

The Impact of Mobile Banking (M-Banking) Services on Customer Satisfaction of the State Savings Bank (BTN)

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Abstract

The goal of this study is to determine and demonstrate the effect of mobile banking services on customer satisfaction. Quantitative method used in this research. Primitive data gathered by distributing questionnaires online to respondents who use BTN mobile banking services in Surakarta is used as a data source in this study. There are 100 respondents in the total sample. In this study, linear regression analysis was used to test the classic hypotheses and assumptions. The results showed that system information security had a positive and significant effect on customer satisfaction, ease of use of services had a positive and significant effect on customer satisfaction, and bank reliability had a significant positive effect on customer satisfaction. The results of the F test show that system security, service ease of use and bank reliability have a significant effect on customer satisfaction. The results of the coefficient of determination (R²) show that the influence of this study is 62.5%, the remaining 37.5% can be explained by other factors not examined in this study.

Keywords: *System Security, Ease of Use of Services, and Banking Credibility.*

Introduction

In the current era of digitalization, competition between companies is fierce, and the global economy has made clear progress, which is driving business in the service world. Banking is one of the service businesses that can contribute to Indonesia's economic growth, because banking has become a business that generates national income for the state and acts as a warehouse for public funds and distributes them back to people who need productive economic activities. In the world of commercial banking, competition is getting tougher both in the domestic market and in the international market, and the country and the banking world are heavily affected by the fluctuations in currency values, which increase the basic goods of society.

Mobile banking is a service product based on GPRS (General Package Radio Services) technology that makes it easier for customers to make banking transactions. The M-Banking service provided by the Surakarta KC State Savings Bank (BTN) has additional features that can make it easier for customers to use transactions. Customer trust and satisfaction are the main success factors in banking service companies. To meet customer satisfaction in the banking industry, the quality of bank services is very important to attract customers. Customer satisfaction does not only provide benefits in the short term but is able to provide benefits in the long term and how banks provide the best service or excellent service so that customers are comfortable and safe.

The effect of M-Banking services on customer satisfaction was carried out by Melfi Adela stating that system security, service ease, and company credibility have a significant impact on how satisfied customers are as do system security and system security. This is not in line with the research conducted by Teuki Rizalsi entitled Effects of Mobile Banking services on customer satisfaction with the result that perceived convenience has no significant effect on customer satisfaction, while perceived security and perceived trust have a significant effect on customer satisfaction.

Customers anticipate m-banking services will be more user friendly. Based on the resultss of the pre-survey, it is known that the Surakarta KC State Savings Bank will have 4 million customers in 2021. There will also be 1.63 million people using m-banking services, up 26% from 1.29 million users at the same time last year.

Literature Review

a. System security

Information security according to G. J. Simons is “a process by which efforts can prevent fraud (cheating) or detect fraud in information-based systems where the information has no physical meaning”. Information security is a form of protection of information and important elements in it such as confidentiality, integrity and availability, including systems and hardware for storing and sending that information (Whitman dan Mattord, 2010).

b. Service convenience

The level of user expectation regarding the number of attempts required to use a system is known as ease of use. This suggests that the degree to which a person perceives that using technology is simple does not require any effort on their part (Davis, 2019:30). According to Jogiyanto (2007: 115) Ease is defined as the extent to which a person believes that using a technology will be free of effort. Ease of use is easy to learn, easy to understand, simple and easy to operate (Jogiyanto, 2007: 129).

c. Company credibility

Focus on technology that has a positive impact and provides convenience, there is a good reputation to encourage user confidence, and the availability of reliable and maximum support mechanisms. One aspect of a company's reputation that is considered to have an influence on business success is bank credibility. (Yuen, 2013). Credibility is the quality, capability, or power to inspire trust. company credibility depends on Company Trust, Company Expertise and Company Attractiveness (Kotler dan Keller ,2006)

d. Customer satisfaction

According to Philip Kotler and Kevin Lane Keller (Hadi Brata et al., n.d.), a person's joy or disappointment following a product performance (results) comparison with expected performance is known as consumer satisfaction. Satisfaction is an attitude that is decided based on the experience gained. Satisfaction is an assessment of the characteristics or features of a product or service, or the product itself, which provides a level of consumer pleasure related to meeting consumer consumption needs. Satisfaction is an assessment of the quality or characteristics of a product or service or the product itself which gives pleasure to consumers in connection with the satisfaction of the consumer's consumption needs. Consumer satisfaction can be created through quality, service and value. The key to generating customer loyalty is delivering high customer value (Lovelock dan Wirtz, 2011:74).

Methods

The effect of the dependent variable on the independent the variable was identified through utilizing the analysis of multiple linear regression in this study. Primary data from a questionnaire with questions about system security, service usability, and the impact of banking credibility on customer satisfaction is used as a data source.

The population in this study are customers who use BTN Mobile Banking services in the city of Surakarta. The sample selection uses the sampling method with random sampling technique, namely the

selection method, the sample is based on all customers, the population is done randomly, regardless of population level. 100 people participated in this research survey. The analysis model uses multiple linear regression analysis, including Instrument Test, Classical Assumption Test, Multiple Linear Regression, t test; F test and Coefficient of Determination Test (R²).

Results

1. Instruments Test

a. Validity test

Validation is to find out how far the correctness of a measuring instrument is in carrying out its measuring function. Validity testing is said to be valid if r_{count} is greater than. In this study, the r_{table} value was 0.1966.

