

Customer's Perception and Service Quality on Mobile Banking Usage

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Abstract

The evolution of technology necessitates that banking creates an innovative and useful product for customers, such as mobile banking. This study examines the impact of perception and service quality on mobile banking usage through a quantitative methodology with a sample size of 100 respondents and the method of multiple regression analysis. Partial test results indicate that perceived benefits, perceived convenience, and service quality influence customer interest in mobile banking, however, perceived risk has no significant effect. The simultaneous test indicates that all variables have a favorable effect on client interest in mobile banking.

Keywords; Perception, Benefit, Convenience, Risk, Service Quality, Mobile banking.

Introduction

Advances in information and technology can support economic and business development. This encourages the financial industry to increase the E-service products such as mobile banking. Bank Syariah Indonesia (BSI) also takes advantage of this technological advancement by issuing a mobile banking service called BSI mobile, which is a digital banking service to make it easier for customers to take advantage of BSI banking services anywhere, anytime, through the BSI mobile application.

The development of BSI Mobile users shows an increasing trend from year to year. In 2016 only 30% of users accounted for it and this continued to increase until 2018 it reached 73%, then in 2019, it was counted as having reached 400,000 users (BSI, 2020).

The presence of mobile banking greatly facilitates customers in conducting transactions using smartphone facilities and internet networks. Currently, there are still many customers who have not used mobile banking, even though it provides convenience and is more practical. Several factors can influence customers' interest in using mobile banking, namely perceived benefits, perceived convenience, perceived risks, and service quality as well as other factors.

According to Jogiyanto (2008), the Perceived benefit is the extent to which a person believes that using technology will improve the performance of his work. Perception of benefits is an important thing that is always considered by users because the benefits of technology will attract someone to use it. In addition to the benefits, ease of use also supports the use of mobile banking.

According to Widjana (Ahmad and Pambudi, 2014) perceived ease of use is an individual's belief that using information technology systems will not be a hassle or require great effort

when used. The ease of using mobile banking is very important for customers so that it is easy to understand and practical to use. Apart from convenience, risk factors in the use of technology are also an important consideration for customers.

Based on previous studies on mobile banking, such as research conducted by Purwati (2018), it was found that the perceived benefits variable did not affect customers' interest in using mobile banking services, while the variables perceived convenience, perceived security, perceived risks and costs affected intentions to use mobile banking.

In research conducted by Pranoto and Setianegara (2020) regarding mobile banking, it is known that perceived benefits have a positive effect on interest in using mobile banking, while the variable perceived ease of use does not affect interest in using mobile banking. In Fakhrurozi's research (2020) regarding mobile banking, it is known that perceived convenience influences interest in using mobile banking, while the usability and risk variables do not affect interest in using mobile banking.

From the description above, it can be seen that there are several studies that state that the variables perceived benefits, perceived convenience, perceived risk, and service quality affect customers' interest in using mobile banking, but there are also several studies that state that the variables perceived benefits, perceived convenience, perceived risk, and service quality does not affect customer interest in using mobile banking. Therefore, researchers are interested in studying more about the variables that influence interest in using mobile banking with the title: "The Influence of Perceived Benefit, Perceived Convenience, Perceived Risk, and Quality of Service on Interest in Using Mobile Banking at BSI KC Banda Aceh".

Material and Methods

Customer Interest

According to Harlan (Ledesman, 2018), Interest is the tendency to want something and choose to pay more attention and remember for a long time and be followed by a sense of pleasure to achieve satisfaction using technology. Meanwhile, according to Jogiyanto (Juanda, 2020) behavioral interest is a person's desire to do a certain action. According to Rafika (2015) knowing someone is still using the technology can be seen through their attitude and attention to technology.

Perception

According to Yuniarti (Juanda, 2020), perception is a process of organizing or giving meaning to impressions obtained through the five senses to give meaning to a stimulus in the surrounding environment. Perceptions obtained by individuals can influence individual actions, both negative and positive perceptions, following individual knowledge of the object being perceived (Juanda, 2020). According to Purwati (2018), perception is an impression that is felt, received, and can influence a person's actions.

