

# Leveraging banking competitive advantage using e-service quality to improve e-customer satisfaction and e-customer loyalty of e-money in Indonesia

Amelia Amelia and Ronald Ronald

## Abstract:

Community activities have been made easier because to the rapid advancement of information technology. The internet is one of the technologies that most contributes to this convenience. With the advent of the internet, the everyday transaction process began to change away from cash and toward electronic currency, also known as an e-payment service. OVO (PT. Visionet Internasional) is one of the Lippo Group's financial application solutions, which debuted in late 2016. Users may execute daily transactions more effectively because to OVO's presence. This study attempts to see if elements such as personal need, user friendliness, and corporate efficiency have an impact on e-customer loyalty as measured by e-customer satisfaction. According to the characteristics of respondents, 150 OVO users in Surabaya were gathered for this study utilizing the snowball approach. Based on the data analysis, all of the four hypotheses suggested are supported.



IJSB

Accepted 10 March 2022  
Published 12 March 2022  
DOI: 10.5281/zenodo.6348711

**Keywords:** *Personal Need, User Friendliness, Efficiency, E-Customer Satisfaction, E-Customer Loyalty.*

## About Author (s)

**Amelia Amelia** (corresponding author), Business School, Universitas Pelita Harapan  
Surabaya Campus, Surabaya, Indonesia.

**Ronald Ronald**, Business School, Universitas Pelita Harapan Surabaya Campus, Surabaya,  
Indonesia.

## 1. Introduction

In the current era of globalization, technological advancement has accelerated at a breakneck pace. Individual lifestyles have been changed by technological advancements in a more modern direction by keeping up with the times. Of course, this will have a significant influence on several elements of life. Fintech is one of the technologies that contributes the most to this convenience. Fintech (financial technology) has benefits over traditional banks. Fintech moves quicker and more agilely than traditional banks due to its leaner organizational structure and dynamic penetration capability. Fintech even aids Indonesia's National Strategy for Inclusive Finance (SKNI). Fintech provides innovative solutions that the community requires in order to live a digitally connected existence. Other benefits of fintech over traditional banks include more convenient payments, easier investment, better service, more options, lower prices, simplifying the chain of transactions, increasing operational and capital costs, freezing information, encouraging economic transmission, and improving the community's economy. OVO is a fintech company (PT. Visionet Internasional). OVO (PT. Visionet Internasional) is a prominent payments, incentives, and financial services platform in Indonesia. Payments, transfers, cash-in/out, incentives, asset management, and investments are currently available on 115 million smartphones through OVO. OVO is accepted in over 373 locations around the Indonesian archipelago, and we're working hard to make OVO the leading payments and financial technology firm in the country. In the face of increasing business competition in Indonesia, it is critical for OVO to consistently increase E-Customer loyalty from OVO users, so this study will look at the impact of Personal Need, User Friendliness, and Efficiency on E-Customer Loyalty through E-Customer Satisfaction OVO users in Surabaya.

## 2. Literature Review

### 2.1 Personal Need

According to Nugraha (2021), personal need is significantly influence towards customer satisfaction. The main concept that hoped can be managed is to manage the customer demand, understand customer need and expressing the services. Customer personal need should be addressed with the suitable features and optimal services. Services can be said as giving the customer services that suitable to their preferences. At this point, management must create a product and a system that caters to the consumer segmentation and target clients. According to Herington & Weaven (2009), e-service quality is linked to satisfaction, with the personal need component accounting for the majority of the variance. Personal need has a major influence on customer happiness, according to Amin (2016), however the standardized path was the least effective when compared to the dimensions of personal need, site organization, and efficiency. We may deduce the following hypotheses from these statements:

**H1:** Personal Need has a positive significant influence on E-Customer Satisfaction

### 2.2 User Friendliness

User friendliness, according to Nugraha (2021), has a major impact on consumer happiness. The ease with which a consumer may use online banking can provide them a sense of security and speed in learning how to use the system given by the program. According to Amin (2016), the user-friendliness dimension has the third most important influence on e-customer satisfaction, based on the significant path coefficient. User friendliness, according to Herington & Weaven (2009), is the third most important factor in e-customer satisfaction. We can get the following hypothesis from these statements:

**H2:** E-Customer Satisfaction is positively influenced by user friendliness.

### 2.3 Efficiency

Customer satisfaction is favorably and considerably influenced by efficiency, according to Nugraha (2021). It is one of the most powerful metrics for assessing the quality of internet banking services. According to Chhabra (2018), the efficiency of the website 0.788 is the most influential element in the quality of Internet banking services. The significant route coefficient has demonstrated, according to Amin (2016), that the efficiency component has the greatest influence on e-customer satisfaction. We can get the following hypothesis from these statements:

