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THE EFFECT OF THE USE OF *MOBILE BANKING* ON STUDENTS OF JAKARTA STATE UNIVERSITY

Putri Fauziyah Nur Azizah^{1*}, Mardi², Santi Susanti³ ^{1,2,3}Faculty of Economics, State University of Jakarta, Indonesia Email: *Putrifauziyah253@gmail.com¹*

Abstract

This study aims to determine the effect of bank security and reputation on decisions to use mobile banking for students at the State University of Jakarta. This study uses a quantitative approach. The data in this study are primary data using a questionnaire. The population in this study were students of the Faculty of Economics, State University of Jakarta, Class of 2018. The sample selection used a purposive sampling technique. The respondents in this study were 200 students of the 2018 State University of Jakarta. The analytical method used was multiple regression analysis. The results of the study indicate that there is an influence of security on the decision to use mobile banking. In addition, there is the effect of bank reputation on the decision to use mobile banking.

Keywords: Security, Bank Reputation, Decision, mobile banking

INTRODUCTION

According to Law Number 10 of 1998 concerning Banking, a Bank can be defined as a business entity that collects funds from the public in the form of deposits (Bank Indonesia, 1998). Therefore, the bank is an institution that collects funds from the public, which is commonly called savings or deposits, and these funds can channel back to the community in the form of loans. Therefore, banks rely on public trust in business activities (Hery, 2015). Furthermore, with bank operational activities as a place to store and distribute these funds to the public, banks develop other services that are increasingly diverse according to needs. Thus banking is experiencing very rapid development, especially in Indonesia.

In Indonesia, the development of banking has increased rapidly, marked by the number of branches and various banks. Moreover, the development of banks continues to occur, resulting in competition for customers to deposit their funds. So, to collect funds from the public, banks need to innovate and provide attractiveness to customers through bank products integrated with technology, security in funds deposited with banks, and quality of service. It is certainly one of the considerations for prospective customers to use a bank's product. (Audina PutriBasutami et al., 2018), which states that when making decisions, consumers will use various information to make decisions.

Technological developments are unavoidable to keep up with, and Mobile Banking is one of the innovations in the banking sector to answer customer needs for technology. According to(Ramadhan & Herianingrum, 2017), *mobile banking* is a service that uses information technology and is an innovation of banking services to support smooth and easy banking activities.

With the development of technology and the benefits obtained by the community and the banking sector, there are aspects of risk that cannot be avoided, namely the security of personal data and customer funds. Guaranteed security will create a sense of trust, and it is necessary to handle and follow up to overcome *cybercrime* that can harm customers and the bank itself. In addition, technical problems in electronic transactions are also one of the

obstacles that result in losses. Security is one of the customer's considerations for using *mobile banking*. Customers will choose a bank whose security is guaranteed so that the risk of loss is small. Technological developments have resulted in all information being uncontrollable, making it difficult to distinguish data that can be used as information or negative information that is detrimental.

Banks and the public must have a way to prevent online-based fraud and theft that is rife, and banks also need to detect and ensure that the right people access mobile banking or not. In addition, the bank is responsible for the privacy of customer data, protecting the data from people who are not entitled to access or change it.

The quality of security has become a benchmark for customers in choosing a bank, resulting in trust in using products at certain banks. Guaranteed security will increase customer trust so that the bank has a good reputation in the eyes of the public. Reputation is considered important by customers in making decisions. Banks that are widely known and do not have a bad history tend to have high customer trust, so banks that are known to be good and have achievements have public attraction and sympathy.

According to(Fang, 2017), reputation is a valuable asset in the investment banking industry because the poor performance of securities damages the reputation of underwriters. Banks with reputable reputations will choose underwriting duties carefully. Banks need to maintain service quality and security to maintain a good reputation. A good opinion by the public can also make the bank more widely known.

Then, research conducted by(Gunawan, 2018) stated that most customers agree that reputation is very important to attract customers' interest, namely having a good feeling about the company, admiring and respecting the company, and trusting the company.

Based on the above background, researchers can identify problems by increasing the number of banks in Indonesia, exposing banks to competitive competition to obtain third-party funds. Meanwhile, third-party funds come from the public as decision-makers in using banking services. But, then, there are cases of fraud and internet-based crimes that cause a decline in public trust and bank reputation, so people tend to choose a good bank reputation over other banks. In addition, most people still doubt the security of *mobile banking* and feel safer transacting directly at the *teller*.

This study aims to find out further the influence of bank security and reputation on decisions to use *Mobile Banking* students of the Faculty of Economics, State University of Jakarta.

THEORY REVIEW

Decision theory using *mobile banking*

According to(Herod Apner Aflil, 2017), it is the end of a long thought process on a problem by answering questions on the problem and then making choices from various alternatives. Then according to(Hadi, 2019), *consumer decision-making*, in this case, the customer, is a process in which there are various choices that the customer can use to make an assessment and based on certain considerations, the customer can choose one or more alternatives as needed.

