THE INFLUENCE OF MOBILE BANKING SERVICE QUALITY ON CUSTOMER SATISFACTION
(Survey at Customer of PT. Bank Rakyat Indonesia Tbk. Jombang Branch)

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ABSTRAK

Penelitian ini bertujuan untuk menjelaskan pengaruh secara parsial dan simultan antara kualitas layanan mobile banking (reliability and responsiveness, assurance and security, convenience, efficiency, easiness to operate) terhadap customer satisfaction. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian penjelasan. Analisa data dalam penelitian ini menggunakan tahapan analisis deskriptif, uji asumsi klasik, analisis regresi linier berganda dan uji hipotesis. Hasil penelitian menunjukkan bahwa terdapat pengaruh positif dan signifikan secara parsial variabel reliability and responsiveness, assurance and security, convenience), efficiency terhadap customer satisfaction. Selanjutnya terdapat pengaruh positif namun tidak signifikan antara variabel easiness to operate terhadap customer satisfaction. Kemudian terdapat pengaruh positif dan signifikan secara simultan variabel reliability and responsiveness, assurance and security, convenience, efficiency, easiness to operate terhadap customer satisfaction sebesar 83%.

Kata Kunci: Reliability and Responsiveness, Assurance and Security, Convenience, Efficiency, Easiness to Operate.

ABSTRACT

This research objectives are to explain the partial and simultaneous influence between mobile banking service quality (reliability and responsiveness, assurance and security, convenience, efficiency, easiness to operate) on customer satisfaction. This research uses a quantitative approach with the descriptive reseach type. Analysis of the data in this research using the stages of descriptive analysis, classical assumption test, multiple linear regression analysis and hypothesis testing. The research result show if there is partially positive and significant influence reliability and responsiveness, assurance and security, convenience, efficiency on customer satisfaction. Furthermore, there is positive but not significant influence between easiness to operate variable on customer satisfaction. Then there is simultaneously positive and significant influence reliability and responsiveness, assurance and security, convenience, efficiency, easiness to operate variables on customer satisfaction amounted to 83%.

Keywords: Reliability and Responsiveness, Assurance and Security, Convenience, Efficiency, Easiness to Operate.

INTRODUCTION

The rapid development of information technology today has been very beneficial to most people in various fields. No exception in banking industry, information technology become an important component in the success of their organizations. The economic development based on the information technology has become a global paradigm, every economic parties have been using modern banking services. Currently, an important issue among the national banking industry is the ability to be able to keep existing customers amid an increasingly diverse needs, be it in the context of a product or service. In this case, the banking company which wasn't able to follow developments and advances of technology will be shifted backward by the existing competition.

Bank is one of the companies engaged in the service field. People already know how the bank services system in general. The pattern of transactions would require substantial time. Most of the customers, wanted a service that is both simple and practical. Manual service is less efficient because of today people activity are increasing and require greater mobility, so it needed a reliable information technology-based service that can meet all the needs with efficient and practical. Therefore, today many banking companies that offer electronic services to improve its service.

Globally, electronic services that are used by banking companies developed in recent years. The number of banks in the world which offer electronic banking services in 1998 only 1.200 banks and increase to 15.485 in 2004. The increase in electronic services include Automatic Teller Machine (ATM), mobile banking, and internet banking. The electronic service is able to cover as much as 18% of employees work in 1999 and increase to 51.3% in 2004, which means that almost half of bank service activities dealt by an electronic service that is independent (Kaddoumi, 2008).

In connection with the rapid development of information technology in Indonesia that facilitate banking companies in improving its service to customers, then banks in Indonesia are competing to launch the various electronic banking facility. One of them is banking services which using a mobile phone that used by the customer through the application called mobile banking. Mobile banking is currently growing with increasing number of mobile phone users. According to data taken from id.techinasia.com, the number of mobile phone users in Indonesia currently reaches 308,2 million people. Meanwhile, according to a survey conducted by Sharing Vision on four major banks in Indonesia, the number of mobile banking users had reached 23,65 million people.

Bank Rakyat Indonesia (BRI) which is the bank with the largest number of customer in Indonesia itself has launched one of the electronic banking service namely mobile banking. This BRI mobile banking facility is called BRI mobile. BRI mobile is electronic banking products that create to provide easiness to its customers in conducting banking transactions through mobile phones both for financial (non-cash) or non-financial transactions anywhere and anytime. According to Sharing Vision, the user number of BRI mobile currently reaches 8,8 million users and become the bank with the largest mobile banking users in Indonesia.

