FACTORS AFFECTING THE INTENTION OF USING INTERNET BANKING: A CASE STUDY ON ONE OF THE NATIONAL PRIVATE BANK IN INDONESIA

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Abstract

The presence of the Internet in everyday life has brought many changes in the transactions in the bank. This study aimed to analyze the influence of perceived ease of use, trust, anxiety computing and service quality of the intention in using internet banking. The sample was one of the customers of private banks in Indonesia national branch offices, in Jakarta and Surabaya. The questionnaire used in this study adopts the existing indicators on WebQual and Technology Acceptance Model (TAM). Analysis of data used multiple linear regression method. The results show that the ease of use, trust, anxiety computing and service quality affects the intention in using electronic banking.

INTRODUCTION

Management information systems and technology that support the business processes of modern companies today is a big challenge for business managers and information technology as well as business practitioners [1]. Advances in information technology are increasingly sophisticated believed to contribute substantially to the significant growth in the banking services sector. Information technology plays a significant role in supporting the competitiveness of each company.

The existence of the internet, from a technical standpoint, allowing the excess funds and shortage of funds would be in touch electronically so that demand and supply of funds could meet without the presence of a financial intermediary such as a bank in the traditional sense. Over the past few years, commercial banks have introduced internet based banking system to improve operations and reduce costs. From time to time, more and more banks which provide services or internet banking services are regulated by Bank Indonesia Regulation No. 9/15/PBI/2007 Year 2007 regarding Implementation of Risk Management in the Use of Information Technology by Commercial Banks. This internet presence has brought a fundamental change in the type of banking service; from the initial banking delivery channels toward self-service channels is called internet banking. Internet banking is one form of product and services ranging widely offered by commercial banks in Indonesia. Internet Banking, according to Bank Indonesia Circular Letter No. 6/18/DPNP concerning Application of Risk Management In the Activities Bank Service Over the Internet (Internet Banking) is one of the services of the Bank, enabling customers to obtain information, communicate and conduct banking transactions through the Internet, and is not a bank that simply organizing banking services via the internet, so that the establishment and activities of Internet only Banks are not allowed. Internet banking can be any type of Internet Banking Informational, Communicative Internet Banking and Transactional Internet Banking, Informational Internet.

Banking is the Bank's services to customers in the form of information through the Internet and not to execute the transaction. Communicative Internet Banking is the Bank's services to customers in the form of communication or interaction with the Bank's internet banking service providers, which is limited and does not execute the transaction. Transactional Internet Banking is the Bank's services to customers to interact with the Bank's internet banking service providers, and execute transactions. Quality of service can be interpreted as an effort to fulfill the needs and desires of consumers and precision of delivery to meet the consumer expectations [2]. WebQual is one method or technique of measuring the quality of a website based on the user end. The method developed by Parasuraman [3], widely used in the early

measurement of service quality. The research instrument at the Web qual developed with Quality Function Development (QFD).

Technology Acceptance Model (TAM) methods was first introduced by Davis [4]. Technology Acceptance Model is theory of information systems that model the process the user will receive and use technology. Web qual related research and TAM have been done. Wibowo [5] mentions that the attitude in TAM as an attitude towards the use of the system in the form of acceptance or rejection as a result when someone uses a technology in its work. Rahadi [6] describes the attitude factor as one of the aspects that influence individual behavior. The attitude of a person consists of cognitive, affective, and behavioral components.

The object of research is one of the leading national private customer banks in Indonesia, namely PT. Bank Artha Graha International Tbk (BAG). Research conducted on internet banking and customers in the two branches of BAG, the Branch Coffee-Jakarta, Kertajaya-Surabaya. The purpose of this study is to analyze the perceived ease of use, trust, anxiety computing, and quality service to the intention of using internet banking on BAG. This study is part of research by Anggraeni [7]. The contribution of this study is to develop a model of service quality measurement for the banking that have implemented the technology that already has a range of facilities including ATMs, Website, banking applications and other physical facilities. Another contribution is that it can provide a reference for research in information technology in general and banking in particular on internet banking business world.

LITERATURE REVIEW AND STUDY OF SIMILAR RESEARCH

Perceived ease of use is defined as the extent to which one believes that the use of a technology would be free of effort. Perceptions of individuals with regard to the ease of using a computer (perceive ease of use) is the degree to which an individual believes that using a particular system would be free of errors. Technology Acceptance Model that has a strong element of behavior assumes that when a person forms a part to act, they would be free to act without restriction (Figure 1).