**H3:** E-Customer Satisfaction is positively influenced by efficiency.

### 2.4 E-Customer Satisfaction

According to Rita (2019), e-customer satisfaction accounts for 62.4 percent of e-customer loyalty, making it statistically significant. E-customer satisfaction and e-loyalty have a positive association, according to Chhabra (2018), hence E-customer satisfaction has a significant positive relationship with e-customer loyalty. According to Amin (2016), e-customer satisfaction and e-loyalty have a favorable link. As a result, consider the following hypothesis:

**H4:** E-Customer Satisfaction has a considerable positive impact on E-Customer Loyalty.

### 2.5 E-Customer Loyalty

According to Jeong & Lee (2010), e-customer loyalty is the customer behavior to use one website in the long period of time and shows high enthusiasm when using it. According to Harris et al. (2004), organization should put emphasize on building customer satisfaction, gaining and sustaining the loyalty of the customer because it represents the most powerful aspiration for service providers because loyal customers usually tend to purchase more and willing to spend more on the product or service they have been loyal in. According to Kertajaya, (2005), a loyal customers is a consumers who make repeat purchases, refer products or services that are used to others and resist the temptation of other products. According to Hur et al. (2010), loyalty can be referred as the intention to repurchase the favorable product or service when the marketing persuade to switch to the competitors.

## 2. Hypothesis

The purpose of this article is to investigate the impact of personal needs, user friendliness, and efficiency on E-Customer Loyalty in Surabaya via E-Customer Satisfaction OVO users. As a result, the following hypotheses are employed.

**H1:** Personal Need has a positive significant influence on E-Customer Satisfaction

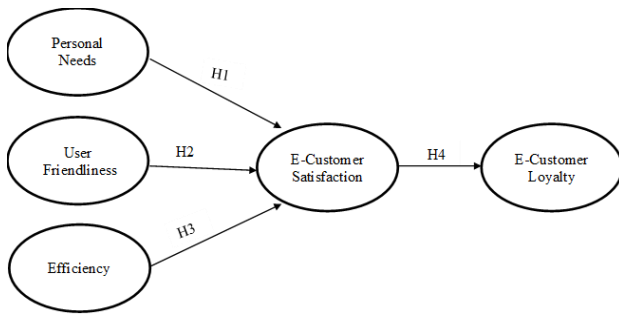
**H2:** E-Customer Satisfaction is positively influenced by user friendliness.

**H3:** E-Customer Satisfaction is positively influenced by efficiency.

**H4:** E-Customer Satisfaction has a considerable positive impact on E-Customer Loyalty.

## 3. Method

A quantitative technique was applied in this investigation. The population is made up of all OVO users in Surabaya. Non-probability sampling was utilized, with a questionnaire serving as the primary data gathering instrument. Researchers will employ snowball sampling strategies in this study, in which they select respondents who will assist them in distributing and filling out questionnaires. According to the characteristics of respondents, 150 OVO users in Surabaya were interviewed for this study. The research model is shown below.



**Figure 1. Research Model**

Source: Amin, 2016

#### 4. Result

Multiple Regression was utilized to evaluate the relationships between the variables in this investigation. SPSS 22.0 was utilized as a statistical analysis tool to solve the research's problem formulation. The next stage is to undertake descriptive statistic-analysis when the surveys have been returned. In Table 1, it can be observed that men are more likely than women to fill out surveys, as evidenced by the fact that 88 respondents (58.7%) use OVO, while 62 respondents (41.3%) are women. This suggests that the majority of OVO users are men.

<b>Table 1.Respondents Characteristic by Gender</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	62	41.3	41.3	41.3
	Male	88	58.7	58.7	100.0
	Total	150	100.0	100.0	
Source: own calculation					

Table 2 reveals that the 18-35 age group dominates the characteristics of respondents by age group, which has 132 respondents (88 percent), followed by the 36-50 age group, which has 14 respondents (9.3%), and the 51-60 age group, which has four respondents (2.7 percent ). This indicates that the majority of responders belong to the generation X and Y age groups.

