

# **THE EFFECT OF SERVICE QUALITY AND PRODUCT QUALITY ON CUSTOMER LOYALTY IN LIVIN' BY MANDIRI E-BANKING WITH CUSTOMER SATISFACTION AS A MEDIATION VARIABLE (CASE STUDY OF PT. BANK MANDIRI BRANCH JAKARTA BANDENGAN**

**MARSELA LUSI ERING**

Postgraduate Student Master of Management Program, Faculty of Economics and Business, Sam Ratulangi University, Indonesia

**Willem JF Alfa Tumbuan, Maria VJ Tielung**

Supervisor of the Faculty of Economics and Business, University of Sam Ratulangi, Indonesia

**Email Correspondence:** [elamarsela88@gmail.com](mailto:elamarsela88@gmail.com)

## **Abstract**

*Livin' by Mandiri* is a digital e-banking service from Bank Mandiri that has functions for transactions, checking balances, top up which can describe the convenience of making transactions and can attract the attention of new customers to try the convenience of transactions. This study aims to determine the effect of service quality and product quality on customer loyalty mediated by customer satisfaction at PT. Bank Mandiri Jakarta Bandengan branch. This study uses path analysis and with a total sample of 93 respondents at PT. Bank Mandiri Jakarta Bandengan branch. The results of this study indicate that:

**Keywords:** Service Quality, Product Quality, Satisfaction, Loyalty

## **INTRODUCTION**

### **Background of the problem**

In the current digital era, technological developments in the business world have become a basic need, especially for the operational activities of a company. Various parties take advantage of technological developments in their business endeavors to facilitate work and improve services for their users. One of these parties is the banking sector which optimizes its business through technology to be able to improve services and be able to survive in the business world.

The banking sector continues to innovate in the field of technology and also offers a modern lifestyle as a way of contact between clients via personal cell phones with internet access or short messages available through e-banking services including mobile banking, SMS banking, and internet banking which can be accessed via personal mobile phones. connected via the internet network so that the connection between the customer's devices and the banking system (Agustini and Putra, 2022).

Through e-banking, including m-banking, SMS banking, and internet banking, it has become a necessity for today's customers to make transactions anywhere and anytime, enabling customers to obtain various information. The use of electronics is to help customers more quickly, safely, comfortably, cheaply at any time and can be accessed via cellphones, computers/laptops, and ATM machines.

In today's banking world, they also compete in the field of technology, especially e-banking created by each bank, both BUMN, BUMD and private. By using the internet network, customers can carry out various transactions without having to leave the house to go to the bank or ATM except for cash withdrawal transactions. The existence of e-banking facilities can affect new customers who need these facilities. Due to the advantages of using e-banking facilities, customers can make non-cash transfers to other banks or to other banks, check account balances and mutations, pay bills monthly, top up electric pulses, e-commerce payments.

**Table 1. Top brand index E-Channel E-banking Phase I 2023 Online and Offline Categories**

No	Brands	Top Brand Index (TBI)	Information
1	m-BCA	47.90%	TOP
2	BRIMobile	19.80%	TOP
3	e-bankingIndependent	13.00%	TOP
4	BNI Mobile	11.30%	-
5	CIMB Niaga Mobile	4.20%	-

Source: Top Brand Award ([www.topbrand-award.com](http://www.topbrand-award.com))

Table 1 shows that data obtained through the site [topbrand-award.com](http://topbrand-award.com), m-BCA occupies the top level of top brand mobile banking in phase I in 2023 with a TBI value of 47.90%. At the second level is occupied by BRI Mobile with a TBI value of 19.80%, then at level three, namely independent e-banking with a TBI value of 13.00%. BNI's mobile banking occupies the fourth level with a TBI value of 11.30%. The last position was occupied by mobile banking owned by CIMB Niaga Mobile with a TBI value of 4.20%.

Customer loyalty is important in the banking business. Satisfied and loyal customers will not hesitate to spread news and positive things about the banking products they use. Customer satisfaction is seen as a key element to build customer loyalty.

