) seen from the table below:

**Table 4.16** Partial Test Results (t) Model I

Coefficients <sup>a</sup>						
Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	29.850	3.759		7.941	.453	
1 e-trust	.034	.117	.029	2,290	.000	
e-service quality	.109	.117	.095	2,931	.000	

a. Dependent Variable: e-satisfaction

Source: Spss output processed 2022

Based on the table above, the *e-trust* variable has a regression coefficient value of 0.34 positive value (+) meaning that the *e-trust* variable has a positive influence on *e-satisfaction*. The *e-trust* variable has a t-count value of 2.290 or greater than the t-table (1.66055) and a significance value of 0.000 or less than 0.05. This shows that the *e-trust* variable has a significant effect on *e-satisfaction*, meaning that:

***H1 : Suspected e-trust affects dana customer e-satisfaction, received***

Furthermore, the *variable e-service quality* has a regression coefficient value of 0.109 positive value (+) meaning that the *variable e-service quality* has a positive influence on *e-satisfaction*. The *e-service quality* variable has a t-count value of 2.931 or greater than the t-table (1.66055) and a significance value of 0.000 or less than 0.05. This shows that the *variable e-service quality* has a significant effect on *e-satisfaction*, meaning that:

***H2: Suspected e-service quality affects DANA customer e-satisfaction , Received***

- b. Model II Regression Analysis
- 1) Coefficient of Determination Test ( $R^2$ )

The coefficient of determination test is a test carried out to determine the ability of independent variables to explain dependent variables. The following are the results of the coefficient of determination test seen from the table below:

**Table 4.17** Coefficient of Determination Test Results ( $R^2$ ) Model II

Model Summary				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
II	.890 <sup>a</sup>	.552	.526	1.284

a. Predictors: (Constant), e-satisfaction, e-trust, e-service quality

Source: Spss output processed 2022

Based on the table above, that the value of the coefficient that has an R Square value of 0.552 or 55.2%. From this value, it can be interpreted that the *variable e-loyalty* can be explained by the variables *e-trust*, *e-service quality* and *e-satisfaction* with an R Square of 55.2%, as much as the rest is 44.8 is described by other variables not studied.

### 2) *Simulation Test (f)*

Simultaneous Test is a test performed to find out whether all free variables have a joint influence on dependent variables. The basics in making decisions in the F test are:

- a) If the F-calculated value is greater than the F-table and has a significant value of less than 0.05, then the independent variables together (simultaneously) affect the dependent variable
- b) b) If the value of F-count is smaller than that of F-table and has a significance value above 0.05, then the independent variable has no influence on the dependent variable

The following are the results of the simultaneous test (F) seen from the table below:

**Table 4.18** Simultaneous Test Results (F) Model II

ANOVA <sup>a</sup>						
Type	Sum of Squares	Df	Mean Square	F	Sig.	
Regression	28.389	3	9.463	5.740	.001 <sup>b</sup>	
II Residual	158.251	96	1.648			
Total	186.640	99				

a. Dependent Variable: e-loyalty  
b. Predictors: (Constant), e-satisfaction, e-trust, e-service quality

Source: Spss output processed 2022

Based on the results of the table above, the F-calculated value is 5.740 and greater than the F-table value of 2.70 and the significant value is 0.001 or less than 0.05, so that it can be concluded that the variables *e-trust*, *e-service quality*, and *e-satisfaction* together (simultaneously) have a significant effect on the variable *e-loyalty*.

### 3) *Partial Test (t)*

Partial Test is a test carried out to determine the influence of one independent variable individually in explaining the dependent variable. In the research hypothesis on the t test, namely H<sub>0</sub>= has no significant effect and H<sub>1</sub>= has a significant effect. There are several basic decision-making in the partial test, namely:

- a) If the calculated value of t is smaller than t-table and has a significant > 0.05, then H<sub>0</sub> is accepted and H<sub>1</sub> is rejected
- b) b) If the calculated value of t is greater than t-table and has a significant < 0.05, then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted

The following are the results of the simultaneous test (F) seen from the table below:

**Table 4.19** Model II Partial Test Results (t)

Coefficients <sup>a</sup>						
Type	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
(Constant)	29.313	3.413		8.588	.000	
II e-trust	.165	.082	.190	2.005	.048	
e-service quality	.107	.083	.122	1.285	.202	
e-satisfaction	.229	.072	.301	3.192	.002	

a. Dependent Variable: e-loyalty

Source: Spss output processed 2022

Based on the table above, the *e-trust* variable has a regression coefficient value of 0.165 positive value (+) meaning that the *e-trust* variable has a positive influence on *e-*