All banks in Indonesia, including BRI necessarily want to achieve a competitive position in the domestic and global markets so can maintain its existence in various service aspect. One effort that can be done is to ensure the customer satisfaction by evaluating and improving the existing service quality, because the service quality in a bank is main key to win the competition with other banks. This research used five dimensions namely reliability and responsiveness, assurance and security, convenience, efficiency, easiness to operate (Sagib and Zapan, 2014) as benchmark and evaluator of mobile banking service quality. With the good mobile banking service quality, it will create customer satisfaction.

REVIEW OF LITERATURE

E-Service Quality

Parasuraman et al. (2005) defines e-Servqual as a degree of how an application or website effectively and efficiently facilitate the customers in terms of shopping, make a purchase and the delivery of products and services.

Model of e-Servqual proposed by Zeithmal, et al. (Tjiptono and Chandra, 2011: 251) is the most comprehensive and integrative online services quality model, comprehensive and integrative because the dimension are relevant and thoroughly fulfill a need for evaluate the electronic services quality. At their research also can be identified 11 dimensions of e-Servqual namely:

1) Reliability

Reliability, is correcting the technical function of the site and the accuracy of the promised service (have stock items, submit to what is ordered, submit as promised), the bill, as well as product information.

2) Responsiveness

Responsiveness, is the quick response and the ability to help if there are any problems or questions from customers.

3) Access

Access, is the ability to find sites quickly and to reach the company when needed.

4) Flexibility

Flexibility, is a choice in the way of payment, shipping orders, purchase, search, and item development.

5) Ease of Navigation

Ease of navigation, which meant that the site contains a function that can assist customers in finding what is needed without difficulty, including a good search function and allows customers to maneuver easily and quickly stepped back or forward in the pages of the site.

6) Efficiency

Efficiency, is the site which is easy to use, well structured, and contains the minimum information needed by the customer as input.

7) Assurance or Trust

Assurance or trust, is confidence of customers to make an agreement with the site and based on the reputation of the site on products or services that are sold must be clear and the information presented is correct.

8) Security or Privacy

Security or privacy, namely the degree where the customer believes that the company's website safe from disturb and there is protection of personal information.

9) Price Knowledge

Price knowledge, is the level where customers can determine shipping price, total price, and price comparisons during the shopping process.

10) Site Aesthetics

Site aesthetics, is the appearance of the websites.

11) Customization or Personalization

Customization or personalization, is how easily sites can be specified individually according to the customers priorities, history, and way of shopping.

Bank

According to Kasmir (2002: 11), bank can simply be defined as a financial institution whose main activity is to collect funds from the public and distribute the funds back to the society as well as provide other banking services.

Information Technology

Wawan Wardiana (2002) in the information technology journal states that information technology is a technology which used for data processing, including processing, obtain, compile, store, manipulate data in various ways to produce information that is relevant, accurate and on time, which is used to personal, business, and government and it is a strategic information for decision making.

Abdul Kadir in Endraria (2015: 23) states that information technology is not just limited to computer technology (hardware and software) that is used to process and store information, but also includes communications technology to transmit information.

Mobile Banking

Mobile banking (also known as m-banking) is the term used to check balances, account transactions, payments, credit applications and other banking transactions through mobile devices such as mobile phones or Personal Digital Assistant (PDA). Mobile banking services previously offered through SMS, the service is also known as SMS banking (Assefa, 2013: 29).

Mobile Banking Service Quality

In some previous research there are variables that adopted by researchers to be taken as a variable in this research. The mobile banking service quality based on a review of previous research consisted of five variables, namely: reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5).

Customer Satisfaction

According to Wilkie quoted by Tjiptono (2008: 24) states that: "Satisfaction is as an emotional response to an evaluation through the product or service consumption experience". While according to Engel, et al (1990), cited by Tjiptono (2008: 24) states that customer satisfaction is an after-purchase evaluation where the chosen alternative is at least equal or exceed customer expectations, while dissatisfaction arises when the result (outcome) did not fulfill expectations".

Hypothesis Model

Hypothesis is a temporary answer or conclusion about the relationship of two or more variables over research issues that must be tested empirically, as presented in Figure 1 below:

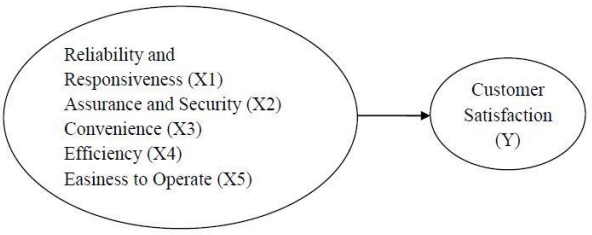

Figure 1: Hypothesis Model

Hypothesis

Based on the hypothesis model, thus the hypothesis formulation in this research could be explained below :

H1: Reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5) partially influence on customer satisfaction (Y).