<b>Table 2. Respondents Characteristic by Age</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-35 years	132	88.0	88.0	96.5
	36-50 years	14	9.3	9.3	100.0
	51-60 years	4	2.7	2.7	
	Total	150	100.0	100.0	
Source: own calculation					

Table 3 shows that the overall indicator's average score is greater than 3.61, suggesting that all variables' indicators are deemed pleasant by all respondents. In addition, if the standard deviation is smaller than 2.0, respondents' replies are homogeneous. E-Customer Satisfaction has the highest mean average of 3.821. This might suggest that respondents agree more with E-Customer Satisfaction indicators than with other factors. The greatest standard deviation score is.90741 for Personal Need. This might imply that, when compared to other variables, respondents' responses to E-Customer Satisfaction are the least homogenous.

Table 3. Descriptive Statistics			
	N	Mean	Std. Deviation
PN.1	150	3.680	1.0512
PN.2	150	3.680	1.0121
PN.3	150	3.713	.9854
PN	150	3.691	.90741
UF.1	150	3.733	.8644
UF.2	150	3.660	.8096
UF.3	150	3.880	.8741
UF	150	3.757	.734
E.1	150	3.660	.8962
E.2	150	3.833	.8625
E.3	150	3.947	.9539
E	150	3.813	.8021
E.CS1	150	3.767	.8144
E.CS2	150	3.860	.7050
E.CS3	150	3.847	.8005
E.CS4	150	3.813	.7363
E.CS	150	3.821	.6394
E.CL1	150	3.833	.7893
E.CL2	150	3.680	.8300
E.CL3	150	3.747	.7065
E.CL4	150	3.787	.8868
E.CL	150	3.7617	.70075
Valid N (listwise)	150		
Source: own calculation			

### 5.1.1 Validity Test

If the factor loading value is more than 0.160, the statement is valid. According to the data validity test, all indicators used to estimate each variable are authentic since the factor loading for each indicator is more than 0.160.

Table 4. Validity Test									
Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL
<b>Personal Need</b>		<b>User Friendliness</b>		<b>Efficiency</b>		<b>E-Customer Satisfaction</b>		<b>E-Customer Loyalty</b>	
PN.1	.722	UF.1	.717	E.1	.747	E.CS1	.728	E.CL1	.709
PN.2	.761	UF.2	.689	E.2	.757	E.CS2	.735	E.CL2	.782
PN.3	.784	UF.3	.666	E.3	.723	E.CS3	.721	E.CL3	.777
						E.CS4	.619	E.CL4	.802
Source: own calculation									

### 5.1.2 Reliability Test

The statement's dependability is compared to the cronbach's alpha value, and if the value is more than 0.6, the statement is considered reliable. Personal Need, User Friendliness, Efficiency, E-Customer Satisfaction, and E-Customer Loyalty all have Cronbach alpha values more than 0.60, as shown in Table 5. As a consequence, it's possible to claim that the assertions characterizing the variables are reliable and consistent, and that they may be used in subsequent research.

Table 5. Reliability Test	
Variable	Cronbach's Alpha Based on Standardized Items
Personal Need	.873
User Friendliness	.832
Efficiency	.865
E-Customer Satisfaction	.857
E-Customer Loyalty	.895
Source: own calculation	

### 5.1.3 Results of Multiple Regression

#### 1. Personal Need, User Friendliness, Efficiency to E-Customer Satisfaction

The results of multiple regression are as follows:

Table 6. Coefisien Regression Model 1						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.075	.229		4.703	.000
	PN	.227	.045	.322	5.065	.000
	UF	.333	.059	.382	5.658	.000
	E	.173	.056	.217	3.106	.002
a. Dependent Variable: E.CS						
Source: own calculation						

The regression equation may be expressed as follows based on table 6:

$$E.CS = b_1PN + b_2UF + b_3E$$

$$E.CS = 0.227 PN + 0.333 UF + 0.173 E$$

Table 6 shows that all of the independent factors have a favorable impact on E-Customer Satisfaction. In comparison to other variables, User Friendliness has the highest regression coefficient of 0.333. E-Customer Satisfaction has the greatest impact on E-Customer Satisfaction. Efficiency, on the other hand, has the least impact on E-Customer Satisfaction, at 0.173.

### 5.1.4 Results of Simple Regression

#### 1. E-Customer Satisfaction to E-Customer Loyalty

The following are the findings of basic regression:

Table 7. Coefisien Regression Model 1						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
2	(Constant)	.844	.250		3.372	.001
	E.CS	.763	.065	.697	11.809	.000
a. Dependent Variable: E.CL						
Source: own calculation						

The regression equation may be expressed as follows based on table 7:

$$E.CL = b_1E.CS$$

$$E.CL = 0.763$$

The independent variable has a positive influence on E-Customer Loyalty, as seen in Table 7. E-Customer Satisfaction had the highest regression coefficient of 0.763. As a result, the most important factor influencing E-Customer Loyalty is E-Customer Satisfaction.