Product quality is one of the factors that influence customer satisfaction and customer loyalty. Quality is the main requirement for a product to be accepted in the market. A product is said to be of high quality if the product is able to meet customer expectations. The quality of banking products is realized by looking for the overall expectations of customers, increasing the value of products/services in order to meet customer expectations, one of the products offered in a bank, namely the features regarding the Livin by Mandiri e-banking application.

Service quality is the industry's ability to create repairs that have a direct impact on customer satisfaction in accordance with their realities and expectations. A quality service quality is a service quality that will make customers feel satisfied with the services that have been provided so that it can directly make customers loyal and will remain loyal to the company.

Related to the concept of service quality has become a very dominant factor in the success of organizations, both profit and non-profit organizations. Because if the customer feels that the quality of service he receives is good or as expected, then he will feel satisfied, trust and have a commitment to become a loyal customer.

PT Bank Mandiri is one of Indonesia's state-owned banks that is also actively using technology based on artificial intelligence (AI) and IT (Information Technology) applications. Livin by Mandiri is an e-banking service from Bank Mandiri that makes it easy for customers to transact safely, easily and quickly via a mobile screen. *New Living by Mandiri* has also been integrated with various e-wallet applications which of course makes it very easy for customers. The number of users of the Livin by Mandiri e-banking application for the period July 2022 to November 2022 can be seen in Table 2 below:

**Table 2. Number of Livin by Mandiri Users  
 Period July 2022 to December 2022**

No	Month	Number of Customers
1	July	262
2	August	187
3	September	169
4	October	230
5	November	379
6	December	105
	Total	1332

Source: PT. Mandiri branch Jakarta Bandengan

Table 2 shows that the number of Livin by Mandiri application users for the period July 2022 to December 2022 has fluctuated, where in July 2022-September 2022 there was a decrease in the number of Livin by Mandiri application users but in October 2022 and November 2022, the number of application users returned increase in line with the number of customers and various application features. However, in December 2022, the

number of application users dropped again, this was due to the reduced number of customers using the application's features.

### **Research purposes**

Based on the formulation of the research problem, this study aims to:

1. Analyzing the direct effect of Service Quality on E-banking Customer Satisfaction Livin By Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
2. Analyzing the direct effect of Product Quality on E-banking Customer Satisfaction Livin By Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
3. Analyzing the direct effect of Service Quality on Livin By Mandiri E-banking Customer Loyalty at PT. Bank Mandiri Jakarta Bandengan branch.
4. Analyzing the direct effect of Product Quality on E-banking Customer Loyalty Livin By Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
5. Analyzing the direct effect of customer satisfaction on customer loyalty of E-banking Livin By Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
6. Analyzing the indirect effect of Service Quality on Livin By Mandiri E-banking Customer Loyalty through customer satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.
7. Analyzing the indirect effect of Product Quality on Customer Loyalty of E-banking Livin By Mandiri through Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.

## **LITERATURE REVIEW**

### **Marketing Management**

According to Assauri (2017: 5), marketing management is an activity of analyzing, planning, implementing, and controlling programs designed to establish, build and maintain profits from exchanges through target markets in order to achieve long-term organizational goals. Meanwhile, according to Tjiptono (2019: 2) explains that marketing management is a total system of business activities designed to plan, set prices, and distribute products, services, and ideas that are able to satisfy the desires of the target market in order to achieve organizational goals. Based on some of the opinions above,

### **Loyalty**

Tjiptono (2019: 110) says that customer loyalty is defined as a customer's commitment to a brand, store, supplier based on a very positive attitude reflected in consistent repeat purchases. Rangkuti (2002: 60), customer loyalty is customer loyalty to companies, brands and products. Hidayat (2009: 103), customer loyalty is a customer's commitment to a market based on a positive attitude and is reflected in consistent repeat purchases. Saladin's Customer Satisfaction (2017: 9), satisfaction is a person's feeling of pleasure or disappointment that comes from a comparison between his impression of the performance (outcome) of a product and his expectations. Durianto (2001: 4),

### **Product quality**

Kotler and Keller (2019: 164) also say that product quality is the ability of an item to provide appropriate results or performance even beyond what the customer wants. Tjiptono (2016: 95) says that product quality is quality including efforts to meet or exceed customer expectations, quality includes products, services, people, processes, and the environment; Quality is a condition that is always changing.

