

THE INFLUENCE OF PRODUCT QUALITY AND SERVICE QUALITY ON CUSTOMER SATISFACTION IN BANK SINARMAS MEDAN BRANCH

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ABSTRACT

Product quality and service quality play an essential role in every business, as they will influence customer satisfaction. Banking industries are one of many industries that keep maintaining customer satisfaction to have competitive advantages over competitors. This study aims to evaluate and measure the effect of product quality and service quality on customer satisfaction at Bank Sinarmas Medan Branch simultaneously and partially. The sample in this study was 178 customers of Bank Sinarmas Medan Branch. The data was collected by using a questionnaire. The data analysis technique used is multiple linear regression analysis. The research results show a simultaneous influence of product quality and service quality on customer satisfaction in Bank Sinarmas Medan Branch. Product quality influences customer satisfaction at Bank Sinarmas Medan Branch, and service quality influences customer satisfaction at Bank Sinarmas Medan Branch.

Keywords: *product quality, service quality, customer satisfaction*

INTRODUCTION

Bank Sinarmas is a restricted liability retail banking company that was established in August 18, 1989 as PT Bank Shinta Indonesia. In 2006, PT Bank Shinta Indonesia changed its name into PT Bank Sinarmas Tbk. As visioned, Bank Sinarmas is trying to become the leading bank by providing the best service to their customers. Hence, Bank Sinarmas is trying to achieve customer satisfaction by providing many facilities to let their customers enjoy the banking facilities of Bank Sinarmas.

Table 1.1 Revenue Comparison of Bank Mandiri Taspen and Bank Sinarmas (in million rupiah)

Year	Bank Mandiri Taspen	Bank Sinarmas
2016	50,145	370,751
2017	160,909	318,923
2018	331,653	50,472
2019	454,124	6,752
2020	453,558	118,522

Source : www.bankmantap.co.id (2021) and Bank Sinarmas (2021)

According to the table above, it can be seen that the revenue of Bank Sinarmas has an unstable slope, meanwhile the revenue of Bank Mandiri Taspen, which also comes from the same bank category, *BUKU II* category, has a stable and increasing revenue from 2016 to 2020. By judging from the table above, it can be concluded that banking market is very competitive. However, Bank Sinarmas has high potential to grow larger and to become the leading bank in banking market.

Table 1.2 Customer Satisfaction Index (CSI) of Bank Sinarmas Medan Branch

Year	Customer Satisfaction Index
2016	83,7%
2017	82,3%
2018	83,3%
2019	79,5%
2020	78,1%

Source : PT Bank Sinarmas Tbk(2021)

From the table above, it shows that the Customer Satisfaction Index (CSI) of Bank Sinarmas Medan Branch is declining and unstable from 2016 to 2020, which indicates that there are a declining satisfaction. According to Sitanggang et al. (2019), customer satisfaction is the gap between the expectation and the received experiences by the customers. From the definition of customer satisfaction, it can be concluded that customer satisfaction is defined by the expectation of the customers. In addition, Khadka and Maharjan (2017) also defined customer satisfaction as one of the top tools that leads to the success of the business. Hence, it can be assumed that customer satisfaction will affects to the survival of a business. The declining CSI is said to be due to the declining product quality and the service quality. The declining product quality and service quality will cause the customer satisfaction to decline, which is supported by the previous research conducted by Dewi and Sudiarta (2018) that mentioned product quality and service quality positively influencing customer satisfaction. However, service quality has more significant influence to customer satisfaction compare to product quality.

2. LITERATURE REVIEW

2.1. Product Quality

Kotler and Armstrong (2016) mentioned that product quality is the characteristics of a product to meet the customer satisfaction. Sitanggang et al. (2019) stated that product quality is the way of meeting the satisfaction of the customers. In addition, Kotler and Armstrong (2016) also mentioned that product quality is the marketer’s positioning tools where quality will directly affect the product’s performance. In the other words, it can be concluded that product quality is the ability of a products to satisfy the customers, which will be used by the marketers as positioning tools.

According to Christianto et al. (2020), there are five indicators used to measure product quality, namely 1) Performance; 2) Reliability; 3) Features; 4) Durability; 5) Serviceability. In addition, Dewi and Sudiarta (2018) added three more indicators in order to measure product quality better, namely 1) Conformance; 2) Aesthetics; 3) Perceived Quality.

H₁ : Product quality and service quality simultaneously affects customer satisfaction at Bank Sinarmas Medan Branch.