*loyalty*. The *e-trust* variable has a t-count value of 2005 or greater than the t-table (1.66071) and a significance value of 0.048 or less than 0.05. This shows that *the variable e-trust* has a significant effect on *e-loyalty*, meaning that:

***H3: Suspected e-trust affects DANA customer e-loyalty , Received***

Furthermore, the *e-service quality* variable has a regression coefficient value of 0.107 positive value (+) meaning that the *e-service quality* variable has a positive influence on *e-loyalty*. However, the *e-service quality* variable has a t-count value of 1.285 or less than the t-table (1.66071) and a significance value of 0.202 or greater than 0.05. This indicates that the *variable e-service quality* has no significant effect on *e-loyalty*, meaning that:

***H4: Suspected that e-service quality affects DANA customer e-Loyalty , Rejected***

Furthermore, based on the table above, the *e-satisfaction* variable has a regression coefficient value of 0.229 positive value (+) meaning that the *e-satisfaction* variable has a positive influence on *e-loyalty*. The *e-satisfaction* variable has a t-count value of 3.192 or greater than the t-table (1.66071) and a significance value of 0.002 or less than 0.05. This shows that the *e-satisfaction* variable has a significant effect on *e-loyalty*, meaning that:

***H5 : Suspected e-satisfaction affects DANA customer e-loyalty, Received***

**4.2.4 Path Analysis**

*Path analysis* is a technique used to determine the direct and indirect consequences of a set of variables that are causal variables against a set of other variables which is an effect variable. In this study tested the intervening variables. Whether the intervening variable is capable of mediation the relationship of dependent and independent variables.

**a. Model I Path Coefficient**

In the results of the regression output of model I, it is known that the magnitude of the R Square value in the Summary model is 0.609 or 60.9%, this shows the contribution of the influence of *e-trust* (X1) and *e-service quality* (X2) on *e-satisfaction* (Z) was 60.9%, while the remaining 39.1% was an influence of other variables not included in the study. To get the value of e1 can be searched by using the formula  $e1 = \sqrt{1 - (0,609)} = 0.6253$ .

**b. Model II Path Coefficient**

In the results of the model II regression output, it is known that the magnitude of the R Square value in the Summary model is 0.552 or 55.2%, this shows that the contribution of the influence of *e-trust* (X1), *e-service quality* (X2) and *e-loyalty* (Y) to *e-satisfaction* (Z) is 55.2%, as far as the rest i.e. 44.8% is explained by other variables not studied. To get the value of e1 can be searched by using the formula  $e1 = \sqrt{1 - (0,552)} = 0.448$ .

**c. Analysis of the Effect of X1 on Z via Y**

Based on the model II path diagram, the direct influence given by the variable *e-trust* (X1) on *e-satisfaction* (Z) is 0.222. While the indirect influence of X1 on Y is multiplied by the value of beta Y against Z, which is  $0.337 \times 0.511 = 0.172$ . Furthermore, it can be known that the total influence that X1 exerts on Z by showing a direct and indirect influence that is:  $0.222 + 0.172 = 0.394$ . This shows that indirect influence is greater than direct influence, so *e-trust* through *e-satisfaction* has a significant influence on *e-loyalty*, meaning that :

***H6: e-trust against e-loyalty through e-satisfaction as a variable intervening dana customers***

, received

d. *Analysis of the Effect of X2 on Z via Y*

Based on the model II path diagram figure, the direct influence given by the *variable e-service quality (X2) on e-satisfaction (Z)* is 0.097. While the indirect effect of X2 on Y is multiplied by the value of beta Y against Z, which is  $0.568 \times 0.511 = 0.290$ . Furthermore, it can be known that the total influence that X2 exerts on Z by showing a direct and indirect influence that is:  $0.097 + 0.290 = 0.387$ . This shows that indirect influence is greater than direct influence, so *e-service quality through e-satisfaction has a significant influence on e-loyalty*, meaning that **H7: e-service quality on e-loyalty through e-satisfaction as a variable intervening DANA customers, Accepted**

Based on the results of the analysis, a discussion of the results of the analysis will be carried out so that it can provide an overview of how the intervariable influence of the research. In this study, there are four variables, namely *e-trust* as variable X1 (Independent), *e-service quality* as variable X2 (Independent), *e-customer loyalty* as variable Y (Dependent) and *e-customer satisfaction* as variable Z (Intervening).