Perceived Benefit

Davis (1989) defines perceived usefulness as the level of individual confidence in a technology that can improve individual work performance. Venkatesh and Davis (2000) also concluded that the TAM (Technology Acceptance Model), perceived usefulness is a strong factor in the acceptance of use and usage habits. This concept describes the benefits of the system for users related to productivity and effectiveness.

Perception of Convenience

According to Widjana in Pambudi (2014), perceived ease of use means an individual's belief that using information technology systems will not be a hassle or require great effort when used. Davis (1989) states that perceived convenience is the extent to which individuals believe that using a system will reduce effort and make their affairs easier. Perceived ease of use is proven to have an influence on a person's interest/behavior indicating that perceived ease of use can lead to increased user interest.

The concept of convenience is to see how far the user believes that the information system used is easy and does not require strong effort to use it. This is the same as the purpose of using a system, namely if someone feels an application is easy to use then they tend to use the application. Rizkiyanto (2010), concluded that ease of use is an approach to technology acceptance which is termed the TAM (Technology Acceptance Model) model. This model illustrates that user acceptance of technology is influenced by the ease of use variables.

Perception of Risk

Perceived risk is a person's perception of uncertainty and consequences in carrying out an activity (Jogiyanto, 2007). According to Smadi in Hapsara (2015), perceived risk is a customer's perception of the negative consequences that a person wants to avoid when using technology.

Service Quality

According to Tjiptono (2006), service quality is an effort to meet customer needs and desires to balance customer expectations. According to Ridwan & Darmawan (2018), Service quality is all activities carried out by banks to meet customer expectations. To create ideal service quality, it must be balanced with commitment, meaning that the services provided are in the form of the ability to provide convenience, speed, and being friendly in providing services to customers.

Mobile Banking

Mobile banking is a service facility that provides features or services designed in such a way by banks to make it easier for customers to make transactions via smartphones.

According to Rahardjo (2002), there are several advantages of mobile banking, namely applications that are easy to understand, services that are easy to reach, and safe. The rapid development of technology has encouraged the banking industry to issue mobile banking services, which can be accessed anytime and anywhere, as long as they are

connected to the internet. Customers will easily get information on transactions that have been made, and can also use the features that have been provided, such as payments (PLN, electricity, insurance), fund transfers, balance info, account mutations, currency exchange rates, credit purchases, etc. These features provide convenience for customers and attract customers.

Related research

Several studies have been done before which can be used as reference material or references in research related to mobile banking. First, research was conducted by Maharani entitled "The Influence of Perceived Convenience, Perceived Usefulness and Trust in Interest in Using BNI Mobile Banking (Case Study of BNI KCU Central Jakarta)" in 2020. This research uses a quantitative approach. The population in this study were all customers who use mobile banking at Bank BNI KCU Central Jakarta, this study used the Non-Probability Sampling Method, with a total sample of 97 respondents. The results of this study indicate that the variables perceived convenience, perceived usefulness and perceived trust have a positive effect on the intention to use mobile banking. What distinguishes this research is several research variables. The similarities and differences between the researcher's thesis and the thesis conducted by Maharani are both researching perceived convenience, and perceived usefulness, while Maharani's research data processing method uses the SEM-PLS (Structural Equation Modeling-partial Least Square) method.

Second, research was conducted by Fahmi entitled "The Influence of Service Quality and Product Quality on Customer Satisfaction in Using BRIS Online at BRI Syariah KC Banda Aceh" in 2020. Using a quantitative approach. Has a sample of 92 respondents. The results of the research partially the service quality variable has a positive effect while product quality does not affect customer satisfaction. The similarities and differences between this study and the research conducted by Fahmi, this research variable only used service quality and product quality variables, while further research used the variables perceived benefits, perceived convenience, perceived risk, and service quality.