### 5.1.5 F-test

The significance of F test values in models 1 and 2 is 0.000, according to SPSS estimates, meaning that the three independent factors have a significant impact on the dependent variable.

Table 9. Result of F-test 1					
Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	0.000	0.000	0.000	0.000
	Residual	0.000	0.000	0.000	0.000
	Total	0.000	0.000	0.000	0.000
a. Dependent Variable: E.CS					
b. Predictors: (Constant), PN, UF, E					
Source: own calculation					

Table 10. Result of F-test 2					
Model		Sum of Squares	Mean Square	F	Sig.
2	Regression	0.000	0.000	0.000	0.000
	Residual	0.000	0.000		
	Total	73.439			
a. Dependent Variable: E.CL					
b. Predictors: (Constant), E.CS					
Source: own calculation					

### 5.1.6 t-test

#### 1. User Friendliness, Personal Need, Efficiency to E-Customer Satisfaction

Personal Need, User Friendliness, and Efficiency to E-Customer Satisfaction were tested using the t test to see if they had a significant influence on E-Customer Satisfaction (independently). The variable is deemed to be considerably influenced by partially if the t test result is less than 0.05.

#### 2. The Relationship Between E-Customer Satisfaction and E-Customer Loyalty

To examine if the independent variable of E-Customer Satisfaction has a substantial influence on E-Customer Loyalty on its own, the t test was used. The variable is stated to be significantly influenced if the t test value is less than 0.05.

### 5.1.7 Final Result

According to the conclusions of this study, personal needs, user friendliness, and efficiency all have a positive and significant impact on E-Customer Satisfaction. E-Customer Satisfaction has a significant and beneficial effect on E-Customer Loyalty. As a result, each of the five hypotheses proposed was proven to be correct. According to the first hypothesis, personal need has a considerable positive impact on E-Customer Satisfaction. The first hypothesis, that Personal Need has a positive impact on E-Customer Satisfaction, is verified since the t test value is 0.000, which is less than 0.05. This supports Nugraha's results, which imply that Personal Need has a big positive influence on E-Customer Satisfaction. The second hypothesis, that User Friendliness has a strong positive impact on E-Customer Satisfaction, has been proven. The second hypothesis, that User Friendliness has a positive impact on E-Customer Satisfaction, is verified since the t test value is 0.000, which is less than 0.05. This backs up Amin's (2016) results, which indicate that user friendliness has a significant positive influence on E-Customer Satisfaction. According to the third hypothesis, efficiency has a positive substantial impact on E-Customer Satisfaction. The third hypothesis, that Efficiency has a positive impact on E-Customer Satisfaction, is verified since the t test value is 0.000, which is less than 0.05. This shows that the conclusions of this study are in line with those of Chhabra (2018), who asserts that efficiency improves E-Customer Satisfaction significantly. The fourth hypothesis, that E-Customer Satisfaction has a positive substantial impact on E-Customer Loyalty, is validated.

The fourth hypothesis, that E-Customer Satisfaction has a positive impact on E-Customer Loyalty, is verified since the t test value is 0.000, which is less than 0.05. This is consistent with Chhabra's (2018) results, which indicate that E-Customer Satisfaction has a significant positive influence on E-Customer Loyalty.