Security Theory

According to(Aufy & Widiartanto, 2020), the definition of transaction security or *security* is the ability of banks to keep transactions safe and to control and safeguard transactions and data. For example, when the customer obtains a security guarantee and follows what the customer expects, the customer will be willing to disclose his personal information to the bank. As a result, the customer will use the product with a sense of security. That way, the customer's goal to prefer to transact at the bank compared to other places based on security is

achieved.

Security can also be interpreted as an effort to provide a sense of security and trust for customers or prospective customers to deposit their funds in the bank(Damayanti, 2017). The reinforced by(Rizal and Evy Maharani, 2020), security in banking ensures that money will not loose, and the quality of bank products is more guaranteed than saving your funds or other people's funds.

Theoretical Framework and Hypothesis Development Theoretical framework

The decision to use mobile banking can be influenced by several things, one of which is security. In determining a decision, consumers/customers are influenced by many things, both marketing and environmental influences, and these influences are then processed and processed within themselves according to their needs. Then, in the end, decision-making occurs. (Evannaza, 2017).

Research conducted by(HR, G.I.S., Fermayani, R. & Harahap, 2020) concluded that security significantly positively affects decisions. Line with research (Li, 2020) stated that new challenges arise when making decisions due to growing information security issues. However, the study's results indicate a significant influence on the contribution of information security to the decision to be chosen. Therefore, it shows the importance of security before making a decision.

Research conducted by(Ekawaty et al., 2020) explained that reputation positively and significantly influences decisions. It means changes to decisions are influenced or determined by changes in the company's reputation or the bank itself. A changed reputation affects changes in customer decisions. In addition, customer decisions are also influenced by reputation that has decreased or increased, so the increase in decisions to use products or services is in line with the increase in the reputation of the company/bank itself.(Suryawardana & Yani, 2017).

Based on the literature review and explanation above, the following hypothesis can propose: "Is there any influence of bank security and reputation on the decision to use *mobile banking* for students of the Faculty of Economics, State University of Jakarta?"

METHOD

This research was conducted at the State University of Jakarta, on Jalan Rawamangun Muka Raya, RT. 11/RW.14, Rawamangun, Pulo Gadung District, East Jakarta City, Special Capital Region of Jakarta. The population in this study were students of the Faculty of Economics, State University of Jakarta, with the target population being the class of 2018. Sampling was done using *a proportional stratified random sampling technique* with random sampling according to the criteria that can be used as samples using the *Issac Michael* formula for as many as 196 students. This study uses a quantitative approach with a survey method. Data collection techniques in this study used a questionnaire (questionnaire). The instrument used in this study is a *Google Form link* with a *Likert* scale containing indicators for each variable.

CONSTELLATION OF RELATIONSHIP BETWEEN VARIABLES

The relationship between the independent and dependent variables can illustrate in the following constellation diagram:

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RESULTS AND DISCUSSION

Based on data obtained from research that has been done, the results obtained from the calculation of SPSS.v25 are as follows.

Table 1 Descriptive Statistics of Decisions to Use *Mobile Banking*

	Descriptive Statistics								
	Ν	Range	Minimum	Maximum	Sum	mea	n	Std. Deviation	Variance
	Statistics	Statistics	Statistics	Statistics	Statistics	Statistics	Std. Error	Statistics	Statistics
The decision to Use Mobile Banking	200	11	41	67	10838	57.82	.162	2.288	5.237
Valid N	200								
(listwise)									

Known to score of the decision to use *mobile banking is* 10,838, with the highest score of 67 and the lowest score of 41. Furthermore, the average score is 57.82, the variance is 5.237, and the standard deviation is 2.288.

Table 2 Security Descriptive Statistics

	Descriptive Statistics								
	Ν	Range	Minimum	Maximum	Sum	mea	mean		Variance
	Statistics	Statistics	Statistics	Statistics	Statistics	Statistics	Std. Error	Statistics	Statistics
Security	200	26	19	45	6640	38.86	.127	1.797	3.230
Valid N (listwise)	200								

The safety score is 6640, with the highest score of 45 and the lowest score of 19. Furthermore, the mean score is 38.86, the variance is 3.230, and the standard deviation is 1.797.

Table 3 Descriptive Statistics of Bank Reputation

	Tuble 5 Descriptive Statistics of Dank Reputation								
	Descriptive Statistics								
	Ν	Range	Minimum	Maximum	Sum	mea	ın	Std. Deviation	Variance
	Statistics	Statistics	Statistics	Statistics	Statistics	Statistics	Std. Error	Statistics	Statistics
Bank Reputatio n	200	26	66	92	11752	73.48	.198	2.794	7.809
Valid N (listwise)	200								

The bank's reputation score is 11752, with the highest score of 92 and the lowest score of 66. Furthermore, the average score is 73.48, the variance is 7.809, and the standard deviation is 2.794.