Third, research conducted by Pranoto and Setianegara (2020) "The Influence of Perceived Benefits, Perceived Convenience and Security on Customer Interests Using Mobile Banking (Case Study at PT. Bank BRI KC Semarang Pedanaran)"

The four studies conducted by Fandi (2019) "The Influence of Service Quality on Customer Interests Using Mobile Banking at PT Bank Syariah Mandiri Surabaya" 2019. This study used a quantitative method with data analysis using SPSS using the Non-Probability Sampling method with a sample size of 120 respondents. The results of this study conclude that there is an influence between service quality and customer interest in using mobile banking. The difference between previous research and research by researchers is that in previous studies using service quality variables as X1 variables and interest variables as Y variables, the object of this research was at PT Bank Syariah Mandiri Surabaya. While researchers used independent variables perceived benefits, perceived convenience, risk, and quality of service. The equation is using the service quality variable on the interest in using mobile banking.

Fifth, research was conducted by Purwati entitled "Factors Influencing Customer Perceptions of Interest in the Use of Islamic Bank Mobile Banking (Study on Bank Syariah Mandiri KCP Darussalam Banda Aceh)" in 2018. This research uses a quantitative approach, using a sampling technique of purposive sampling with a sample of 40 respondents. The method used is multiple linear regression analysis. The results of research conducted by Purwati concluded that the variables perceived convenience, perceived risk, perceived costs, and compliance had an effect on customer interest in using mobile banking, while the perceived benefit variable harmed customer interest. The similarities and differences in the research conducted by Purwati and the researchers are the variables and the objects.

Effect of perceived benefits on interest in using mobile banking

Davis (1989) defines convenience as a belief in usefulness, where a person believes that using the system can provide benefits for those who use it. From this definition, it can be seen that perceived usefulness is a belief about the decision-making process. If someone believes in a system then he will continue to use it. Conversely, if someone feels the system is less useful then he will not use it.

Effect of perceived convenience on interest in using mobile banking

Perceived ease of use, according to Widjana (2010: 33) means an individual believes that using information technology systems will not be a hassle or require great effort when used (free of effort). The intensity of use and interaction between the user and the system can also show the ease of use.

Effect of risk perception on interest in using mobile banking

According to Featherman and Pavlou (2002: 1035), perceived risk is a perception of uncertainty and unwanted consequences of using a product or service. Perception of risk is a form of assessment or a way of thinking that arises from risk situations based on the beliefs/experiences of customers who use mobile banking services themselves.

Effect of service quality on interest in using mobile banking

According to Tjiptono (2007) that the quality of services at a bank must have a level of excellence that is expected to meet the level of customer desires, namely expectations and performance. If the perceived service quality equals or exceeds the expected service quality, then the service is said to be of high quality and satisfactory. According to Olsen and Wyckoff in Yamit (2020: 22) defining service quality is the level of quality that can be seen from a comparison between consumer expectations and service quality performance.

Methods

This study uses a quantitative approach. This study examines the perceived benefits, perceived convenience, perceived risk, and quality of service on the interest in using mobile banking.

In obtaining data for this study, primary data was used, namely, data collected directly by researchers from respondents through questionnaires according to the needs of researchers. In this case, the quantitative data needed is the number of BRIS Online application users, reviews available on the Play store, and the results of the questionnaire.

Researchers decided to choose the location of PT. BSI KC Banda Aceh, because it has a strategic location. Researchers have also conducted field surveys and found complaints from customers regarding mobile banking and services, so the researchers decided that PT. Bank Syariah Indonesia (BSI) Banda Aceh Daud Beureueh 2 was the object of this study.

The population that will be the object of this study are customers of Bank BSI Syariah KC Banda Aceh Daud Beureueh 2. The growth in the number of customers installing the BSI Mobile application on the Play Store (2020) has reached more than five hundred thousand people (500,000+). It is not easy to know for sure the number of BSI KC Banda Aceh 2 customers who use the BSI Mobile application, so the population in this study is considered unknown and the sample size is 100 customers.

The sampling technique in this study used Nonprobability Sampling. This is because sampling does not provide an equal opportunity/opportunity for each member of the population to be selected as a sample (Sugiyono in Fahmi, 2020). This study used purposive sampling. According to Sugiyono (2018), purposive sampling is a sampling technique with certain considerations.

