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The Impact Of Electronic Service Quality Towards Customer Satisfaction Of Livin Merchant User At PT. Bank Mandiri (Persero) Tbk.

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ABSTRACT

The purpose of this research is to know the impact of *e-service quality* towards *customer satisfaction.* This because at KCP Sokaraja found phenomenon improvement number of inactive customers user Livin' Merchant, until September 2024 there were 772 total customers recorded users and only 62 users active and 710 others is inactive. This because customer difficulty understand features and functions on Livin' Merchant. Then, some user with range age 40 years old need longer time to adapt the concept of payment method. So customer decide for no use application Livin' Merchant again because need long time to understand features and payment concepts in Livin' Merchant. This research will be conducted using a quantitative approach.. The subject in this study is customers of PT. Bank Mandiri (Persero), Tbk. who had used and installed the Livin' Merchant application on their smartphones. The determination of the population used non-probability sampling method, that is purposive sampling. The determination of the sample used Slovin formula. The measurement scale used is Likert Scale and the analysis tool used SPSS. The test that used of this research is multiple linear regression. The results of this study will explained more details in the par of discussion.

Keywords: *electronics service quality, customer satisfaction, mobile banking* .

1. Introduction

Indonesian Internet Service Providers Association (APJII) stated amount Indonesian internet users in 2024 will reach 221,563,479 people from total 278,696,200 people Indonesian population in 2023. From the results survey internet penetration in Indonesia 2024, the level of Indonesia's internet penetration hits figure 79.5%. Compared with previously period, increase of 1.4%. Calculated since 2018, Indonesia's internet penetration has reached 64.8%. Then in a way sequentially, 73.7% in 2020, 77.01% in 2022, and 78.19% in 2023. The increase internet usage in Indonesia is in line with trend use *mobile banking*. Bank of Indonesia (BI) noted that in the first quarter of 2024, transactions *digital banking* penetrate reach Rp. 15,881.5 trillion. This is increase as much as 16.15% compared to same period year on year. Bank Mandiri give a positive respond with launch application Livin' Merchant, which provides convenience access service banking (*access to finance*) for MSME. This application is already used by 1.7 million business perpetrator with frequency transaction as many as 24.8 million times and the value transaction up

to 2.6 trillion rupiah since launched in mid- 2023.

At KCP Sokaraja found phenomenon improvement number of inactive customers user Livin' Merchant summarized until mid year 2024 recorded 772 customers users and only 62 users active and 710 others is inactive. This because customer difficulty understand features and functions on Livin' Merchant. Then, majority customer range age over 40 years old need longer time to adapt the concept of payments method. So that customer decide for no again to use Livin' Merchant because need long time to understand features and payment concepts in the application.

2. Literature Reviews

2.1 Electronic Service Quality

In small scope quality there is also the term e-service quality, which is defined as to what extent the website allows consumer for shopping, doing payment, make delivery goods, and do service with effective and efficient . According to Parasuraman et al. (1988) e-service quality is defined as:

> *"overall evaluation of a specific service firm that results from comparing that firm's performance with the customer's general expectations of how firms in that industry should perform"*

The definition can interpreted as overall evaluation about company service from comparison between company performance with consumer expectation about how should company work. Gefan (2002) define e-service quality as consumer subjective comparison between desired quality service for accepted and with what is the truly cusumer get. Meanwhile, Santos (2003) also explained that e-service quality is interpreted as overall evaluation and review/comments from consumer about excellence and quality service for ensure loyalty consumers .

The study has underline a number of dimensions important in e-service quality, there are dimensions the experience development often the walk time, as summarized in table following this:

Table 1. Development Dimensions of E-Service Quality

Reference	Dimensions	Context
Zeithaml et al. (2002)	*Delivery, responsiveness, security, reliability,* and *communication*	E-SQ
Surdajaja et al. (2003)	*Customization, delivery, reliability, information, responsiveness, interaction,* and *security*	E-SQ
Yang et al. (2004)	*Aesthetics , security, collaboration, personalization, courtesy, competence, access, communication, convenience, reliability, ease of use, credibility,* and *responsiveness*	Online Sales
Parasuraman (2005)	*Contact, compensation, responsiveness, privacy,*	E-SQ

	fulfillment, availability, and *efficiency*	
Sohn & Tadisina (2008)	*Functionality, website content, communication, customized, ease of use, reliability, speed of delivery,* and *trust*	Online finance

From several the theory that has been exposed above, the author decide for referring to the theory from Parasuraman (2005) there are 7 dimensions that build e-service quality, namely *contact, compensation, responsiveness, privacy, fulfillment, availability,* and *efficiency.*

2.2 Customer Satisfaction

According to Kotler and Keller (2012) satisfaction is feeling like or dislike someone who appears after compare between performance (or results) the product thought the performance (or expected results). If performance generated succeed fulfil consumers expectation, then will created satisfaction consumers, but if performance fail fulfil the consumer expectations, then will get disappointment from consumers.