1. *The effect of e-trust on e-customer satisfaction*

Based on the results of the calculation of the hypothesis test partially (t test) on model I, a value of significance of the value is obtained that is smaller than the established level of significance. This means that there is a significant influence between *the e-trust variables on e-customer satisfaction* so that this research hypothesis is accepted, because it is supported by research data that shows that the *variable e-trust has a positive influence on e-customer satisfaction*. Then, this study obtained the results of the regression coefficient coefficient marked positively so that it showed that this *e-trust variable had a positive and significant influence on e-customer satisfaction*. This means that the higher the trust/confidence of DANA users, the satisfaction of DANA users will increase.

Trust is considered as a commitment between DANA users so that consumer satisfaction can be realized in accordance with expectations. When DANA users have confidence that the vendor can be trusted, DANA users will feel a favorable feeling. When this happens, it will have a positive effect on fulfilling customer pleasure which will provide benefits to DANA.

Trust is also not something that can be recognized quickly by others. Trust will arise when the user is satisfied. Trust has been considered as a form of transaction that can realize consumer satisfaction to be able to make a favorable feeling for DANA users.

The results of this study are also supported by the results of research conducted by Ghane et al., that *e-trust directly and positively affects e-satisfaction*. Where in this study shows that *e-trust has been considered an important component in the online context so that it will have an impact on e-satisfaction*.

Based on the theory of *Behaviorism* introduced by Ivan Petrovich Pavlo in 1849-1936 AD, that if applying the right strategy it turns out that a person can be controlled through the means of a natural stimulus with a stimulus that it is appropriate to obtain a repetition of the desired response, while one does not realize that it has been controlled by a stimulus coming from outside it. From this theory it can be concluded that the trust built by a company built using the right strategy for its users, will then build a good relationship so that the positive

response / experience obtained can make customers able to get a good experience.

## 2. *The effect of e-service quality on e-customer satisfaction*

Based on the results of the calculation of the hypothesis test partially (t test) in model I, the significance value of *the e-service quality* variable with a value smaller than the specified level of significance was obtained. This means that there is a significant influence between the variables of *e-service quality* on *e-satisfaction* so that this research hypothesis is accepted, because it is supported by research data that shows that the variable *e-service quality* has a positive influence on *e-satisfaction*. Then, this study obtained the results of regression coefficients marked positively so that it showed that this *e-service quality* variable had a positive and significant influence on *e-satisfaction*. This means that *the e-service quality* on the DANA website has a positive impact on dana customer *e-satisfaction* which will eventually be on the decision to make *online* transactions. It also shows that the easier a technology is to use, the more it will also increase DANA customer satisfaction. And then the variable *e-service quality* is the variable that has the most influence on model I.

*E-service quality* is a form of service provided through a wide internet network that includes the ability to interact with customers using the *website*. When *e-service quality* provides good service and is able to become a *website* that can facilitate effective and efficient transaction methods, then this will also have a positive effect towards the fulfillment of customer pleasure that will provide benefits to DANA. These results are also in line with research conducted by Ghane et al., that *e-service quality* will positively affect *e-satisfaction*.

## 3. *The effect of e-trust on e-customer loyalty*

Based on the results of the calculation of the hypothesis test partially (t test) in model II, an *e-trust* variable significance value is obtained with a value smaller than the established level of significance. This means that there is a significant influence between *the e-trust* variables on *e-customer loyalty* so that this research hypothesis is accepted, because it is supported by research data showing that the variables *e-trust* has a positive influence on *e-loyalty*. Then, this study obtained the results of regression coefficients marked positively so that it showed that this *e-trust* variable had a positive and significant influence on *e-customer loyalty*. This means that *e-trust* has a direct influence on *e-loyalty* which means that increasing trust in DANA, it will also have an effect and has an impact on increasing the loyalty of DANA users.

Trust is also considered the beginning of relationships in shaping and nurturing between application users. According to Reichheld and Scheffer that to gain customer loyalty, it must first build consumer trust/confidence so that customer loyalty can occur.

In *online* business, *e-loyalty* is a very important problem because consumers can easily switch from one site to another because they can easily switch from one site to another because they can easily switch to each other compare. Therefore, the company must help the right strategy for its users, so that it will build trust to be able to get customers to intend to visit again. This is in accordance with the theory of Behaviorism, if applying the right strategy it turns out that a person can be controlled through the means of a natural stimulus with the right stimulus to get repetition the desired response, while a person does not realize it that it has been controlled by a stimulus coming from outside it.