- 1) The outcomes of the System Security Questionnaire Validity Test consist of 4 question items. All are valid, so It can be drawn that each a dominant variable value that forms the perception of system security on customer satisfaction and the dominant value is found in question items X1_2, X1_1, and X1_4.
- 2) The Validity Test's outcomes of the Ease of Use Questionnaire consist of 4 question items. All are valid, It very well may be drawn that each variable has a dominant value that forms the perception of system security on customer satisfaction and the dominant value is found in question items X2_2, X2_3, and X2_4
- 3) The Legitimacy Test's discoveries of the Banking Credibility Questionnaire consist of 4 question items. All are valid, so It very well may be drawn that each variable that each a dominant factor value that forms the perception of system security on customer satisfaction and the dominant value is found in question items X3_4, X3_3, and X3_1.
- 4) The results of the Customer Satisfaction Questionnaire Validity Test consist of 4 question items. All valid. After getting the results of the validity test, it can be concluded that a dominant factor value that forms the perception of system security on customer satisfaction and the dominant value is found in the question items Y_4, Y_1, and Y_3

b. Reliability Test

This reliability test is used to determine the level of trust index of the variable, if the Cronbach Alpha value is > 0.60 then this is said to be reliable. The calculation results from the data reliability test in the table can be seen that the used questionnaire is trustworthy because the Cronbach Alpha value is greater than 0.60.

2. Classical Assumption Test

Often the validity requirement of linear regression analysis is to pass the classic hypothesis test. Therefore, a classic hypothesis test must be carried out, where the analysis does not find violations of the multicollinearity test, autocorrelation test, heteroscedasticity test, and normality test.

3. Multiple Linear Regression Analysis

The regression coefficient value of each independent variable is System Security, Ease of Use of Services and Banking Credibility, then for the dependent variable, namely Customer Satisfaction. The following table displays the multiple linear regression analysis test results:

Model		Unstandardized coefficients		Standardize d coefficients	t	Sig	Collinearity Statistics	
		B	Std Error	Beta			Toleran ce	VIF
a.	1 (Contant)	.649	1.213		.535	.594		
	Keamana n Sistem	.179	.088	.171	2.038	.044	.541	1.848
	Kemudah an Pengguna an	.311	.087	.315	3.556	.001	.483	2.070
	Layanan Kredibilit as Perbanka n	.455	.086	.431	5.266	.000	.566	1.767

Dependen variable:Kepuasan Nasabah

The multiple linear regression equation is found as follows, namely:

$$Y = 0,649 + 0,179 (X1) + 0,311 (X2) + 0,455 (X3)$$

4. T test

The results of the t test or partial test can be seen as follows:

- a. System Security t-test value of 2.038 with a significance value of 0.044 <0.05 indicates that system security has a significant impact on customer satisfaction. The hypothesis which reveals that system security has a significant effect on customer satisfaction has been proven true.
- b. The t test value of Ease of Use of Services is 3.556 with a significance value of 0.001 <0.05. This indicates that ease of use of services has a significant effect on customer satisfaction. The hypothesis which reveals that the ease of use of services has a significant effect on customer satisfaction is proven to be true.
- c. The t-test value of banking credibility is 5.266 with a significance value of 0.000 <0.05, knowing that banking credibility has a significant impact on customer satisfaction The hypothesis which reveals that banking credibility has a significant effect on customer satisfaction is proven to be true.

5. F test

The results of the F test can be reviewed in the following table:

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	291,738	3	97,246	55,898	,000 ^a
	Residual	167,012	96	1,740		
	Total	458,750	99			

The

F test yielded 55.898 with a significance level of $0.000 < 0.05$. The variables can be concluded to be system security, ease of use of services, banking credibility have a significant effect on customer satisfaction at Bank BTN.

6. Test the Coefficient of Determination (R_2)

Based on the results of the R_2 test of 0.625 which means system security, ease of use of services, banking credibility, are able to influence customer satisfaction 62.5% and 37.5% are influenced by variables that are not part of this study.

Discussion

1. Effect of System Security on Customer Satisfaction

Customer satisfaction with Bank BTN Mobile Banking has a positive impact on system security. Maintaining customer data through mobile banking which reduces the possibility of theft of customer data shows the impact of system security on customer satisfaction. Customer satisfaction will increase if system security is maintained.

2. The Effect of Ease of Use of Services on Customer Satisfaction

In using Bank BTN Mobile Banking, Customer satisfaction is significantly influenced by ease of use. Positive customer response to the use of Mobile Banking and the ease with which customers can access it demonstrates the impact of ease of use on customer satisfaction. Customer satisfaction will increase if services are made easier to use.

3. The Effect of Banking Credibility on Customer Satisfaction

By using Bank BTN Mobile Banking, customer satisfaction is greatly influenced by the bank's credibility. The increasing number of customers using mobile banking shows the effect of banking credibility on customer satisfaction. Customer satisfaction will increase if the credibility of the banking system is increased.

Conclusions

The conclusion that can be drawn from the findings of the research that has been carried out is System Security has a positive and significant influence on Bank BTN Customer Satisfaction, Ease of Use of Services has a positive and significant influence on Bank BTN Customer Satisfaction, and Banking Credibility has a positive and significant influence on Customer Satisfaction. Based on the results of the F test variable System Security, Ease of Use of Services, and Banking Credibility simultaneously have a significant influence on customer satisfaction of Bank BTN Surakarta and it

can be said that the influence exerted by the dependent variable has an independent variable that is 62.5% while the remaining 37.5% influenced by other variables.

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