2.2 Service Quality

Djunaedi and Panjaitan (2017) mentioned that service quality is the effort to meet the needs and wants of the customers in terms of meeting the expectation. Zeithaml in Leonnard (2018) also defined service quality as the further evaluation of product or services received by the customers. By assessing the definition of service quality above, it can be concluded that service quality is the measure of expectation and received service to satisfy the customers. It also can be concluded that service quality is being measured by calculating the gap between expectation and the received service by the customers. Djunaedi and Panjaitan (2017) mentioned that service quality plays an important part as the main objective of service quality is to achieve customer satisfaction.

According to Lamb et al. (2017), there are five indicators being used to measure service quality, namely 1) Reliability; 2) Responsiveness; 3) Assurance; 4) Empathy; 5) Tangibility. In addition, Pakurar et al. (2019) added three more indicators to measure service quality better, namely 1) Accessibility; 2) Financial Aspects; 3) Employee Competencies.

H₂: Product quality partially affects customer satisfaction at Bank Sinarmas Medan Branch.

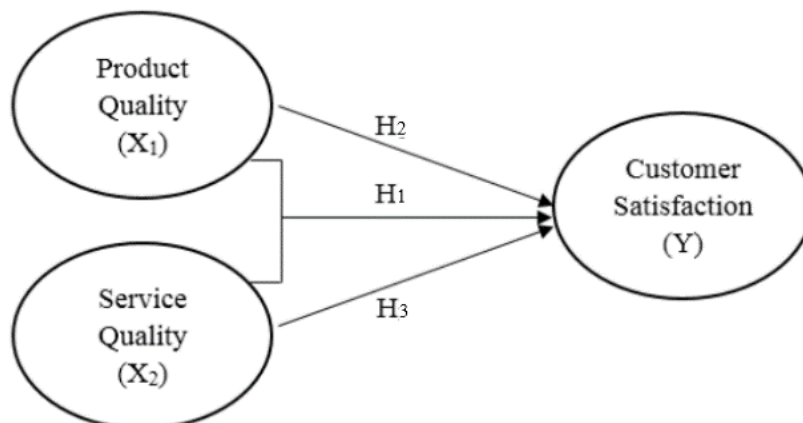
2.3 Customer Satisfaction

Khadka and Maharjan (2017) stated that customer satisfaction is one of the top tools being used to leads business to achieve success. Lamb et al. (2017) defined customer satisfaction as the whole evaluation of the customers, which is able to satisfy the customers. In addition, Sitanggang et al. (2019) mentioned that customer satisfaction is the gap between expectation and the received experiences by the customers. Hence, it can be concluded that customer satisfaction is the afterpurchase evaluation after receive the experience of the previous purchase.

According to Kotler and Armstrong, customer satisfaction can be seen through repurchase intention and spread of good words. Hence, the indicators being used to measure customer satisfaction are 1) Repurchase Intention; 2) Willingness to Refer Others. In addition, Endang and Endah (2017), indicators that being used to measure customer satisfaction are 1) Satisfaction on Product; 2) Satisfaction on Service; 3) Satisfaction on Facilities Provided. However, Khadka and Maharjan (2017) also added three more indicators to measure customer satisfaction better, namely 1) Satisfaction on Price; 2) Trust on the Products and Service of the Company; 3) Complaints and Problems.

H₃: Service quality partially affects customer satisfaction at Bank Sinarmas Medan Branch.

Figure 2.1 Theoretical Framework



3. RESEARCH METHODOLOGY

This research was conducted to test the hypothesis proposed by using the research method designed. This research was conducted by using quantitative approach. Sarstedt and Mooi (2019) defined quantitative research is the research that using quantified information to be analyzed. In addition, this research also conducted by using descriptive and correlational research. Descriptive research is the research that used surveys and fact finding enquiries that used to describe the phenomenon, characteristics, and functions (Sarstedt & Mooi, 2019). According to Husna and Suryana (2017), correlational research is the research that was conducted to measure and to find the influence of independent variables to dependent variables.

The data of this research was gathered by using simple random sampling technique. Simple random sampling method is the method that allows all of the respondents have the same possibility of being chosen (Priyono, 2016). The sample size of this research will be 178 customers of Bank Sinarmas Medan Branch.