Regression Equation Analysis

Multiple regression tests perform after normally distributing the data. The test aims to predict the value of the dependent variable if there is an increase or decrease in the independent variable. The following are the results of multiple linear regression in this study:

Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients				
Model	В	Std. Error	Beta	t	Sig.		
1(Constant)	15.203	3.342		4.549	.000		
Security	.271	.080	.213	3.385	.001		
Bank Reputation	.437	.051	.533	8.490	.000		
Dependent Variabl	e. Decision to	Ise Mohile Banki	no				

Table 4 Multiple Linear Regression Test	

Dependent Variable: Decision to Use *Mobile Banking*

Based on the data in table 4 above, the following multiple linear regression equation is obtained:

Y' = 15.203 + 0.271 XI + 0.437 X2

So if the security and reputation of the bank are zero (0) or do not increase or decrease, then the decision to use *mobile banking* is worth 15.203. The security value on the decision to use mobile banking is 0.271, and the bank's reputation on the decision to use mobile banking is 0.437. It means that if the security and reputation of the bank have increased by one point, then the security and reputation of the bank have increased by one, meaning that each variable positively influences the decision to use *mobile banking*.

Simultaneous Regression Coefficient Test (T-Test)

To determine the effect of each independent variable on the dependent variable, namely the security and reputation of the bank, on the decision to use *mobile banking*, the regression coefficient test by using the t-test. This hypothesis testing is carried out with the criteria if $t_{hitung} > t_{tabel}$ and the significance value of the t-test <0.05. It can say that the independent variable affects the dependent variable. Below is a table of the results of the t-test calculation using SPSSv.25 as follows:

	Coefficients ^a							
		Unstandardized		Standardized				
		Coeffi	cients	Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	15.203	3.342		4.549	.000		
	Security	.271	.080	.213	3.385	.001		
	Bank	.437	.051	.533	8.490	.000		
	Reputation							

b. Dependent Variable: Decision to Use Mobile Banking

1) Safety Coefficient Test

Based on the *output* above, t itung for the decision has a value of 3.342, while the t table can be found in the statistical table with a significance of I 0.05/2 = 0.25 (two-tailed test) with df = (nk-1) or df = 200-2-1 = 197 obtained t table of 1,972. Then the value of t count (3.385) > (1.972) and a significance of 0.001 < 0.05. So it can conclude that partial security positively and significantly affects decisions.

2) Bank Reputation Coefficient Test

Based on the output above, *t* itung for bank reputation has a value of 3.385, while the t table can be found in the statistical table with a significance of 0.05/2 = 0.25 (two-tailed test) with df = (nk-1) or df = 200-2-1 = 197 obtained t table is 8,490. Then the value of t count (8.490) > (1.972) and a significance of 0.000 < 0.05. So it can conclude that the bank's reputation affects the decision.

The table above shows a t-count value for each variable, namely security (3.385) and bank reputation (8.490). The t-table value of this study is 1.972. The t count and t table value are used to see whether the hypothesis can be accepted or rejected. If t count < t table means Ho is accepted and Ha is rejected, whereas if t count > t table means Ho is rejected and Ha is accepted. The sig value in the table above, namely security (0.001) and bank reputation (0.000), is a sig value for each variable to determine whether the independent variable is significant or not on the dependent variable. It can see whether the sig value <0.05 means significant, whereas if the sig > 0.05 means not significant.

Simultaneous Regression Coefficient Test (F Test)

The F test is used to determine whether there is a combined effect of the independent variables on the dependent variable, namely bank security and reputation, on decisions. With the criteria, if the *probability value* (*p*-value) is smaller than 0.05 (significance level) and F_{hitung} greater than F_{tabel} , then the independent variable has a jointly significant influence on the dependent variable. The following are the results of the F test through SPSS version 25:

	ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	472.154	2	236.077	81.591	.000 ^b		
	Residual	570.001	197	2.893				
	Total	1042.155	199					

a. Dependent Variable: Decision

c. Predictors: (Constant), Bank Reputation, Security

Based on the calculations in the table above, it can be seen that F_{itung} of 81.591 while F_{tabel} can be seen in the statistical table with a significance of 0.05 and to find out F_{tabel} can use the formula df 1 (number of variables-1) or 2-1=1, then F (nk-1) or 200-2-1= 197. Obtained F_{tabel} of 3.89. In other words, it shows that there is a significant simultaneous effect between the security and bank reputation variables on the decision to use *mobile banking* because $F_{of the count}$ (81.591) > F_{table} (3.89) and significance (0.000 < 0.05).