### **Service Quality**

Service quality is the ability of a company to meet customer expectations by providing services to customers during and after transactions take place. Tjiptono (2019: 59) says that service quality is the level of excellence expected and control over that level of excellence to fulfill customer desires.

### **Previous Research**

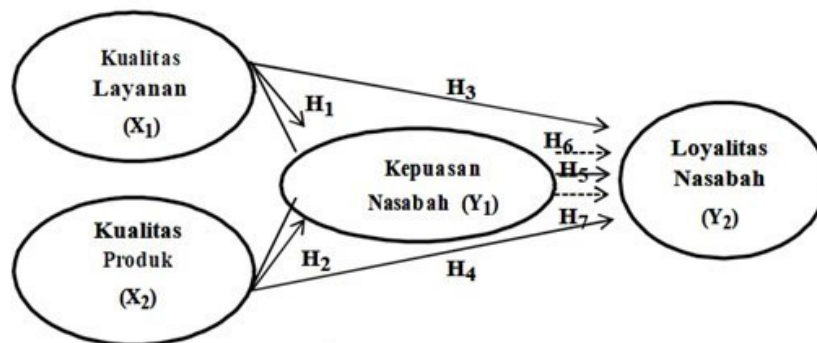
Agustini and Putra (2022), The Effect of Service Quality and Customer Satisfaction on Customer Loyalty m-banking livin by Mandiri in Karangasem Regency. The results of this study indicate that: (1), service quality has a positive impact on customer loyalty. (2) customer satisfaction has a positive impact on customer loyalty, (3) service quality and customer satisfaction simultaneously affect customer loyalty.

Zulkarnain and Ramdanyah (2018) The effect of service quality and product quality on customer loyalty with customer satisfaction as an intervening variable (Case Study at PT Bank Syariah Mu'amalah Cilegon). The results showed that service quality had a positive and significant effect on customer loyalty, product quality had a positive and significant effect on customer loyalty, service quality had a positive and significant effect on customer satisfaction, product quality had a positive and significant effect on customer satisfaction, and customer satisfaction had a positive effect significant effect on customer loyalty.

Susanto and Subagja (2019) The effect of service quality, customer satisfaction and corporate image on customer loyalty at PT. Bank Central Asia Tbk Pondok Gede Plaza branch office. The results showed that the effect of service quality on customer loyalty and had a significant relationship, the customer satisfaction variable was found to have a positive but not significant effect and the company image variable did not show the effect of customer loyalty. Variables of service quality, customer satisfaction, and corporate image have a significant influence and level of good relationship on customer loyalty.

Febrianto and Yusuf (2021) The Effect of Service Quality and Customer Satisfaction on Customer Loyalty at Bank Mandiri KCP Jamika Bandung. The results of this study found that service quality has a partial effect on customer loyalty. Meanwhile, customer satisfaction does not have a partial effect on customer loyalty. Service quality and customer satisfaction simultaneously influence customer loyalty.

**Research Model**



**Figure 1. Research Model**  
 Source: Literature Reviews, 2023

**hypothesis**

- H1: Service Quality has a direct and significant effect on e-banking livin' by Mandiri Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.
- H2: Product quality has a significant direct effect on Customer Satisfaction e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
- H3: Service Quality has a direct and significant effect on Customer Loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
- H4: Product Quality has a direct and significant effect on Customer Loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
- H5: Customer satisfaction has a direct and significant effect on customer loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
- H6: Service Quality has a significant effect on Customer Loyalty e-banking livin' by Mandiri through Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.
- H7: Product Quality has a significant effect on Customer Loyalty e-banking livin' by Mandiri through Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch

## RESEARCH METHODS

The approach used in this study is a quantitative approach, which is a research approach based on the philosophy of positivism, used to examine certain populations or samples, collecting data using research instruments, analyzing data statistically, with the aim of testing established hypotheses (Sugiyono, 2019:8). Based on the level of explanation, this research is included in the category of explanatory research, namely research that seeks causation between two or more variables to be studied. The results in explanatory research will determine and see the level of relationship between different variables in a population (Kriyantono, 2015: 69). Based on the research objectives, this research is included in the category of associative research, namely research that aims to determine the relationship between two or more variables. With associative research, a theory can be built that can function to explain, predict and control a symptom (Sugiyono, 2019: 11).

### Population, Sample Size and Sampling Technique

The population in this study is all customers who use the livin' by Mandiri e-banking application at PT. Bank Mandiri Jakarta Bandengan branch for the period July 2022 to November 2022, totaling 1332 people.

The sampling technique based on the Slovin Formula is quoted from Sujarweni's book (2019:16)

Where:

$$n = \frac{N}{1 + Ne^2}$$

n = number of samples

N = total number of population

e = 10% error tolerance limit (0.1)

The sample size used in the study was 93 respondents.

### Data Types and Sources

The types of data in this study were primary data and secondary data, which were carried out based on the questionnaire data collection method as well as data obtained officially by the relevant agencies.

Primary data was obtained from customers using the livin' by Mandiri e-banking application at PT. Bank Mandiri Jakarta Bandengan branch, based on questionnaires regarding service quality, product quality, customer satisfaction and customer loyalty. Secondary data was obtained from related agencies, either companies, government or independent institutions that have the legality to provide data related to this research.

### Data collection technique

The method used in this research is based on interviews and questionnaires. The distribution of the questionnaire was carried out online and the mechanism used the Google form.

### Variable Operational Definitions

1. Quality of Service (X1)
2. Product Quality (X2)
3. Customer Satisfaction (Y1)
4. Customer Loyalty (Y2)

### Testing the Validity Test Instrument

Validity test is done by comparing the value of r count with r table for degree of freedom (df) = n-2, in this case n is the number of samples. If r count is greater than r table and is positive, then the question is declared valid. (Sugiyono, 2019: 124).

### Reliability Test

To test the reliability level of the instrument, an Internal Consistency Test was carried out using the Reliability Coefficient (Cronbach's Alpha). The value of the Cronbach Alpha Coefficient is said to be good if the coefficient is between 0.6 and 1.0 (Umar, 2019: 113).

### Normality test

The normality assumption test is used to test whether in a regression model, the independent variables or both have a normal distribution or not. According to Santoso, to detect the existence of a normality is to look at the distribution of data (points) on the diagonal source of the graph with the following conditions: (a) If the data spreads around the diagonal and follows the direction of the diagonal line, the regression model meets the assumption of normality. (b) If it spreads far from the diagonal line or does not follow the direction of the diagonal line, the regression model does not meet the normality assumption.

**Multicollinearity Test**

Multicollinearity test aims to test in the regression model found a correlation between the independent variables. In this study, the technique for detecting the presence or absence of multicollinearity in the regression is by looking at the Variance Inflation Factor (VIF) value and the Tolerance value. If the Tolerance value is close to 1, and the VIF is around the numbers 1 to 10 and not more than 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model.

**Heteroscedasticity Test**

Heteroscedasticity is a variable variation that is not the same for all observations. In this test, the errors that occur are random but show a systematic relationship according to the magnitude of one or more independent variables.

**Analysis Techniques**

The data analysis technique used in this research is path analysis with the help of the SPSS version 22 program.

**RESEARCH RESULTS AND DISCUSSION**

**Research result**

**Overview of Research Respondents**

**Table 3. Description of Respondents by Age Group**

Age	Frequency	Percentage (%)
18 – 25 Years	28	30%
26 – 35 Years	53	57%
36 – 45 Years	10	11%
> 45 Years	2	2%
Amount	93	100%

Source: Processed Data, 2023

Based on this age group, it can be concluded that the largest number of respondents use the livin' by Mandiri e-banking application PT. Bank Mandiri Jakarta Bandengan branch with 57% coming from 26-35 years of age.