This research is using multiple linear regression analysis. Sugiyono (2016) mentioned multiple linear regression is being used to predict the dependent variable if the independent variables are being manipulated. The multiple linear regression model will be as follows:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Where:

Y = customer satisfaction

a = constants

b_1 = partial slope of the linear relationship of X_1 to Y

X_1 = product quality

b_2 = partial slope of the linear relationship of X_2 to Y

X_2 = service quality

e = standard error

4. RESULTS AND DISCUSSION

4.1 Validity and Reliability Test

Before the main test was conducted, the pretest was conducted to the other 30 customers of Bank Sinarmas Medan Branch with significance level of 5%. The pretest includes validity and reliability test, which will be as follows:

Table 4.1 Validity and Reliability Test

Variable	Question	r count	r table	Validity	Cronbach's Alpha
Product Quality	Q1	0,470	0,361	Valid	0,773
	Q2	0,835		Valid	
	Q3	0,579		Valid	
	Q4	0,535		Valid	
	Q5	0,693		Valid	
	Q6	0,744		Valid	
	Q7	0,565		Valid	
	Q8	0,646		Valid	
Service Quality	Q9	0,786	0,361	Valid	0,899
	Q10	0,573		Valid	
	Q11	0,600		Valid	
	Q12	0,580		Valid	
	Q13	0,751		Valid	
	Q14	0,855		Valid	
	Q15	0,504		Valid	
	Q16	0,563		Valid	
Customer Satisfaction	Q17	0,756	0,361	Valid	0,778
	Q18	0,685		Valid	
	Q19	0,651		Valid	
	Q20	0,464		Valid	
	Q21	0,542		Valid	
	Q22	0,636		Valid	
	Q23	0,631		Valid	
	Q24	0,629		Valid	
	Q25	0,764	Valid		

From the table above, it can be seen that all of the indicators above from the research variable passed the validity test, as the r count > r table, 0,361. In addition, by looking at the value of the Cronbach's Alpha value, it can be seen that all of the indicators have the Cronbach's Alpha value > 0.06 which can be concluded that all of the indicators of the research variables passed the validity and reliability test.

4.2. Classical Assumption Test

1. Normality Test

Table 4.2 Normality Test

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	178
Test Statistic	,067
Asymp. Sig. (2-tailed)	,050 ^c

From the table above, it can be seen that the Asymp. Sig. value are equal to 0,05. Hence, it can be assumed that the regression model has the normally distributed residual value.

2. Multicollinearity Test

Table 4.3 Multicollinearity Test

Variables	Tolerance	VIF
Product Quality	,108	9,217
Service Quality	,108	9,217

From the table above, it can be seen that the tolerance level of the independent variables are higher than 0,10 and the VIF value are less than 10, which shows that the data do not suffer multicollinearity or carrying the same information.

3. Heteroscedasticity Test

Table 4.4 Heteroscedasticity Test

Variables	t	Sig.
Product Quality	-1,242	,216
Service Quality	1,121	,264

From Table 4.4 above, by using Glejser test, it shows that the sig. value of each independent variables is higher than 0,05 that indicates the regression model do not suffer heteroscedasticity.

4.3. Multiple Linear Regression

Table 4.5 Multiple Linear Regression Test

Coefficients ^a				
Model	Unstandardized Coefficients			
	B	Std. Error	t	Sig.
1 (Constant)	-.894	,070	-12,779	,000
Product Quality	,565	,060	9,463	,000
Service Quality	,721	,062	11,559	,000

$$Y = a + b_1X_1 + b_2X_2 + e$$

$$Y = -0,894 + 0,565 X_1 + 0,721X_2 + 0,05$$

Where:

Y = customer satisfaction

X₁ = product quality

X₂ = service quality

e = standard error

From the Multiple Linear Regression model formed, it can be seen that if the product quality are increased 1 (one) unit, there will be an increase of customer satisfaction as much as 0,565. However, if there is an increase of service quality as much as 1 (one) unit, there will be an increase of customer satisfaction of 0,721. Hence, it can be concluded that service quality are much more influential compare to product quality, as the increase of service quality are much more influential compare to the increase of product quality.

1. Coefficient of Determination

Table 4.6 Coefficient of Determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,979 ^a	,958	,957	,14013

From Table 4.6 above, it shows that the adjusted R square value is 0,957 which shows that customer satisfaction are able to be explained by product quality and service quality as much as 95,7%, while the other 4,3% are being explained by the other factors aside of product quality and service quality.

2. Hypothesis Testing

Table 4.7 F-Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77,773	2	38,886	1980,324	,000 ^b
	Residual	3,436	175	0,020		
	Total	81,209	177			

From Table 4.7 above, it can be seen that the F value are higher than the F table, where 1980,324 > 3,05. In addition, by looking at the Sig. value, it can be concluded that the Sig value are < 0.05. Hence, it can be concluded that there are a simultaneous influence of product quality and service quality to customer satisfaction.