## 5. Discussion

This model was created to investigate E-Customer Loyalty in Surabaya for OVO users. Personal Need, User Friendliness, and Efficiency have positive and substantial influences on E-Customer Satisfaction, according to this study model. E-customer satisfaction also has a good and significant impact on customer loyalty. As a result, the conclusion is that all of the four hypotheses given are supported. Variables such as Personal Need, User Friendliness, Efficiency, and E-Customer Satisfaction have been identified as crucial elements to note based on the research findings, since these variables have a significant impact on E-Customer Loyalty among OVO users in Surabaya. As a result, the management implications must focus on those elements. The theories that have been created can be used to explain the managerial implications of these findings. First and foremost, E-Customer Satisfaction is a key factor that influences the amount of E-Customer Loyalty. Customer satisfaction may be measured by how happy customers are with the features provided, how happy they are with online services in general, how happy they are with the services provided by the application, and how happy they are with the experience they had while using the application. User loyalty may also be demonstrated in whether they will suggest the app to others, prefer the app over others, would recommend the applications to someone seeking assistance, and intend to use the app in the future. The intention to continue using the program is one of the key indications of E-Customer Satisfaction, with the lowest outcomes among the other indicators. As a result, OVO must improve this indicator by being able to provide the most up-to-date data and information on stock prices. It is also critical to maintain its reputation, as well as the quality and safety of the users, as well as the coding program in the application, in order to make transactions easier for the users. E-customer loyalty will naturally rise as customers become happier. The E-Customer Satisfaction factors are largely influenced by the second User Friendliness measure. Has a well-organized application menu, an easy-to-use help menu, and programs that start and function smoothly are all essential factors that influence user happiness. One indicator of User Friendliness is the number of times an app is launched and runs smoothly; this indicator receives the lowest scores among the others, so it is critical for OVO to improve this indicator by offering a language selection in the OVO app that is distinguished by the language of the smartphone and includes several other regional languages. Third, the Efficiency variable is the second most important factor in determining E-Customer Satisfaction. Easy to locate what the user needs, easy to go somewhere, and the ability to conduct an expedient transaction are all essential factors that influence customer satisfaction. One indicator of efficiency is the ability to complete an efficient transaction, which has the lowest results among other indicators. It is critical for OVO to improve this indicator by removing some of the application features that consume too much processing data from smartphones so that smartphones with low specifications can continue to use without problems such as freeze and lagging, and by adding features such as speech or gesture recognition to speed up the service search process. Fourth, one of the criteria that determines E-Customer Satisfaction is Personal Need. Feel completely safe when making a transaction, feel as if personal needs have been met when using the application, application provides information and products based on my preferences is very important and affects customer satisfaction is very important and affects customer satisfaction is very important. One indicator of Personal Need is the feeling that my personal needs have been met while using the application, which has the lowest results among the other indicators. It is important for OVO to develop this indicator by providing a kind of direct notification to users via email



whenever online funds are withdrawn or taken by others, so that the emergence of cybercrime problems, if they occur, can be reported more quickly.

### Research Limitation

This study has a restriction in that it only looks at Indonesia. Future research might be conducted in other nations with geographical characteristics that could add to the research appeal. Only respondents who live in Surabaya are included in this study. Other fields of inquiry might be explored in the future. Furthermore, OVO is the sole research object in this study. Using a different item might have different outcomes.

### Acknowledgment

Pelita Harapan University, Surabaya Campus, funded the research for this study.

### REFERENCES

- [1] Chhabra, K. (2018). Does service quality matters in the context of internet banking? A perceptual analysis of india's internet banking customer's perception regarding service quality, trust, satisfaction and loyalty. *Journal of Commerce & Accounting Research*, 52-60.
- [2] Herington, C., & Weaven, S. (2009). E-retailing by banks: e-service quality and its importance to customer satisfaction. *European Journal of Marketing*, 1220-1231.
- [3] Jeong, Y., & Lee, Y. (2010). A study on the customer satisfaction and customer loyalty of furniture purchaser in on-line shop. *Asian Journal on Quality*.
- [4] Nazarudin Aziz, Y. E. (n.d.). *Pengaruh kualitas pelayanan dan kepuasan pelanggan terhadap loyalitas nasabah pt bank rakyat indonesia cabang padang*. Padang: Sekolah Tinggi Ilmu Ekonomi "KBP" Padang.
- [5] Nugraha, K. S. (2021). Internet Banking Service Quality: Building Satisfaction and Customer Trust. *International Journal of Social Science and Business*, 58.
- [6] O'Neill, A. (2021, July 22). *Statista*. Retrieved from Indonesia share of economic sectors in the gross domestic product 2020: <https://investasimuda.com/review-indopremier-sekuritas/>
- [7] *Phintraco.com*. (2020, Juli 23). Retrieved from Phintraco Sekuritas: <https://phintraco.com/phintraco-sekuritas-perusahaan-sekuritas-dengan-segudang-prestasi/>
- [8] Ramseook, P. M., & Naidoo, P. (2011). Customers' perspectives of service quality in internet banking. *Services Marketing Quarterly*, 247-264.
- [9] Rita, P. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. 1-14.

### Cite this article:

**Amelia, A. & Ronald, R.** (2022). Leveraging Banking Competitive Advantage using E-Service Quality to Improve E-Customer Satisfaction and E-Customer Loyalty of E-Money in Indonesia. *International Journal of Science and Business*, 10(1), 20-28. doi: <https://doi.org/10.5281/zenodo.6348711>

Retrieved from <http://ijsab.com/wp-content/uploads/903.pdf>

## Published by