H2: Reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5) simultaneously influence on customer satisfaction (Y).

RESEARCH METHOD

Research Type

This research is descriptive research, meaning this research describes relationship between variables, there are independent and dependent variable, next look for how much influence of independent variable to dependent variable.

Population

Population is the whole of elements set that have a general characteristics number where the research conducted (Widayat, 2004). The population in this research are all BRI mobile user customer of Bank Rakyat Indonesia Jombang branch.

Sample

Sample in this research is a part of population. The use of a large sample in quantitative research is considered to produce more accurate statistical calculations than the sample in small quantities (Kumar, 1999).

Samples number determination if the population is large and the number is unknown, so it can use the Rao Purba formula as follows:

$$n = \frac{Z^2}{4\,(moe)^2}$$

$$n = \frac{1{,}96^2}{4\,(0{,}1)^2}$$

$$n = 96{,}04$$

Rounding = 97

Based on formula above then the minimum sample obtained can be used is 97 respondents. Basically there is no fixed rule about the number of samples to be taken in a population, but it can be adapted to the used analysis needs as well as considering the cost, time and effort in the research (Oesman, 2010). While according to Ghozali (2008: 44) sample size standart are 100-200. Based on that, so in this case the researchers took a sample of 100 respondents which sufficiently representative to be investigated.

Sampling which researchers use is non-probability model with accidental sampling method. Accidental sampling is a sampling technique based on chance, in which anyone who accidentally met with researcher on the research location are considered suitable and willing to become respondents.

Data Analysis Techniques

Analysis of data is a very important part in scientific research, because with the analysis, these data can be given meaning which useful in solving the research problem. In this research, data analysis was performed with the following stages descriptive analysis, classical assumption test, multiple linear regression analysis, and hypothesis testing.

RESULT AND DISCUSSION

This research show that from collected questionnaire with sample total in this research were 100 respondent, it can be seen that 55 respondents were man, while women were 45. Majority of respondents have between 21-30 years of age amounted 40 respondents and majority of respondents also had a Degree S1 lastest education level amounted 57 respondents. Then most of the respondents have entrepreneur occupation with 31 number of respondents. All of the statistical result in this research were processed by a computer program SPSS 16 for Windows.

Table 1: Multiple Linear Regression Result

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.934	.170		5.509	.000
X1	.228	.081	.242	2.823	.006
X2	.213	.084	.274	2.546	.013
X3	.134	.064	.167	2.079	.040
X4	.170	.067	.226	2.521	.013
X5	.056	.067	.077	.837	.405

Based on Table 1. The Multiple Linear Regression can be describe as follow:

Y_1=0,934+0,228X1+0,213X2+0,134X3+0,170X4 +0,056X5

The regression coefficient variable reliability and responsiveness (X1) 0,228 means reliability and responsiveness variable proven to show the positive relationship direction on customer satisfaction. This means if another independent variable value is constant then reliability and responsiveness increase amounting to one unit, so customer satisaction (Y) will increase by 0,228.

The regression coefficient variable assurance and security (X2) 0,213 means assurance and security variable proven to show the positive relationship direction on customer satisfaction. This means if another independent variable value is constant then assurance and security increase amounting to one unit, so customer satisaction (Y) will increase by 0,213.

The regression coefficient variable convenience (X3) 0,134 means convenience variable proven to show the positive relationship direction on customer satisfaction. This means if another independent variable value is constant then convenience increase amounting to one unit, so customer satisaction (Y) will increase by 0,134.

The regression coefficient variable efficiency (X4) 0,170 means efficiency variable proven to show the positive relationship direction on customer satisfaction. This means if another independent variable value is constant then efficiency increase amounting to one unit, so customer satisaction (Y) will increase by 0,170.

The regression coefficient variable easiness to operate (X5) 0,056 means easiness to operate variable proven to show the positive relationship direction on customer satisfaction. This means if another independent variable value is constant then easiness to operate increase amounting to one unit, so customer satisaction (Y) will increase by 0,056.

Table 2: Coefficient Determination (R^2)

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916[a]	.839	.830	.19711
a. Predictors: (Constant), X5, X4, X3, X2, X1				
b. Dependent Variable: Y				

Based on Table 2. obtained adjusted R square amounted 0,830 or (83%). This shows that the percentage contribution of the independent variables influence include reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5) simultaneously on the dependent variable, customer satisfaction (Y) amounted to 83%. While the rest 17% influenced or explained by other variables that not included in this research.