This is also supported by research from Ghane et al., that *e-trust* affects *e-loyalty*. Where in research *e-loyalty* is directly influenced by *e-trust* and has been considered an important component in the online context in shaping consumer loyalty.

#### 4. *The effect of e-service quality on e-customer loyalty*

Based on the results of the calculation of the hypothesis test partially (t test) in model II, the significance value of the *e-service quality* variable with a value turned out to be greater than the set level of significance. This means that there is no significant influence between the variables of *e-service quality* on *e-loyalty* so the hypothesis of this study is rejected. Then, this study obtained the results of regression coefficients marked positively so that it showed that this *e-service quality* variable had a positive but insignificant influence on *e-loyalty*. And then the *e-service quality* variable is a variable that has no effect on the model II. This happens because the website's ability to provide services provided on the internet network is lacking in fulfilling services to consumers. The *e-service quality* offered by the DANA application does not provide satisfaction to users, so this also has an impact on the *e-loyalty* of DANA users themselves.

The positive influence given by *e-service quality* on *e-customer loyalty* means that when *e-service quality* can provide satisfaction to users, it will affect *e-customer loyalty* in the direction that positive. However, these results show that the influence is positive but not significant, so it can be concluded that the level of loyalty in the aspect of *e-service quality* ability to DANA users is not providing maximum satisfaction but less.

This can happen because if the information provided by the online seller is not appropriate, the website's ability is lacking, the lack of service when experiencing problems, so this is not make an increase in customer trust in the online services provided by the seller.

This is also in line with research conducted by Melinda, that *e-service quality* does not affect *e-loyalty*. This happens because the value on the statistical test t is 1,177 which means it is smaller than 1.96 so the research from Melinda supports the results of this study.

#### 5. *The effect of e-customer satisfaction on e-customer loyalty*

Based on the results of the calculation of the partial hypothesis test (t test) in model II, the significance value of the *e-customer satisfaction* variable was obtained with this value turned out to be smaller than the set level of significance. This means that there is a significant influence between the variables of *e-customer satisfaction* on *e-customer loyalty* so that the hypothesis of this study is accepted, because it is supported by research data showing that the variable *e-customer satisfaction* has a positive influence on *e-customer loyalty*. Then, this study obtained the results of the regression coefficient of the *e-customer satisfaction* variable marked positively so that it showed that this *e-customer satisfaction* variable had a positive and significant influence on *e-customer loyalty*. This means that *e-satisfaction* has a direct influence on *e-loyalty* which means that the increasing *e-satisfaction* responses that lead to positive will have an impact on Shopee users' decision to be *e-loyalty* and this is evident from the results of the study.

According to Tjiptono and Chandra buyer satisfaction or dissatisfaction is determined by consumer evaluation of the difference between initial expectations (or just other comparisons) and perceptions of product performance actual after discharging the product. If consumers are satisfied with the product or service they choose, then consumers tend to return to buy products or services and eventually become loyal customers. So that post-consumption evaluation of how well product providers meet or exceed consumer expectations is important in forming visiting intentions and making transactions.

This is in line with research conducted by Ricky Immanuel Sanjaya that there is a positive relationship between *e-satisfaction* and *e-loyalty*. The higher the *e-loyalty* is

determined by *e-satisfaction*. If *e-satisfaction* increases, it will increase customer *e-loyalty*, and vice versa when *e-satisfaction* decreases, customer *e-loyalty* will decrease.

#### 6. *The effect of e-trust on e-customer loyalty through e-customer satisfaction as an intervening variable*

This is in line with research conducted by Ricky Immanuel Sanjaya that there is a positive relationship between *e-satisfaction* and *e-loyalty*. The higher the *e-loyalty* is determined by *e-satisfaction*. If *e-satisfaction* increases, it will increase customer *e-loyalty*, and vice versa when *e-satisfaction* decreases, customer *e-loyalty* will decrease.

This is also in line with research by Anindea Revita that the results of this study show that *e-satisfaction* is a connecting variable between the variable *e-trust* variable *e-loyalty* which means the more consumer confidence is maintained, the more satisfied a consumer will be so that it will increase consumer loyalty to *online* business. Not only that, in this study it was proven that the *e-trust* variable affects the *e-satisfaction* variable significantly which means that consumers increasingly trust an *online* business then the level of consumer satisfaction with *online* business will be even greater. Similarly, the *e-trust* variable affects the *e-loyalty* variable significantly which means that the more consumers trust an *online* business, the more consumers will loyal to *online* business so it won't switch.