**Table 4. Description of Respondents Based on Last Education**

Last education	Frequency	Percentage (%)
SENIOR HIGH SCHOOL	17	18.3%
Diploma	4	4.3%
S1	67	72%
S2	3	3.2%
Other	2	2.2%
Amount	93	100%

Source: Processed Data, 2023

Based on the latest educational data, it can be concluded that the largest number of respondents use the livin' by Mandiri e-banking application PT. Bank Mandiri's Jakarta Bandengan branch, namely 72%, came from

undergraduate education.

**Table 5. Description of Respondents by Occupation**

Work	Amount	Percentage (%)
Self-employed	8	8.6%
Student / Student	7	7.5%
PNS/TNI/POLRI	13	14%
Other	65	69.9%
Amount	93	100%

Source: Processed Data, 2023

Based on the employment data, it can be concluded that the largest number of respondents use the e-banking application *livin'* by Mandiri PT. Bank Mandiri Jakarta Bandengan branch, namely 69.9% of respondents who came from other jobs.

**Results of Data Analysis**  
**Validity and Reliability Test Results**

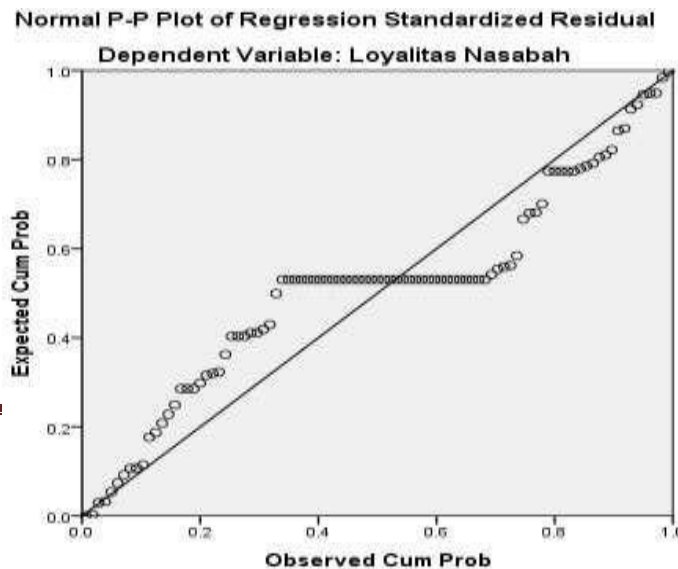
**Table 6. Validity and Reliability Test Results**

Variable	Statement	Sig	Status	CronbachAlpha	Status
Service Quality(X1)	X1.1	0.000	Valid	0.896	Reliable
	X1.2	0.000	Valid		Reliable
	X1.4	0.000	Valid		Reliable
Product Quality (X2)	X3.1	0.000	Valid	0.764	Reliable
	X3.2	0.000	Valid		Reliable
	X3.3	0.000	Valid		Reliable
	X3.4	0.000	Valid		Reliable
Customer Satisfaction (Y1)	Y1.1	0.000	Valid	0.803	Reliable
	Y1.2	0.000	Valid		Reliable
	Y1.3	0.000	Valid		Reliable
	Y1.4	0.000	Valid		Reliable
	Y2.1	0.000	Valid		Reliable
Customer Loyalty (Y2)	Y2.2	0.000	Valid	0.888	Reliable
	Y2.3	0.000	Valid		Reliable
	Y2.4	0.000	Valid		Reliable

Source: Processed Data, 2023

Based on Table 6 it can be seen that the significant value for each statement is  $< \alpha 0.05$  or  $0.000 < 0.05$ , so it can be concluded that each statement is said to be valid. The CronbachAlpha value for each variable is  $> 0.6$ , so it can be concluded that each statement is said to be reliable.