There are 5 factors consumers satisfaction who need be noticed company from Kotler and Keller (2017) revealed factors the as following :

- Quality product, consumer will feel satisfied if the products they use quality
- Quality service, same as it is with quality quality products, consumers will feel satisfied if to obtain service in accordance with consumer hope.
- Emotion, satisfaction no just rated from quality products and services but consumer trend assumption about a brand also influences satisfaction consumer.
- Price, determination the right price can be a potential influence to consumers satisfaction, increasingly cheap price offered will increase perceived value consumer.
- Cost, consumer will feel more satisfied if no requested pay cost addition for obtain the product or service.

3. Research Methodology

Basically research method is how to do it for obtain further data processed for needs certain, such as research, work write scientific, etc. This research will supported with a method for reach objective research that will be explained as following :

3.1 Approach Study

This study will be conducted with approach quantitative. Conducted at PT. Bank Mandiri (Persero), Tbk . KCP Sokaraja. The subject in study is customer of PT. Bank Mandiri (Persero), Tbk. who use and install application Livin' Merchant on their smartphone. Determination of population use *non-probability sampling* method especially *purposive sampling* with customers criteria of PT. Bank Mandiri (Persero), Tbk . who use and install the Livin' Merchant at least 1 time. The determination sample use Taro Yamane's formula with the calculation is according to Ruslan (2003) as following

$$N = \frac{N}{N(d)^2+1}$$
$$= \frac{772}{772(10\%)^2+1}$$
$$= 88.53$$
$$N = 89$$

Measuring instrument in this study will using SPSS v26 for calculate the data and also statistics. This research using 2 variables. According to Suliyanto (2018) variables is characteristics of object research whose value varies from one subject to other subject or from one time to other time. The independent variable is E-Service Quality (X) with 7 indicators, the are efficiency (X1), system availability (X2), fulfillment (X3), privacy (X4), responsiveness (X5), compensation (X6), and contact (X7). As well as consumer satisfaction as variable dependent (Y). The measurement scale used using the Likert Scale. Likert Scale is useful for measure response or respondent response related with social object, each answer from every question own mark gradation from very positive to very negative with gradation score 1-5. And the data collection instrument uses closed questionnaire.

3.2 Data analysis

3.2.1 Multiple Linear Regression

This study use multiple linear regression analysis method for test the relationship between two variable because consequence between independent variable (X) with dependent variable (Y). Model equation multiple linear regression is as following

$Y = \alpha + \beta 1X1 + \beta 2X2 + \ldots + \beta nXn + e$

Note:
Y = variable free
X = variable bound
α = constant / intercept
β = coefficient regression
e = *standard error* 10%.

3.2.2 Significance Test (t-Test)

The t-test aims for know whether in the regression model variable independent in a way individually influence to variable dependent or not. Basis for taking decision in the t-test is
Based on mark significance (Sig.)

- If the value significance (Sig.) ≤ 0.05 there is influence variable independent to variable dependent
- If the value significance (Sig.) > 0.05 there is no influence variable independent to variable dependent

Based on comparison mark t_{count} with t_{table}

- If the value $t_{count} \geq t_{table}$ so there is influence variable independent with variable dependent
- If the value $t_{count} < t_{table}$ so there is no influence variable independent with variable dependent

3.2.3 Significance Simultaneous Test (F Test)

The purpose of the F test for know the influence exerted independent variable to dependent variable in a way together (simultaneous). Similarly with the t-test where the F test uses *output* data from results multiple linear regression test calculation. Basis for taking decisions used that is

Based on mark significant (Sig.) of table Anova

- If the Sig. value ≤ 0.05 there is influence variable independent to variable dependent in a way simultaneous
- If the Sig. value > 0.05 there is no influence variable independent to variable dependent in a way simultaneous

Based on comparison mark F_{count} with F_{table}

- If the value $F_{count} \geq F_{table}$ so there is influence variable independent to variable dependent in a way simultaneous
- If the value $F_{count} < F_{table}$ so there is no influence variable independent to variable dependent in a way simultaneous .