Figure 1: Technology Acceptance Model (TAM) according to Davis [4].
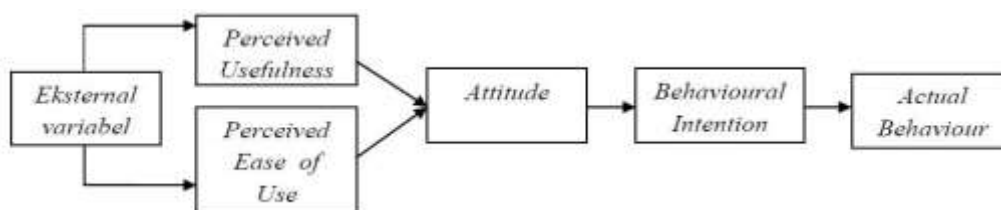
Wibowo [5] mentions that the attitude in TAM conceptualized as an attitude towards the use of the system in the form of acceptance or rejection as a result when

someone uses a technology in its work. Rahadi [6] describes the attitude factor as one of the aspects that influence individual behavior. Annamalai explains that the attitude is positive or negative feelings of a person in terms of doing a particular behavior. Ba and Pavlou [8] define trust as an assessment of one's relationship with others who will do certain transactions in line with expectations in an environment full of uncertainty.

One method of measuring the quality of electronic banking services is Web qual method. This method is the development of servqual by Parasuraman WebQual has been developed since 1998 and has undergone several iterations in the preparation of the dimensions and grains question. Web qual 1.0 emphasizes the analysis of information quality and have a deficiency in service interaction, Web qual 2.0 conversely, more emphasis on the analysis of the interaction but sorely lacking in quality analysis of information. Both instruments are trying to be applied to a study of the quality of online auction sites [9]. The results showed that the analysis of the quality of the site are categorized into three distinct areas of focus, namely (1) Quality of the site; (2) The quality of information provided, and (3) the quality of interaction offered by the service. The results of this study are known as WebQual 3.0. Further analysis of Web qual 3.0, yield 4.0 Web qual model approaches, which eventually replace the first dimension, namely the quality of the site into a dimension of Usability. Website quality measurement instruments according to Yang, et al. [10] consists of five dimensions of usability, usefulness of content, adequacy of information, accessibility and interaction. Hermana [11] examines the quality of service on one of the websites of government banks and private banks in Indonesia. The results showed that there was no difference in service quality perceptions among private banks with state banks. Medyawati and Ega [12] adopting the results of previous study to compile a web qual questionnaire, to measure the quality of service at the bank's website in Indonesia.

According to Maharsi and Fenny [13] internet banking provides advantages to customers and banks. For customers internet banking offer convenience and speed in the banking transaction. The advantage for banks, internet banking could be a cheap solution infrastructure development compared to open ATM outlets.

Anxiety computing is the tendency of a person to be hard, worry or fear about computer use in the present or in the future [14]. Embi [15] defines anxiety computing as the anxiety felt by the individual while interacting with a computer or when they think to use a computer. Maharsi and Yuliani [16] states that the factors affect interest in using internet banking is perceived usefulness, perceived ease of use, and perceived credibility. Results of Tjini [17] showed that the construct attitude affect the interest for using Internet services banking, trust and perception constructs comfort effect on attitudes to using the internet services banking. Saputro and Sukirno [18] states that the perceived ease of use, trust, anxiety computing, and quality of service, affecting interest in using internet banking at Mandiri bank customers in Yogyakarta.

Research Hypothesis

H1: there is influence between perceived ease of use to the intention in using internet banking,

H2: there is influence between trusts to the intention of using internet banking,

H3: there is influence between anxieties computing to the intention of using internet banking,

H4: there is influence between service qualities to the intention in using internet banking,

H5: perceived ease of use, trust, anxiety computing, and service quality jointly affect the interest of customers using internet banking.

RESEARCH METHOD

The object of research is the customer BAG located at branch offices in Jakarta and Surabaya. Web qual and TAM method used in this study to measure the ease of use of banking technology in this regard and internet banking website visitor perceptions of the quality of the service website. The research instrument (questionnaire) designed in this study using a 5-scale Likert Summated Rating is from 0 (strongly disagree) to 5 (strongly agree). This research questionnaire adopts two dimensions of Web qual i.e. Usability and interaction quality described in questions 1 and 2 and incorporated in the variable perceived ease of use (Table 1).

Table 1: Research variables.