**Normality Test Results**



**Figure 2. Normal Probability Plots**  
 Source: Processed Data, 2023

Figure 2 shows that the data spreads around the diagonal line following the direction of the diagonal line, showing a normal distribution pattern, so that the regression model meets the assumption of normality.

**Multicollinearity Test Results**

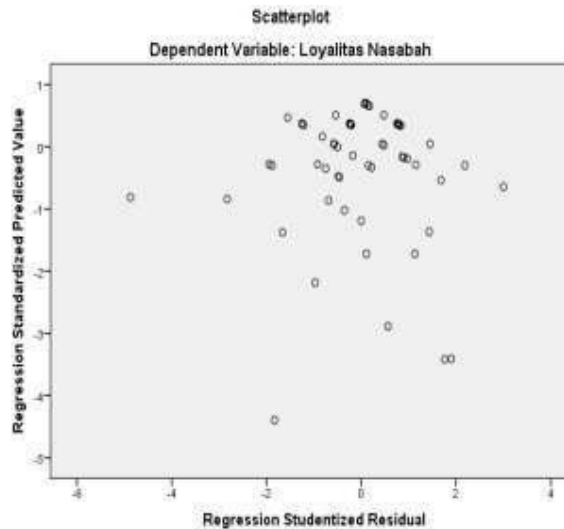
**Table 7. Collinearity Model**

Model		Collinearity Statistics	
		tolerance	VIF
1	(Constant)		
	Service Quality	.363	2,756
	Product quality	.361	2,768
	Customer Satisfaction	.269	3,717

Source: Processed Data, 2023

Table 7 shows that there are no symptoms of multicollinearity if the VIF value < 10. Because the VIF values of all variables are less than 10, there are no symptoms of multicollinearity in all independent variables. It can be concluded that there are no multicollinearity symptoms in the model.

**Heteroscedasticity Test Results**



**Figure 3. Scatterplots**

Source: Processed Data, 2023

Figure 3 shows that the results of the heteroscedasticity test show that all points do not have a certain pattern and in their distribution the points spread below and above the number 0 on the Y axis. This indicates the absence of heteroscedasticity.

**Hypothesis testing**

**1. Sub Structure 1**

**Table 8. Test Results for the Coefficient of Determination (R2) X to Y1**

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.855a	.731	.725	1.14332

a. Predictors: (Constant): Customer Satisfaction, Service Quality, Product Quality



b. *Dependent Variables:*Customer Loyalty Source: Processed Data, 2023.

Based on Table 8 above, it can be seen that the nature of the correlation (R) shown is 0.855. This shows that the relationship between the independent variables, namely service quality and product quality on customer satisfaction is very strong/high because it is in the correlation interval between 0.80-1.000. The coefficient of determination value expressed by Adjusted R Square is 0.725 or 72.5%. The results of this study indicate that customer satisfaction can be explained by variations in service quality and product quality variables of 72.5% while the remaining 27.5% is explained by other variables not examined in this study.

**2. Sub Structure 2 and 3**

**Table 9. Test Results for the Coefficient of Determination (R<sup>2</sup>) X, Y1 to Y2**

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.903a	.816	.810	1.00361

- a. *Predictors:(Constant):* Customer Satisfaction, Service Quality, Product Quality
- b. *Dependent Variables:*Customer Loyalty Source: Processed Data, 2023

Based on Table 9 above, it shows that the value of the coefficient of determination expressed by Adjusted R Square is 0.810 or 81% (classified as good). The results of this study indicate that customer loyalty can be explained by variations in service quality, product quality, and customer satisfaction variables of 81%, while the remaining 19% is explained by other variables not examined in this study.

