SECURITY AND TRUST AFFECTING INTEREST IN USING INTERNET BANKING WITH TECHNOLOGY ACCEPTANCE MODEL (TAM)

Handy Noviyarto

ABSTRACT

Along with the development of the Internet in Indonesia, the Internet Banking service has an added value for banks in Indonesia in providing the best service to its customers. With a growing number of banks offering Internet Banking facility caused the competitive rivalry between banks. This study aims to determine the effect on Security and Trust in Interests In Using Internet Banking. The research method is quantitative model TAM (Technology Acceptance Model). The data used in this study are primary data. The data collection is done by using a questionnaire. This study showed that variables simultaneously Security and Trust significantly affect the Customer Interests in Using Internet Banking.

KEYWORDS: Internet Banking, Security, Trust, TAM

1. INTRODUCTION

Development of Internet technology is now adopted in the banking sector, which is reflected by the number of banking companies applying and developing the Internet Banking services. In the business world, competition between companies is increasing, therefore every company is required to make changes to achieve a success in doing business[1]. Internet is an innovation that allows people to conduct transactions anywhere and anytime, so it fits with the development of today's society known very busy and has high mobility. Internet Banking answer the demands of customers who want service fast, secure, convenient, inexpensive, available 24 hours and can be accessed from anywhere, whether mobile phones, computers, and laptops. Internet banking is a service offered by banks to conduct non-cash transactions through an internet connection that can be accessed through Laptops, Mobile Phones, Computers, etc. The bank usually provides a website that serves to clients perform various transactions via the web. The approach used to see the ease of a technology is TAM (Technology Acceptance Model) developed by Davis in 1989[2]. TAM model actually adopted from the model TRA (Theory of Reasoned Action), namely the theory of reasoned action with the premise that a person's reaction and perception something, will determine the attitude and behavior of the person. Reactions and perceptions of users of Information Technology (IT) will affect his attitude in the acceptance of these technologies.

TAM aims to explain and predict the reception (acceptance) users and the factors that influence the acceptance of the technology within an organization. TAM also explains the causal relationship between beliefs and behavior, the purpose or purposes, as well as the actual use of the user of an information system. According to Davis (1989), there are two main concepts that are believed to user acceptance is security and trust. In this writing, the author presents in five parts, 1. Introduction, in this section will be described about the formulation of the problem and the purpose of research benefits. 2. Platform Theory, in this section will be described briefly the theory that supports the preparation and writing of this journal. 3. Research Method, in this section will be discussed about the exposure method used by the authors. 4. Discussion of Result, in this section will be described about analysis and design of the information systems. 5. Conclusion. In this section the author gives the conclusion of what has been discussed in previous chapters.[3]

2. PLATFORM THEORY
1. Internet banking

According to Thulani et al., In Safeena et al., (2010: 3) Internet Banking refers to a system that allows bank customers to gain access to their accounts and general information about bank products and services through the use of a bank site, without the intervention or discomfort sent letters, faxes, original signature and a confirmation phone [4]. In Tong et al. (2011) stated that the bank is using the Internet Banking service provides a low cost to the customer [5]. Internet Banking cut operating costs, improves efficiency, reduce pavlou paper costs for the purposes of the

Faculty of Computer Science, Mercu Buana University, Indonesia

transaction as well as providing the opportunity for the bank to maintain its relationship with customers. Internet Banking develop into a "one stop service and information units" which promises to be beneficial as well for the bank and its customers (Tan and Teo, 2000)[6]. Internet Banking provides several advantages compared to the traditional systems of banks.

2. Security

Security of information is how we can prevent fraud (cheating) or at least, detecting fraud in an information-based system, where information itself has no physical meaning. Sathye research results in Almuntaha (2008: 17) states that security is the most important issue and often with publications concerning the security of the media make customer confidence in the security of Internet Banking is reduced.[6]

3. Trust

According to Ba and Pavlou (2002) defines trust as an assessment of one's relationship with others who will do certain transactions in line with expectations in an environment of uncertainty[7]. Consumer confidence is defined as the willingness of the parties to accept the risk of the other party action based on the expectation that the other party will be an important act for parties who believe, regardless of the ability to supervise and control the actions of the trust (Mayer et al, 1995).[14]