3.2.4 Coefficient Correlation Test (r Test)

This test use to know how much big the relationship that occurs between independent variable with dependent variable. In this research use Correlation Pearson method with base taking decision that is

Based on mark Significant (Sig.)

- If the Sig. value ≤ 0.05 there is connection intervariable
- If the Sig. value > 0.05 there is no connection intervariable

Based on mark r_{count}

- If the value $r_{count} \geq r_{table}$ so there is connection intervariable
- If the value $r_{count} < r_{table}$ so there is no connection intervariable

3.2.5 Coefficient Determination Test (R^2)

It is a test that is carried out with objective for know how much big influence independent variable with dependent variable in a way simultaneous. Conditions for can performing the R^2 test is must fulfillment of the linear regression test, or must influence.

3.3 Illustrations

After to examine the foundation theory and supported with the data that has been presented, researchers try pour out research concepts through framework study as following

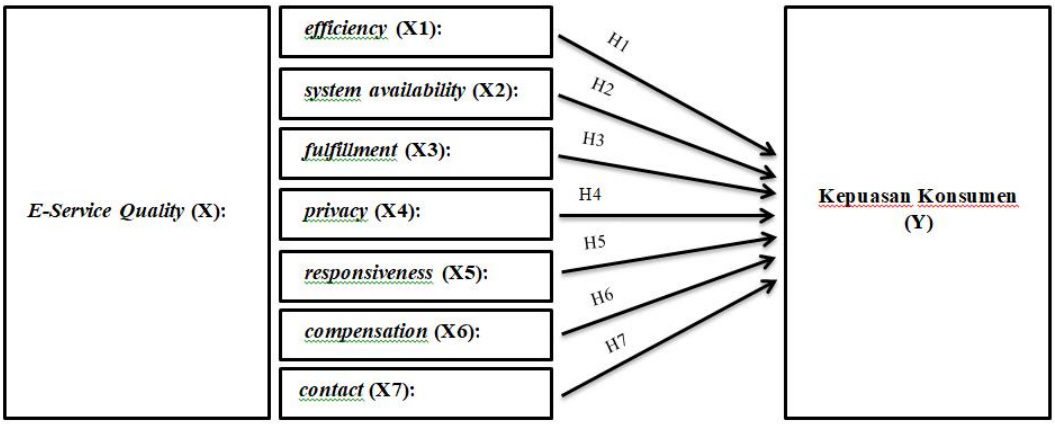

Figure 1. Illustration channel study

From the picture above, e-service quality as an independent variable is specified according to Parasuraman (2005) into 7 indicators, which stand to be hypothesis. Customer satisfaction as a dependent variable will be tested with independent variables to determine whether there is an influence of e-service quality on customer satisfaction.

4. Results

Research result is divided become a number of segment research, there is :

4.1 Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		89
Normal Parameters [a,b]	Mean	.0000000
	Std. Deviation	1.59304959
Most Extreme Differences	Absolute	.086
	Positive	.057
	Negative	-.086
Test Statistics		.086
Asymp . Sig. (2-tailed)		.102 [c]

a. Test distribution is Normal.

Based on Kolmogorov-Smirnov test results, values significance (Asymp. Sig. 2-tailed) is 0.102, which is bigger than 0.05. This shows that the residual data is distributed normally, meet assumption normality for analysis regression .

4.2 Linearity Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
y * x	Between Groups	(Combined)	328,467	6	54,744	13,374	.000
		Linearity	298,715	1	298,715	72,978	.000
		Deviation from Linearity	29,752	5	5,950	1,454	.214
	Within Groups		335,645	82	4.093		
	Total		664.112	88			

Linearity test results show mark significance in the "Deviation from Linearity" row is 0.214, which is bigger than 0.05. This indicates there is linear relationship between independent variable and dependent variable, fulfilling assumption linearity .