**Partial Test (t-test)**

**1. Sub Structure 1**

**Table 10. Partial Test (t test) X to Y1**

Model	Unstandardized Coefficients		standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1. (Constant)	-2,417	1,363		-1,773	.080
Service Quality	.586	.097	.462	6028	.000
Product quality	.507	.083	.465	6075	.000

*Dependent Variable:* Customer Satisfaction // Source: Processed Data, 2023

Service quality has a t-count value of 6.028 > t-table 1.661 (df = n-k-1 = 93-2-1 = 90) and has a significance value of 0.000 <0.05, which means that the service quality variable has a significant direct effect on customer satisfaction. This means that the hypothesis (H1) which states that service quality has a significant direct effect on customer satisfaction at PT. Bank Mandiri Jakarta Bandengan branch, accepted or proven.

Product quality has a t-count value of 6.075 > t-table 1.661 (df = n-k-1 = 93-2-1 = 90) and has a significance value of 0.000 <0.05, which means that the product quality variable has a significant direct effect on customer satisfaction. This means that the hypothesis (H2) which states product quality has a direct significant effect on customer satisfaction at PT. Bank Mandiri Jakarta Bandengan branch, accepted or proven.

**2. Sub Structure 2 and 3**

**Table 11. Partial Test (t test) X, Y1 to Y2**

Model	Unstandardized Coefficients		standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1. (Constant)	-1,832	1.217		-1,505	.136
Service Quality	.391	.101	.291	3,861	.000
Product quality	.020	.087	.017	.230	.819
Customer Satisfaction	.677	.093	.641	7,317	.000

*Dependent Variable:* Customer Loyalty // Source: Processed Data, 2023

The regression coefficient is 0.391, so the service quality will increase by 0.391 times. Service quality has a t-count value of  $3.861 > t\text{-table } 1.662$  ( $df = nk-1 = 93-3-1 = 89$ ) and has a significance value of  $0.000 < 0.05$ , which means that the service quality variable has a significant direct effect on customer loyalty. This means that the hypothesis (H3) which states that service quality has a significant effect on customer loyalty at PT. Bank Mandiri Jakarta Bandengan branch, accepted or proven.

The regression coefficient for the product quality variable is 0.020 and not significant at 0.819 which means that hypothesis 2 can be rejected because the significance value is greater than 0.05 ( $0.819 > 0.05$ ) and the t-count value is 0.230

$< t\text{-table } 1.662$  ( $df = nk-1 = 93-3-1 = 89$ ), which means that the product quality variable has no direct significant effect on customer loyalty. This means that the hypothesis (H4) which states product quality has no significant effect on customer loyalty at PT. Bank Mandiri Jakarta Bandengan branch, accepted or proven.

The regression coefficient is 0.677, so customer loyalty will increase by 0.677 times. Customer satisfaction has a t-count value of  $7.317 > t\text{-table } 1.662$  ( $df = nk-1 = 93-3-1 = 89$ ) and has a significance value of  $0.000 < 0.05$ , which means that the customer satisfaction variable has a significant direct effect on customer loyalty. This means that the hypothesis (H5) which states that customer satisfaction has a significant effect on customer loyalty at PT. Bank Mandiri Jakarta Bandengan branch, accepted or proven.

## **Discussion**

### **The Influence of Service Quality on Customer Satisfaction**

Based on the results of data processing, the results of the study show that service quality has a significant direct effect on customer satisfaction. This means that the quality of services provided by PT. Bank Mandiri Jakarta Bandengan branch through the livin' by mandiri e-banking application has made the best contribution to customers, including; The facilities available at Livin' By Mandiri e-banking are complete and easy to use. In addition, the services provided by PT. Bank Mandiri Jakarta Bandengan branch through e-banking livin' by Mandiri according to what customers expect.

### **The Influence of Product Quality on Customer Satisfaction**

Based on the results of hypothesis testing that has been done, it shows that product quality variables have a significant direct effect on customer satisfaction. This means that the products available in the features of e-banking livin' by Mandiri are in accordance with customer needs so that customers are satisfied with these products. On the other hand, the response of e-banking livin' by Mandiri is very fast because it has a quality product for applications that cannot be accessed by other people or anyone and has an application design that attracts customers' interest in using it.