#### 7. *The effect of e-service quality on e-loyalty through e-satisfaction as an intervening variable*

Based on the model II path diagram, it shows that *e-service quality* through *e-satisfaction* has an influence on DANA customer *e-loyalty*. This shows that *e-satisfaction* with DANA users is able to mediate the *e-service quality* relationship with DANA customer *e-loyalty*. Based on these results, it can be seen that when the ability to *e-service quality* increases, it will have an impact on increasing *e-satisfaction* responses in a positive direction which then has an impact on increased *e-loyalty* of DANA usage.

In research conducted by Imam Prayogo Ambardy and Sevenpri Candra which showed that *e-service quality* has a significant effect on *e-loyalty* through *e-Satisfaction*. In addition, Melinda's research also supports in this study that *e-service quality* affects *e-loyalty* through *e-satisfaction*.

## 4. Conclusion

Based on the results of the data analysis that has been carried out and the discussions that have been described in Chapter IV regarding the effect of *e-service quality* and *e-trust* on *e-customer loyalty* through *e-customer satisfaction* as an intervening variable (Study on users of Indonesian digital wallets "funds" in Pekanbaru City), then the conclusion is as follows:

1. Based on the results of data analysis, it shows that *e-trust* has a positive and significant influence on *e-customer satisfaction*. This happens because *e-trust* has a direct influence on DANA customer *e-customer satisfaction*, the higher the level of trust of DANA consumers, the more this will also affect and has an impact on improving customer satisfaction responses.
2. Based on the results of data analysis, it shows that *e-service quality* has a positive and significant influence on *e-customer satisfaction*. This happens because the *e-service quality* on the DANA website has a positive impact on dana customer *e-customer satisfaction* which will eventually be on the decision to make *online* transactions. It also shows that the easier a technology is to use, the more it will also increase DANA customer satisfaction.

3. Based on the results of data analysis, it shows that *e-trust* has a positive and significant influence on *e-customer loyalty*. This happens because *e-trust* has a direct influence on *e-customer loyalty* which means increasing trust in DANA, then this will also have an effect and have an impact on increasing the loyalty of DANA users.
4. Based on the results of data analysis, it shows that *e-service quality* has a positive and insignificant influence on *e-customer loyalty*. This happens because the website's ability to provide services provided on the internet network is lacking in fulfilling services to consumers. *The e-service quality* offered by the DANA application does not provide satisfaction to users, so this also has an impact on the *e-loyalty* of DANA users themselves.
5. Based on the results of data analysis, it shows that *e-customer satisfaction* has a positive and significant influence on *e-loyalty* received. This happens because *e-customer satisfaction* determines whether someone wants or is not loyal to use the DANA application. *E-customer satisfaction responses* that lead to positive will have an impact on DANA users' decisions to be *e-loyalty* and this is evident from the results of the study.
6. Based on the results of data analysis, it shows that *e-trust* has a significant influence on *e-customer loyalty* through *e-customer satisfaction*. This happens because *e-customer satisfaction* has an influence on DANA customer *loyalty e-customer loyalty*. Based on these results, it can be seen that when DANA's customer *e-trust* increases, it will have an impact on increasing *e-customer satisfaction* in a positive direction which will then have an effect on increasing *e-customer loyalty* the use of DANA.
7. Based on the results of data analysis, it shows that *e-service quality* has a significant influence on *e-customer loyalty* through *e-customer satisfaction*. This happens because *e-customer satisfaction* with DANA users is able to mediate the *e-service quality* relationship with *DANA customer loyalty e-customer loyalty*. Based on these results, it can be seen that when the ability of *e-service quality* increases, it will have an impact on increasing *the response of e-customer satisfaction* in a positive direction which then has an impact on increased *e-customer loyalty* of DANA usage.

## 5.2 Advice

Based on the results of the research and conclusions, there are several suggestions that can arise, namely:

### 1. *For DANA Companies in Indonesia*

It is hoped that the results of this study can be a reference basis for DANA Indonesia companies to pay more attention to what factors can affect DANA users. This is intended so that the DANA Indonesia company can implement the right strategy for the application so that it can be more optimal in advancing the company's profits, *e-commerce* in Indonesia and provide satisfaction to DANA users.

### 2. *For Future Researchers*

It is hoped that the results of this study can be a reference in the next research. In addition, it is expected to research customers who transact with DANA and consider the vendors providing products in the assessment of the DANA application. So that the results of the research in more value can be used to perfect this research.

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