Coefficient of Determination Test

The magnitude of bank security and reputation influence on decisions can be seen from the value of the coefficient of determination or R^2 obtained through calculations in SPSS 25 as follows.

Model Summary							
Model	R	R Square	Adjusted R Square	Std. The error in the Estimate			
1	.673 ^a	.453	.448	1.701			

a. Predictors: (Constant), Bank Reputation, Security

Based on the R square based on the analysis of the data obtained by 0.453. Thus, it is known that the decision to use *mobile banking is* influenced by the security and reputation of the bank by 45.3%, while it is influenced by other factors not examined in this study.

DISCUSSION

1. The Effect of Security on Decisions to Use Mobile Banking

Based on the results of the research described above, the results obtained are that there is a positive influence between security and the decision to use *mobile banking*. It is evidenced by the value of the coefficient X₁ in the regression test of 0.271, which means that if security increases by one point, the decision to use *mobile banking* will increase by 0.271 at a constant 15.203. In addition, based on the results of the partial significance test or t-test, it is obtained t_{itung} of 3.385, it can be seen that t_{itung} bigger than t_{tabel} 1.972 1.972 with a significance level of 0.001 < 0.05 which states that security partially has a positive and significant effect on the decision to use *mobile banking*.

It is in line with research conducted by (Maria and Rilo 2017). This study shows that security has a positive and significant effect on the use of *mobile banking* among students in DKI Jakarta. Based on a t-test of _{3.867} significant level of 0.000, a hypothesis was accepted with samples of 200 respondents in this study.

Then, in line with other research (Agustiningrum & Andjarwati, 2021), this study shows that security has a positive and significant effect on decisions. Based on the results of the t-test of 4.626 with a significant level of 0.000, the hypothesis is acceptable. The sample used is as many as 200 respondents.

Furthermore, research conducted by(Lisdiana, 2021), this study shows that there is a significant positive effect of security on decisions. It is evidenced by the t-count value of 5.175, a significance value of 0.000 < 0.05, and a regression coefficient of 0.623. The sample used in this study was 100 respondents.

Then, research conducted by(HR, G.I.S., Fermayani, R. & Harahap, 2020), this study shows that security has a positive and significant influence on decisions because the significance value obtained is 0.001 < 0.05, which is supported by the t arithmetic value of 3.292 > t table of 1.983. The sample used in this study was 100 respondents.

2. The Effect of Bank's Reputation on Decisions to Use Mobile Banking

Based on the results of the research described above, the results obtained are that there is an influence between bank reputation on decisions to use *mobile banking*. The evidenced by the value of the X2 _{coefficient} in the regression test of 0.437, which means that if the bank's reputation increases by one point, the decision to use *mobile banking* will increase by 0.437 at a constant 15.203. In addition, based on the results of the partial significance test or t-test, the t count is 8.490, it can be seen that *itung* bigger than *ttabel* 1,972 with a significance level of 0.000 < 0.05 which states that the bank's reputation influences the decision to use *mobile banking*.

And also, in line with research conducted by(Riza & Hakim, 2021), this study shows a positive influence between reputation and decisions. Based on the results of the t-test for the reputation variable of $_{3.367}$ while the t- $_{table}$ of 1.984, it can conclude that reputation significantly influences customer decisions to choose Islamic banks because t- $_{count}$ is greater than ttable and the significance level is (0.000) below 5%. This study used 100 people as respondents.

Then, research conducted by(Widowati & Mustikawati, 2018) Shows a positive and significant influence between reputation and decisions. The evidenced by the results of the t-test obtained at 4.384, which is greater than the t- table, which is 1.665. The results of the statistical t-test for the Bank's Reputation variable gave a significant value of less than 0.05 (0.000 < 0.05). The sample used in this study was 80 respondents.

Next is the research conducted by(Syaima, 2018); this study shows a positive influence between reputation and decisions. The evidenced by the results of the t-test of 5.578, which is greater than the t- table of 1.96. The results of the statistical t-test for the Bank's Reputation variable gave a significant value of less than 0.05 (0.000 < 0.05). The sample used in this study was 60 respondents.

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CONCLUSION

This study examines the influence of bank security and reputation on the decision to use *mobile banking*. Based on the results of the tests and discussions described previously, it can conclude that security has a positive and significant effect on decisions. Furthermore, the bank's reputation positively and significantly affects the decision to use *mobile banking*.

Based on the explanation above, there are several recommendations for further researchers as follows:

- 1. It is hoped that further research can be better and perfect with a discussion that complements the decision to use *mobile banking* on independent variables such as convenience, service quality, facilities, and public perception.
- 2. The sample selection is still in a small scope from students of the Faculty of Economics, State University of Jakarta. The sample used can expand and become more varied in terms of the population and demographics of a respondent.

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