### **The Influence of Service Quality on Customer Loyalty**

Based on the results of SPSS data processing, the results show that service quality has a significant direct effect on customer loyalty. This means the quality of service at PT. Bank Mandiri Jakarta Bandengan branch through e-banking livin' by Mandiri has been going well because it provides convenience and trust for customers

### **Product Quality Against Customer Loyalty**

Based on the results of hypothesis testing that has been done, it shows that the product quality variable does not have a significant effect on customer loyalty. This means that the better the quality of the products provided by e-banking livin' by Mandiri, it is not certain that customers will become loyal to e-banking livin' by Mandiri.

### **The Effect of Customer Satisfaction on Customer Loyalty**

Based on the data obtained from the respondents' answers to the questionnaire, overall customers who use the e-banking application livin' by Mandiri PT. Bank Mandiri Jakarta Bandengan branch has a high perception or response regarding customer satisfaction. The results of the study show that customer satisfaction has a direct significant effect on customer loyalty,

### **The Effect of Service Quality through Customer Satisfaction on Customer Loyalty**

Based on the results of hypothesis testing, the results show that service quality through customer satisfaction has a significant effect on customer loyalty. This shows that the quality of services provided by the

company through the livin' by Mandiri e-banking application has been running well and smoothly and has had a positive impact on customer loyalty through customer satisfaction.

### **Effect of Product Quality through Customer Satisfaction on Customer Loyalty**

Based on the results of the hypothesis testing described previously, it shows that product quality through customer satisfaction has a significant effect on customer loyalty. This means that the better the product quality of PT. Bank Mandiri's Jakarta Bandengan branch will be followed by an increase in customer satisfaction, due to the quality of products from PT. Bank Mandiri Jakarta Bandengan branch can provide unique product characteristics and characteristics to customers so that customers perceive that PT. Bank Mandiri's Jakarta Bandengan branch has certain advantages that other products don't have.

### **Conclusion**

1. Service Quality has a direct and significant effect on e-banking livin' by Mandiri Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.
2. Product Quality has a significant direct effect on Customer Satisfaction e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
3. Service Quality has a direct and significant effect on Customer Loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
4. Product Quality has a direct and significant effect on Customer Loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
5. Customer Satisfaction has a direct and significant effect on Customer Loyalty e-banking livin' by Mandiri at PT. Bank Mandiri Jakarta Bandengan branch.
6. Service Quality has a significant effect on e-banking livin' by Mandiri Customer Loyalty through Customer Satisfaction at PT. Bank Mandiri Jakarta Bandengan branch.

### **Suggestion**

1. To increase customer satisfaction, one of the things that needs to be done is that the company should maintain a very good response from customers towards livin' by Mandiri e-banking services and be able to improve security and service quality both in terms of appearance, features and convenience so that it will able to provide interest and comfort for customers.
2. To increase customer satisfaction, products obtained from the conformity of expectations on product performance in the livin' by Mandiri e-banking application used, will make customers satisfied using the product in that application.
3. Increasing customer loyalty can be done by fulfilling user expectations for the livin' by mandiri e-banking application, establishing good relationships with customers, one of which is by handling customer complaints quickly and accurately.
4. For PT. Bank Mandiri Jakarta Bandengan branch is expected to pay more attention to the appearance of products/features so that customers are happy and satisfied with the livin' by mandiri e-banking facility in order to meet customer expectations and generate customer loyalty.
5. To increase customer loyalty, one of the efforts that must be made is that PT. Bank Mandiri Jakarta Bandengan branch continues to maintain that customers remain loyal to using the livin' by Mandiri e-banking application.
6. To compete amid the many e-banking service providers, livin' by Mandiri must improve service quality and prioritize customer satisfaction in order to build customer loyalty
7. PT. Bank Mandiri Jakarta Bandengan branch, especially the marketing department to make plans related to the introduction or dissemination of livin' by mandiri e-banking products or applications to customers so that the product quality of these applications can be known more widely by customers so as to increase customer satisfaction and loyalty.

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