4. Framework

Theoretically, this study refers to the concept of consumer behavior is a study that focuses on how individuals make the decision to utilize the available resources (time, money, effort) to buy goods related to consumption (Schiffman and Kanuk, 2008: 6)[8], Empirically, the previous studies on the behavior of the adoption of online services, producing a wide range of formulation. One of them by adopting and combining the theoretical concepts of consumer behavior and the Technology Acceptance Model (TAM) in the context of Internet Banking,
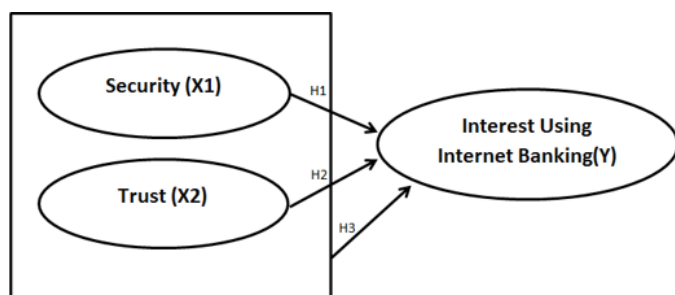

Figure 3. Research Framework

Internet banking in Kusuma and Susilowati (2007) is mentioned as one form of electronic banking is offered through the internet where customers can conduct and transact financial services in an artificial environment (virtual environment)[9].

Technology Acceptance Model (TAM) is a popular model and widely used in a variety of research on the process of adoption of information technology including Internet Banking. Simplicity and the ability to explain (explanatory power) the

causal relationship is the main reason use of the TAM model (Davis, 1989).

5. Hypothesis

The hypothesis is a temporary answer to the formulation of research problems.

It is said to be temporary because new answers given are based on relevant theory, not based on empirical facts obtained through data collection.

Hypothesis can also be expressed as an answer to the formulation of research problems. The hypothesis is as follows:

H1: Security supposed to influence the customer's interest in the use of Internet Banking
H2: Trust supposed to influence the customer's interest in the use of Internet Banking
H3: Security and Trust supposed to influence the customer's interest in the use of Internet Banking

3. RESEARCH METHOD
1. Research methodology
Method of research is a quantitative descriptive method.

2. Sampling and Population
1. Population
Population is the generalization region consisting of the objects / subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions. Taking into account the small number of the population, the number of samples in this study is all the population to be studied which numbered about 70 people. The data collection is done by distributing questionnaires to 70 peoples who using internet banking Thus the sampling used in this study is the Probability Sampling Technique.

2. Sampling
The sample is part of the number and characteristics possessed by the population which will determine the number of respondents who used to represent the entire population. The sampling method is a research effort to obtain representative samples of the population who can describe. The sampling technique used is Simple Random Sampling.

3. Conceptual definition
Based on the theories that are described in the previous chapter, the conceptual definition of each variable is as follows:
1. Security of information is how we can prevent fraud (cheating) or at least, detecting fraud in an information-based system, where information itself has no physical meaning. Sathye research results in Almuntaha (2008:17) states that security is the most important issue and often with publications concerning the security of the media make customer confidence in the security of Internet Banking is reduced.
2. According to Ba and Pavlou (2002) defines trust as an assessment of one's relationship with others who will do certain transactions in line with expectations in an

environment of uncertainty. Consumer confidence is defined as the willingness of the parties to accept the risk of the other party action based on the expectation that the other party will be an important act for parties who believe, regardless of the ability to supervise and control the actions of the trust (Mayer et al, 1995).

3. Interests of behavior (behavioral intention) according Jogiyanto (2007: 29) is a desire or interest in someone to perform a specific behavior.

4. Interests associated with behaviors or actions, but interest may change over time, the wider intervals of time, the more possible changes occur in a person's interest. According Setyanto (2011: 12) interest in the use of Internet Banking online can be defined frequency (how often) customers using the facilities provided by the bank to transact online through electronic banking or Internet Banking service.

4. Steps Research

The implementation process of scientific research consists of the steps also apply the principles of the scientific method. The steps to be followed in conducting scientific research are as follows:

1. **Identify and Formulate problems:** Outlining of problem identification and problem limitation on the scope of issues to be studied based on the identification of problems and restrictions on the problem.

2. **Determining Research Objectives:** Looking for a relationship or distinguish between two or more variables conceptually linked to the research objectives.

3. **Conduct a Preliminary Survey and Literature Studies:** Survey is a preliminary study conducted to sharpen the direction major study aimed at feasibility study with respect to research procedures and other things that are still unclear. Literature study aims to identify and understand the relevant literature related to the research proposal.