Table 4.8 t- Test

Coefficients ^a			
Model		t	Sig.
1	(Constant)	-12,779	,000
	Product Quality	9,463	,000
	Service Quality	11,559	,000

From Table 4.8 above, it can be seen that the t value of each Product Quality and Service Quality are higher than t table, 1,974. In addition, by judging from the Sig. value, each of the research variables has Sig. value less than 0,05 that indicates there are a partial influence of product quality to customer satisfaction, and there are a partial influence of service quality to customer satisfaction.

4.4. Discussion

The Influence of Product Quality and Service Quality on Customer Satisfaction in Bank Sinarmas Medan Branch

By evaluating the results of F-test, it can be concluded that there is a simultaneous influence of product quality and service quality towards customer satisfaction. This results comply with the previous research conducted by Dewi and Sudiarta (2018), that also resulted there is a simultaneous influence of product quality and service quality. In addition, Khadka and Maharjan (2017) also mentioned that there is a simultaneous influence of product quality and service quality. By interpreting the research results, if Bank Sinarmas Medan Branch provided the good product quality with the good service quality, it will resulted in the good customer satisfaction. However, in this research, the service quality in PT Bank Sinamas Tbk Medan Branch is more influencing compare to the product quality.

The Influence of Product Quality on Customer Satisfaction in Bank Sinarmas Medan Branch

By evaluating the results of t-test, it can be concluded that there is a partial influence of product quality towards customer satisfaction. This results comply with the previous research conducted by Dewi and Sudiarta (2018), that also resulted there is a partial influence of product quality towards customer satisfaction. Although Endang and Endah (2017) mentioned that product quality has positive partial influence towards customer satisfaction, product quality in this research do not has the strongest correlation to customer satisfaction. By interpreting the regression model formed, it can be obtained that product quality has positive partial influence towards customer satisfaction. However, product quality has weaker correlation compare to service quality, which comply to the statement by Elidawati, Yasri, and Idris (2018), that there is a strong correlation between product quality and customer satisfaction. Hence, it can be concluded that an increase in product quality will increase the customer satisfaction, although it is not as influential as service quality.

The Influence of Service Quality on Customer Satisfaction in Bank Sinarmas Medan Branch

By evaluating the results of t-test, it can be concluded that there is a partial influence of service quality towards customer satisfaction. This results comply with the previous research conducted by Dewi and Sudiarta (2018), that also resulted there is a partial significant influence of service quality towards customer satisfaction. This results comply to the previous research conducted by Elidawati, Yasri, and idris (2018) that stated service quality has partial significant influence to customer satisfaction. By interpreting the regression model formed, it can be concluded that service quality has positive significant partial influence towards customer satisfaction. Hence, it can be concluded that an increase in service quality will significantly increase the customer satisfaction, since service quality has the highest correlation to customer satisfaction than product quality.

5. PENUTUP

By evaluating the results from F-test, it can be concluded that there are a simultaneous influence of product quality and service quality to customer satisfaction. This research shows that if Bank Sinarmas Medan Branch able to provide both good service quality and good product quality, the customer satisfaction will be improved significantly. However, In terms of product quality, especially performance, Bank Sinarmas Medan Branch can start to allow the customers with identity card outside of the region to open the saving account with the recommendation of company or customers of Bank Sinarmas Medan Branch in order to improve the performance of their product quality. Moreover, Bank Sinarmas Medan Branch should be aware of their service quality, as the service quality have more influence to the customer satisfaction, especially in terms of responsiveness and improve their acessibility, and be aware of their product quality in terms of performance. In terms of responsiveness, Bank Sinarmas Medan Branch can start to hire the experienced staff in order to reduce the waiting time required to be served for the customers. As Bank Sinarmas Medan Branch hiring the experienced staff, they will be able to reduce the training expense, rather than hiring the fresh graduate. In addition, Bank Sinarmas Medan Branch can start to apply the free money withdrawal from the other banks' ATM. By applying the free withdrawal policy, there are more customers will feel more satisfied, as the customers would not have to worry about the availability of the ATM machine in Medan.

By assessing the results of t-test, it can be concluded that product quality also has the positive partial influence to customer satisfaction. The higher product quality of Bank Sinarmas Medan Branch, the higher the customer satisfaction will be.

Besides of product quality, there are a positive significant influence of service quality to customer satisfaction. From this research, it shows that the better the service quality of Bank Sinarmas Medan Branch, the more satisfied the customers will be.

In conclusion, it can be concluded that both improving service quality and product quality will be able to improve their customer satisfaction. For the future researcher, it is recommended for the future researcher to conduct research by adding the other factors that might influence customer satisfaction aside of product quality and service quality.

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