Research Variable	Indicator	No. of Item Instrument
Perceive ease of used (X1)	1. Easy to learn 2. Easy to use 3. Accessible	1,2 3 4
Trust (X2)	1. The speed of transaction 2. Transaction security 3. Reputation	5 6,7 8
Computer Anxiety (X3)	1. Impact and technology risk 2. Technology-based crimes	9,10 11,12
Service Quality (X4)	1. Application Support 2. Performance and Reliability	13,14 15,16
Internet Banking intention (Y)	1. The desire to use technology 2. Support and attention to technology	17 18,19,20

Stages of research include validity and reliability of research instruments were questionnaires. Testing the validity using Pearson correlation method to determine

the validity of the questionnaire items. Pearson Product Moment Method (PPM) according Sugiyono [19] is the score of each of the questions linking with a total score. According to Umar, an indicator is said to be valid if the significance value ≤ 0:05 (α = 5%). Reliability tests performed using Cronbach Alpha coefficients, i.e., if the value of r ≥ 0.600, then the instrument is considered reliable.

RESULT AND DISCUSSION

The data were collected by distributing questionnaires to BAG customers in four branches, namely the branch Kopi, at Jakarta and branch Kertajaya at Surabaya. The total numbers of valid and the completed questionnaires as much as 184, in general, the profile of the respondents, 50.41% are women, 49.59% are male, 56% of private sector employees, 5:25% Housewife, 21% were civil servants, 8% of the students, 9.75% are entrepreneurs.

In the early stages of research, tested the validity and reliability of the questionnaire distributed in 30 respondents, the validity and reliability test results showed that all questions are valid and reliable, thus spreading the questioner continued. The number of valid questionnaires from two offices at Jakarta and Surabaya are 184. Validity and reliability of all respondents indicate that the whole question r value greater than r table (0.149), thus the questionnaire can be declared invalid. Reliability test results showed that the Cronbach alpha value is 0.740 and is therefore reliable questionnaire. Recapitulation of respondents' answers can be seen in Figure 2 below.

Figure 2: Respondents answer Recapitulation.
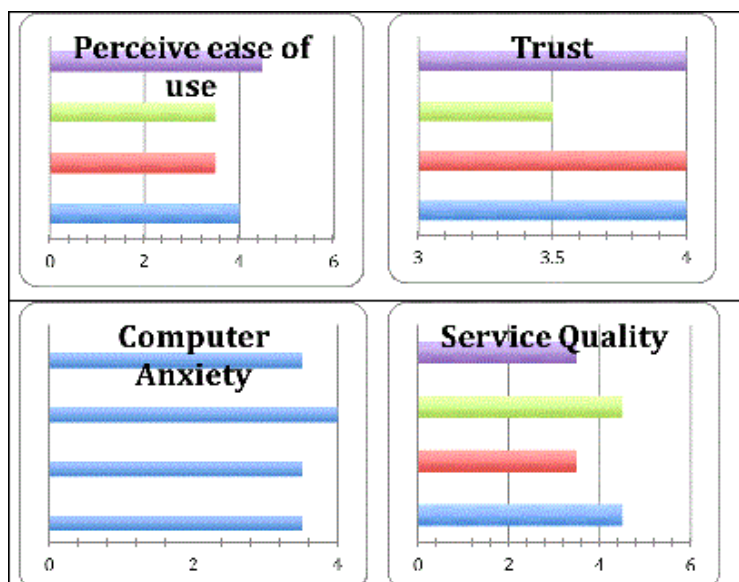
The results of the questionnaire answers, for perceive variable ease of use shows that 51% of respondents agreed that BAG internet banking, is easy to learn, easy to understand, and accessible (questions 1 and 4 in the questionnaire). For trust variable, customer already feeling of comfort and security, however, there is still concern for internet banking crime reflected the majority of respondents who answered the question undecided on 6 and 7. On question no. 8 in confidence indicators, customers agree that BAG is a bank that has a good reputation. From the answers, indicate that customers feel worried for error when pressing the buttons on the computer when transacting with internet banking. Customers in doubt, with the use of computers and technology will make money is not safe condition. Customers are also concerned with the rise of cybercrime and the lack of knowledge about the use of internet banking. Related to the quality of service, the customer agrees that the call center BAG, easily accessible and ready to help with a quick response in case of problems without time restrictions (Figure 3).

Figure 3: Respondents answer recapitulation for Internet Banking variable intention.
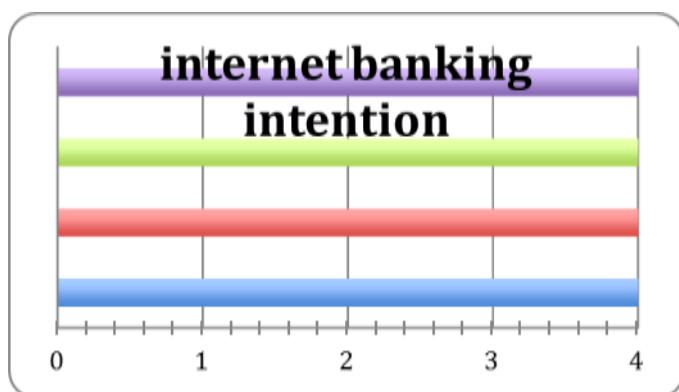
Based on interviews with customers, obtain information that is basically the level of customer confidence in the banks and internet banking applications has increased. However, not able to increase interest in the use of internet banking for BAG customers.