4. **Identifying the Variables and Operational Definition of Variables:** Identifying the variables used to determine the variables included in this study.

5. **Determining Sample and Create Questionnaires:** Population is the generalization region in the form of a subject or object under study to be learned and conclusions drawn. While the sample is a portion of the population studied. In other words, the sample is partially or act as representative of the population so that the results of the study were successfully obtained from the sample can be generalized to the population.

6. **To Test the Feasibility Questionnaire:** Test feasibility study questionnaire is a procedure to ascertain whether the questionnaire will be used to measure the research variables valid or not.

7. **Collecting Data and Analyze Data:** There are several things to keep in mind in data collection for qualitative research. First, research is generally carried out more than once. Second, in data collection is always adjusted to the natural situation. Third, do probing symbols. Probing is a process of deeper exploration of a thing that is necessary to be revealed.

8. **Conduct an Analysis of Factors:** Explaining the structure of relationships among many variables in form factor or variabel latent or variable formations. Factors are formed is the amount of random (random quantities) that previously could not be observed or measured or determined directly. In addition to the main purpose of factor analysis.

9. **Perform Analysis Overall Research:** Doing the efforts made by working with the data, organize data, sorted them into units that can be managed, synthesize, search and find patterns, find what is important and what is learned and decide what can be told to others.

10. **Make Conclusions:** Conclusion of the study is a brief statement of the results of the analysis of the description and discussion of the results of testing the hypothesis that has been done in the previous chapter.

11. **Prepare Reports on Research and Dissemination:** Report preparation and dissemination of research results is the final step in the implementation of scientific research.

4. DISCUSSION OF RESEARCH

1. **Research Result**

Based on the hypothesis that has been formulated in this study to be tested, then it should be done a test with parametric statistical method, wherein in the method requires that the data for each variable to be analyzed must meet the standards based on the criteria of normal distribution of data and the data must be reliable. Therefore, the data will be analyzed and qualified these criteria will be tested and described below, both in determining the validity and reliability. The statements contained in the questionnaire for the variable Security (X1) and Trust (X2), and Interest Using Internet Banking (Y) as a variable that is structured so that it considered to be able to provide input data for writers. Beads prepared statement and was measured in Likert scale that the statements are displayed in numeric form with the weight value 1-5, ie with statements ranging from Strongly Agree / Good (weight 5), Agree / Good (weight 4), Simply Agree / well (weight 3), Less Agree / good (weight 2), Strongly Disagree / good (weight 1). Description of the results obtained by 70 respondents as sample, consisting of peoples who use Internet Banking. Descriptive analysis of the characteristics of respondents consisted of a table that contains the gender, the age of the respondents, and education last.

2. **Test Research Instruments**

Reliability and validity testing is the process of testing the grain is a statement in a questionnaire, whether the contents of grains such statements are valid and reliable. If grains such statements are valid and reliable means grains such statement has been able to measure the factors.

Validity Test

Processing and testing using the techniques of calculation based on the assumption that the sample data obtained come from normally distributed population. Based on calculations by the research instruments, can be known

whether the initial hypothesis can be accepted or rejected at the significant level or alpha = 0.05. Statistical tests performed to test the parameters based on the size of the statistics obtained from the sample. The whole process of data processing and analysis are using software tools (software), namely Statistical Product and Service Solutions (SPSS).

3. Implications of Research Results

Based on the results obtained, it can be seen that the factors significantly affecting Interests Using Internet Banking Security and Trust. Based on this, the effectiveness of Interests Using Internet Banking can be improved by increasing the quality of these factors. In addition, through the coefficient determination, it is known that simultaneously points gained by 24.5%. It shows that all the factors have contributed significantly and effectively to the Interests Using Internet Banking.

5. CONCLUSION

The thesis is structured in order to determine whether the perception of benefits, Perceived Ease, Perceived Risk, Security and Trust are some of the factors that affect interest Using Internet Banking. After doing this research, then the conclusion such as [16]:

1. There is no significant effect of variable Security (X1) against the Interests Using Internet Banking amounting 0.1%. And based on the t test, then Ho is accepted and Ha rejected,
2. There is a significant effect of the variable Trust (X2) against the Interests Using Internet Banking amounting 6.6%, And based on the t test, then Ho is rejected and Ha accepted.
3. Simultaneously, the variable Security (X1) And Trust (X2) significantly affect the interest Using Internet Banking 24.5%. And based on the F test, then Ho rejected and Ha accepted.

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