4.3 Multiple Linear Regression Test

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-4,600	3.376		-1.363	.177
	x1	.480	.147	.342	3.268	.002
	x2	-.194	.131	-.133	-1.485	.141
	x3	.224	.139	.146	1,612	.111
	x4	.598	.142	.388	4.210	.000
	x5	.026	.113	.025	.227	.821
	x6	-.112	.190	-.052	-.590	.557
	x7	.265	.163	.156	1,630	.107

a. Dependent Variable: y

Equality regression can arranged as following :
y = -4.600 + 0.480x1 - 0.194x2 + 0.224x3 + 0.598x4 + 0.026x5 - 0.112x6 + 0.265x7. Related explanation from regression test will discussed in the discussion section of this paper .

4.4 Simultaneous Test (F)

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	334,943	7	47,849	11,774	.000 [b]
	Residual	329,170	81	4.064		
	Total	664.112	88			

a. Dependent Variable: y

Predictors: (Constant), x7, x4, x6, x3, x2, x1, x5

The results of the F test show mark significance 0.000, which is less from 0.05. This indicates that the regression model in a way overall significant, or at least one independent variable own influence significant to dependent variable.

4.5 Coefficient Test Correlation (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710 [a]	.504	.462	2.016

a. Predictors: (Constant), x7, x4, x6, x3, x2, x1, x5

The R^2 (R Square) value is 0.504, which means 50.4% of the dependent variable variation can explained by independent variables in the model. Adjusted R^2 is 0.462 provides more estimates

conservative, indicating 46.2% of the variation can explained by the model after take into account amount independent variable.

5. Discussion

After known test results on the part results , can explained a number of matter that is :
Equality Regression :
y = -4.600 + 0.480x1 - 0.194x2 + 0.224x3 + 0.598x4 + 0.026x5 - 0.112x6 + 0.265x7.

5.1 Interpretation Coefficient

- Constant (β0) = -4.600
  This matter to signify If all variable independent is worth 0, then mark variable dependent (y) is -4.600.
- x1 (β1) = 0.480, p = 0.002
  Coefficient positive and significant ($p < 0.05$). Each increase one unit x1 will increases y by 0.480, with assumption other variables are constant .
- x2 (β2) = -0.194, p = 0.141
  Coefficient negative However No significant ($p > 0.05$) Although There is indication connection negative, its influence statistically but can't be significant.
- x3 (β3) = 0.224, p = 0.111
  Coefficient positive However No significant ($p > 0.05$). Although There is indication connection positive , its influence its influence statistically but can't be significant.
- x4 (β4) = 0.598, p = 0.000
  Coefficient positive and very significant ($p < 0.001$). Each increase one unit x4 will increases y by 0.598, with assumption other variables are constant .
- x5 (β5) = 0.026, p = 0.821
  Coefficient positive However No significant ($p > 0.05$). The effect is very small and does influence statistically but can't be significant.
- x6 (β6) = -0.112, p = 0.557
  Coefficient negative However No significant ($p > 0.05$). Although there is indication connection negative, its influence statistically but can't be significant.
- x7 (β7) = 0.265, p = 0.107
  Coefficient positive However No significant ($p > 0.05$)
  Although There is indication connection positive, its influence statistically but can't be significant.

5.2 Significance Variables

Only variables x1 and x4 have influence significant to y. The variable x4 has the strongest and most significant influence. Other variables (x2, x3, x5, x6, x7) don't show significant influence on the level 95% confidence .

5.3 Model Strengths

$R^2 = 0.504$, which means 50.4% of the variation in y can explained by variables independent in the model. Adjusted $R^2 = 0.462$, giving more estimates conservative, showing 46.2% variation can explained after take into account amount variable independent.

5.4 Significance Overall Model

The F test yields mark significance 0.000 ($p < 0.05$), indicating that the model is overall significant. This signifies at least one independent variable own influence significant to dependent variable.

6. Conclusion

This regression model fulfil assumption normality and linearity. The model is overall significant, with ability explain about 50% variation in variable dependent. Variables x1 and x4 have influence significant, while other variables do not show significant influence at the 0.05. Variables x1 and x4 must be get special attention because own influence significant against y. Other variable although no significant, still possible own influence practical and not must direct issued from the model without consideration more continue. This model is good enough to explain variation y, but still here is about 50% of the variations are not explained, There is shown other possible factors influential.

Evaluation in this study required for do analysis more continue on variables x1 and x4 for understand its influence more details. Evaluation return variables that are not significant for determine whether they need maintained in the model based on theory or consideration practical . If possible, look for variable possible additions can increase ability predictive model.

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