Table 2: Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.627[a]	.393	.379	1.17070	1.764

Based on Table 2, it can be explained that the four variables, perceive ease of use, trust, computer anxiety and service quality values obtained correlation R of 0.627,

showed strong degree of closeness of the relationship between independent and dependent variable (Table 3).

Table 3: Interpretation of correlation.

Interval coefficient	Correlation
0,00-0,199	Very Low
0,20-0,399	Low
0,40-0,599	Medium
0,60-0,799	Strong
0,80-1,000	Very strong
Source: Sugiyono [19].	

The coefficient of determination used to measure the contribution or the role of the independent variables in explaining the dependent variable. According to the Table 2 coefficient of determination Adjusted R Square of 0.379 indicates that the contribution of independent variables on the dependent variable 37.9%, which means that the effect of variable Perceived Ease of Use (X1), Confidence (X2), Anxiety computing (X3) and Quality of Service (X4) against Interests Using Internet Banking (Y) is 37.9%, while the rest influenced by other variables not examined in this study.

Table 4: F test result.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	170119.661	5	34023.932	48.364	.000[a]
Residual	277175.933	394	703.492		
Total	447295.595	399			

Based on Table 4, the calculated F value is 48.364 with a significant level of 0.000, while the F-table at alpha 5% was 2.21. Therefore F-count> F-table that is 48.364> 2.21 and probability (Sig-F) of 0.000 meaning <0.05. It can be concluded that the ease of use, trust, anxiety computing and service quality jointly influence the interest in using internet banking.

In Table 5 shows that all variables in this study affect the interest in the use of Internet banking is the ease of use, trust, anxiety computing and service quality. This is shown in column Sig. the value of <0.05. The regression equation obtained as follows:

Y=4.055+0.33JP+0.43JK+0.279 JC+0.404JL

Table 5: T-test result.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.055	1.094		3.706	.000
	JP	.033	.065	.039	.517	.036
	JK	.043	.069	.047	.623	.034
	JC	.279	.066	.272	4.201	.000
	JL	.404	.067	.427	6.060	.000

The overall analysis is outlined below. Ease of use affects the desirability of using internet banking. These results are in line with the majority of respondents who agreed that Internet banking BAG easy to learn, and features on the menu BAG internet banking is easy to understand.

The trust of customers towards BAG BAG is a very important factor to be owned by a bank. Customer confidence towards BAG, could be seen from the number of respondents who agree that BAG is a bank that has a good reputation. Based on interviews, internet banking at BAG currently has pretty good security because it has three layers of security. The results of the study are not in line with Shomad [20] that the trust is not the main thing to enthuse the people in the use of technology-based information systems. However, these results are in line with Tjini [17], Saputro and Sukirno [18] that trust influence the intention in using internet banking.

Anxiety computing, affect the intention in using internet banking. This is consistent with the statement of respondents who agree that the increment of cybercrime, make anxious customers using internet banking technology. These results are consistent with research Saputro and Sukirno [18] that anxiety affects computing interest in using internet banking.

Quality of service affects the interest in using internet banking. The results of this study are consistent with Saputro and Sukirno [18] and confirmed by the percentage of respondents who agree that is equal to 26.9%. Services provided by BAG including the Call Center can be reached 24 hours. Of respondents indicate that the Call Center BAG easily accessible and ready to help and provide a quick response to the problem presented customers. Quality of service is the main thing that must be maintained by a bank as a provider of financial services, including the provision of

internet banking facilities [21-26].

Based on the interviews, information was obtained that the features provided in the relative BAG internet banking has not been a lot of, for example, there is no online features for the placement of deposits, savings online, online ticket payment features, online credit purchase.

CONCLUSION

Based on the description in the discussion, it could be concluded that perceive ease of use, trust, computer anxiety, and quality of service affects the interest to use internet banking. This is consistent with the results of recapitulation of the questionnaires and interviews with some respondents, that BAG customers feel less secure in using internet banking, fear of the crime and the fear of losing their money. However customers still have confidence in the BAG.

LIMITATION OF THE STUDY

The limitation in this study is the geographical location of the object of study, namely BAG branch offices located in Surabaya. Researchers cannot directly supervise and accompany the process of filling out the questionnaire.

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