Hypothesis Testing

1. t Test

Table 3: t Test Result

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.934	.170		5.509	.000
X1	.228	.081	.242	2.823	.006
X2	.213	.084	.274	2.546	.013
X3	.134	.064	.167	2.079	.040
X4	.170	.067	.226	2.521	.013
X5	.056	.067	.077	.837	.405

The statistical t-test (partial) indicates that the mobile banking service quality has a partial influence on customer satisfaction. Based on the table 3, it can be described as follows:

Reliability and responsivenesss (X1) variable has a significance value (Sig.) 0,006 with α (significance degrees) value 0,05 means 0,006 < 0,05 and t 2,823 > t table (1,660). So it can be concluded that H_0 rejected or H_1 accepted. This means that reliability and responsiveness are partially have a significant influence on customer satisfaction.

Assurance and security (X2) variable has a significance value (Sig.) 0,013 with α (significance degrees) value 0,05 means 0,013 < 0,05 and t 2,546 > t table (1,660). So it can be concluded that H_0 rejected or H_1 accepted. This means that assurance

and security are partially have a significant influence on customer satisfaction.

Convenience (X3) variable has a significance value (Sig.) 0,040 with α (significance degrees) value 0,05 means 0,040 < 0,05 and t 2,079 > t table (1,660). So it can be concluded that H_0 rejected or H_1 accepted. This means that convenience are partially have a significant influence on customer satisfaction.

Efficiency (X4) variable has a significance value (Sig.) 0,013 with α (significance degrees) value 0,05 means 0,013 < 0,05 and t 2,521 > t table (1,660). So it can be concluded that H_0 rejected or H_1 accepted. This means that efficiency are partially have a significant influence on customer satisfaction.

Easiness to operate (X5) variable has a significance value (Sig.) 0,405 with α (significance degrees) value 0,05 means 0,405 > 0,05 and t 0,837 < t table (1,660). So it can be concluded that H_0 accepted or H_1 rejected. This means that easiness to operate are partially does not have a significant influence on customer satisfaction.

2. F Test

Table 4: F Test Result

ANOVA[b]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	19.020	5	3.804	97.908	.000[a]
	Residual	3.652	94	.039		
	Total	22.672	99			
a. Predictors: (Constant), X5, X4, X3, X2, X1						
b. Dependent Variable: Y						

The statistical F-test (simultaneous) indicates that the mobile banking service quality has a simultaneous influence on customer satisfaction. Based on the table 4, it can be described as follows:

From F test obtained F 97,908 which is greater than f table 2,31 and significance value which 0,000 < α = 0,05, it is said that the regression analysis model is significant. So its mean H_0 rejected where it can be concluded that the reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5) variables have simultaneously significant influence on customer satisfaction.

CONCLUSION AND SUGGESTION

Conclusion

Based on the research results that have already done, then obtained some conclusions are as follows:

1. There is a positive and significant influence partially of the reliability and responsiveness (X1) variable on customer satisfaction (Y) of BRI mobile user. This shows that if reliability and responsiveness (X1) variable increases, so customer satisfaction will increase too and the increase is significant.
2. There is a positive and significant influence partially of the assurance and security (X2) variable on customer satisfaction (Y) of BRI mobile user. This shows that if assurance and security (X2) variable increases, so customer satisfaction will increase too and the increase is significant.
3. There is a positive and significant influence partially of the convenience (X3) variable on customer satisfaction (Y) of BRI mobile user. This shows that if convenience (X3) variable increases, so customer satisfaction will increase too and the increase is significant.
4. There is a positive and significant influence partially of the efficiency (X4) variable on customer satisfaction (Y) of BRI mobile user. This shows that if efficiency (X4) variable increases, so customer satisfaction will increase too and the increase is significant.
5. There is a positive but not significant influence partially of the easiness to operate (X5) variable on customer satisfaction (Y) of BRI mobile user. This shows that if easiness to operate (X5) variable increases, so customer satisfaction will increase too but the increase was not significant.
6. There are a postitive and significant influence simultaneously of the reliability and responsiveness (X1), assurance and security (X2), convenience (X3), efficiency (X4), easiness to operate (X5) variables on customer satisfaction (Y) of BRI mobile user with influence contribution percentage amounted to 83%.

Suggestion

Based on the conclusions obtained in this research, so it is provided suggestions as a complement toward the research results, are as follows:

1. For further research is suggested to test easiness to operate variable with the research object at different banks to see the consistency of the results.

2. For further research is expected to examine with other variables outside variables that have been investigated in order to obtain more varied results.
3. Companies are suggested to pay more attention at easiness to operate of mobile banking service, because this variable has no significant influence on customer satisfaction. One of them can be done by updating the system to make it more interactive and attracting users in its operation so that it can create a significant influence on customer satisfaction.
4. The company should be able to maintain or even improve services, especially in mobile banking service that is increasingly in demand. This will make the company remain competitive and keep customers satisfied so that it can become loyal customers.

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