The reason for using purposive sampling is that researchers use criteria that have been determined by researchers to select samples. The characteristics of the respondents in this study are as follows:

1. Respondents who are or have used BSI Mobile
2. Respondents are customers of BSI KC Banda Aceh
3. Customers who understand how to operate the BSI Mobile application

The data collection technique used in this study was a questionnaire (questionnaire, which is a data collection technique that gives a set of questions or written statements to respondents to answer (Sugiyono, 2009). The type of questionnaire or questionnaire used is a closed questionnaire where the questions or statements have been provided and the respondent chooses the answer that is already listed. The reason the researcher uses a closed questionnaire is that the data can be processed and easily scored and does not take too much of the customer's time to answer a statement.

This study used a scoring technique for a questionnaire distributed to respondents, namely by using an ordinal scale. According to Sugiyono (2017), an ordinal scale is a scale that distinguishes categories based on level or sequence. The ordinal scale used in this study was shown to measure the subject's response to five categories of attitudes, namely Strongly Agree (SS), Agree (S), Undecided (R), Disagree (TS), and Strongly Disagree (STS). This study uses four independent variables, namely perceived benefits, perceived later, risks, and service quality with one independent variable namely customer interest.

Result and Discussion

The Effect of Perceived Benefits on Interest in Using Mobile Banking

The results of the study show that the perceived benefits variable influences the customer's interest in using mobile banking, which means that it supports/is in line with the hypothesis (H1). This is evidenced by the results of statistical analysis which shows the t-count value of $1.817 > t\text{-table } 1.66105$ so that it can be stated that the perceived benefit variable affects customer interest.

The results of this study are also in line with the TAM (Technology Acceptance Model) theory introduced by Davis (1989), which assumes that a person's acceptance of information technology is influenced by perceived benefits, which are related to the use of technology to increase the productivity and performance effectiveness of the technology used. This is seen from a person's ability to operate and utilize technology, the better a person uses technology, the more benefits one can feel, and this is what makes users feel different benefits.

The results of this study are in line with the research of Ahmad and Pambudi (2014) and Oktabriantono et al (2017), who found that perceived benefits affect customers' interest in using mobile banking. However, the results of this study contradict the research of Anendro (2016) and Rahayu (2015) which state that perceived benefits partially have no effect and are not significant on the interest in using mobile banking.

The results of this study also indicate that perceived benefits influence the intention to use mobile banking. The more customers feel the benefits of mobile banking in improving their performance, the more often they will use it. Perceived benefits related to effectiveness and productivity to improve performance. So that if customers feel that mobile banking services provide benefits, then there will be an urge to use mobile banking services.

The Effect of Perceived Convenience on Interest in Using Mobile Banking

Based on the research results, it is known that the perceived ease of use variable influences the customer's interest in using mobile banking, which means that it supports the second hypothesis (H2). This is shown through the results of statistical tests that the perceived ease of use has a t-count of $3.098 > t\text{-table of } 1.66105$. It can be concluded that the second hypothesis which states that perceived convenience influences the interest in using mobile banking is acceptable.

The results of this study are in line with previous research, namely research by Purwati (2018) and research by Oktabriantono et al (2017), which found that perceived convenience has a significant influence on customers' interest in using mobile banking. The results of this study are consistent with the theory of the Technology Acceptance Model (TAM) introduced by Davis (1989), which assumes that a person's acceptance of information technology is influenced by the variable perceived ease of use.

Based on this analysis, it indicates that perceived ease of use influences the intention to use mobile banking, where the easier mobile banking is to operate, the more often mobile banking is used by customers. The public as customers will feel comfortable if mobile banking services are easy to use, have understandable operations, do not require much effort, and meet customer needs.

Effect of Risk on Interest in Using Mobile Banking

The results of this study reject the third hypothesis (H3), that the risk variable does not affect customers' interest in using mobile banking. This is shown through the results of statistical tests that the risk variable has a t-count of 0.143 < t-table of 1.66105 and the significant level between these variables is 0.886, so it can be seen that the significance value is $0.886 < 0.05$, which means that risk does not affect customer interest in using mobile banking. Thus it can be concluded that the hypothesis "risk affects customer interest in using mobile banking" is rejected.

The results of this study are in line with Pangesti's research (2018) which found that perceived risk had no significant effect on customers' interest in using mobile banking. This is also similar to the research of Kalairasi and Srividya (2012), which states that perceived risk, especially privacy and security risks, has a negative and significant effect on consumers' desire to use mobile banking. It can be concluded that the perception of risk when using the mobile banking services offered by BSI does not affect customers' interest in using mobile banking services.

The results of this study indicate that the perception of risk does not affect the use of mobile banking. High-risk perceptions motivate people as customers to avoid using mobile banking and consider other alternatives. Perception of risk will make customers feel afraid, then rethink when they are going to use mobile banking. This is because there are cases of fraud and hypnosis that occur. Therefore, the higher the risk perception that is thought by the customer, the lower the interest in using mobile banking.

The Influence of Service Quality on Interest in Using Mobile Banking

The results of this study support the fourth hypothesis (H4), that service quality variables affect customer interest in using mobile banking. This is shown through the results of statistical tests that the service quality variable has a t-count of 5.759 > t-table of 1.66105 with a significance level of $0.00 < 0.05$, which means that service quality influences interest in using mobile banking. It can be concluded that the second hypothesis which states "service quality influences interest in using mobile banking" is accepted.

The results of this study are in line with research by Setyaningsih (2017) which states that service quality has a positive effect on customer interest. Research conducted by Fandi (2019) states that service quality has a significant effect on interest in using mobile banking.

The results of this study are also under the theory of Tjiptono (2007) that service quality at banks must have a level of excellence that is expected to meet the level of customer desires, namely expectations and performance. Same thing with PT. BSI KC Banda Aceh in providing superior service quality (electronic) services to customers using mobile banking. It can be concluded that with the high quality of the mobile banking services provided, it is certain that there will also be high encouragement/interest of customers to use mobile banking services.

The Influence of Perceived Benefit, Perceived Convenience, Risk, and Quality of Service on Interest in Using Mobile Banking Services

Based on the results of the hypothesis testing that has been done, there is a simultaneous and significant influence between the independent variable and the dependent variable, as evidenced by the test results (F), namely the F-table value is 2.47 and the F-count is 84.616. This shows that the value of $F\text{-count} > F\text{-table}$ and $\text{sig. } 0.000 < 0.05$. This proves that the variables perceived benefits, perceived convenience, risks, and quality of service together have an influence. If seen based on the value of R Square (R^2) in this study, the results show 84.616. This means that perceived benefits, perceived convenience, risks, and service quality influence interest by 84.6%.

From the results of field studies that have been conducted at Bank BSI KC Banda Aceh, this study found that when a technology is easy to understand and use, this can affect customer interest in using mobile banking services, the convenience felt by customers, namely the use of practical mobile banking and can save time. The findings of this study are in line with those put forward by Davis (1989) who stated that perceived benefits and convenience are the main determinants of customer attitudes and behavior in using technology. The results of this study are supported by Indriyani (2018) where perceived usefulness, perceived ease of use, risk, and service quality together influence customers' interest in using mobile banking. This is also in line with Rithmaya's research (2016) where ease of use, benefits, attitudes, risks, and service features all have a positive influence on customers' bone mass in using internet banking.

Conclusion

Based on research that has been done regarding the Effect of Perceived Benefit, Perceived Convenience, Perceived Risk, and Service Quality on Interest in Using Mobile Banking BSI KC Banda Aceh with a sample size of 100 people, after meeting in person and responding to the questionnaire given, the researcher draws the following conclusions:

1. For the variable perceived benefits (X1), based on the results of the t-test it shows that partially perceived benefits have a significant effect on customers' interest in using mobile banking. This happens because the results of the $t\text{ count} > t\text{ table}$.
2. For the perceived convenience variable (X2), based on the research conducted, it is stated that this variable partially has a significant influence on the interest in using mobile banking.
3. For the risk variable (X3), the t-test shows that the perception of risk does not affect customer interest. This means that other factors are more influential than perceived risk. This shows that customers are concerned about the risks of using mobile banking.
4. For the service quality variable (X4), the t-test shows partially that service quality has a positive and significant effect on customer interest in using mobile banking.
5. Based on the results of the F test that has been carried out for the variables perceived benefits, perceived convenience, risk, and service quality simultaneously it is stated that they have a significant effect on customer interest simultaneously.

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