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# Factors Affecting Perception of Benefits of Using E-Banking Services

(Study at Bank BNI Makassar)

Feby Fauziah Haya, Haris Maupa, Nuraeni Kadir Master Program of Manajemen, Faculty of Business and Economics, Hasanuddin University, Indonesia.

Abstract:- Banking is slowly shifting conventional banking services to digital application services. This change is inevitable in today's era. This study aims to determine the effect (Perceived self-efficacy), complexity, perceived trust, compatibility and perceived ease-of-use on perceived benefit of using. e-banking services at PT. BNI. To achieve this goal, questionnaires were used with data analysis techniques using SEM PLS analysis. The results of the study found that the perceived efficacy had an impact in increasing the perceived ease-of-use of using BNI e-banking services. Complexity has a negative effect on later perceptions of using e-banking services. The effect of perceived trust has an impact in increasing the perception of benefits in the use of BNI e-banking services. The effect of perceived compatibility has an impact on the perceived benefits of using BNI e-banking services. The effect of perceived ease-of-use has an impact on perceived benefits of using BNI e-banking services.

**Keywords;** Self-Efficacy, Complexity, Perceived Trust, Compatibility And Perceived Ease-Of-Use.

### I. INTRODUCTION

The development of information technology which is often used by individuals is the internet. At the moment, the internet is a primary need for every individual. According to research conducted by HootSuite and We Are Social management in a report titled "Digital 2020: Indonesia", 175.4 million internet users with penetration of 64% have been connected to the internet. This is also supported by the ownership of mobile phones by 96% and smart phones as much as 94% which is not new at this time [5].

Several factors have accelerated migration to digital channels in Indonesia, including the rapidly increasing adoption of the internet and smartphones; The high growth of e-commerce especially during the current Covid-19 pandemic, which requires us to carry out all activities from home as well as matters related to banking. This indicates that 80% of e-commerce payments are made via mobile phones [5].

Banking creates several conveniences offered to customers who want something instant and can be used anywhere with an internet connection known as electronic banking. Electronic banking is an innovation created by banks by utilizing information technology so that it can be used digitally by their customers [8]. With the presence of electronic banking, it is hoped that it can answer the convenience desired by banking customers themselves. With electronic banking, customers can more easily check accounts, overbooking, transfer funds to routine bill payments via the internet [1].

According to a survey conducted by Price waterhouse Coopers (PwC), mobile and internet took top positions for customer transactions. Branch offices no longer dominate transaction activities in the past 3 years. In 2015, only 10% of respondents made transactions out of 50% of transactions via electronic banking. ATM transactions are approaching the branch office level (although it is a difficult measurement considering that many ATMs are located outside branch offices) [9].

Just 3 years ago, 75% of bankers estimated that more than half of their transactions were carried out through conventional branches - now this figure has dropped to 34%, while the trend of transacting on digital channels has risen to 35%. The increasing adoption of smartphones and other internet-enabled devices is making people trust digital channels more and more accustomed to using digital services.

Banking is slowly shifting conventional banking services to digital application services. This change is inevitable in today's era. Banks need to be aware of current digital technology developments, if they don't want to be left behind by their customers who turn to financial institutions that indulge their customers.

The development of e-banking has innovated from banking activities which initially seemed complicated because you had to make various transactions by visiting a branch office. The presence of e-banking is a solution for time-consuming banking affairs. Now, everything is easier and can be carried out starting from the grip of the customer's cellphone. Banking makes it easy for their customers who want to open an account without having to go to the bank, save money, top-up their e-wallets, and other banking services without having to go to the bank with e-banking.

However, apart from the convenience provided by banks, it is hoped that e-banking users will actually increase as expected. Despite all the conveniences offered by ebanking, branch offices will continue to be relevant in Indonesia. According to a survey conducted by McKinsey in digital banking in Indonesia: Building Loyalty and Generating Growth, about four out of five respondents said that convenient branch locations and ATMs were the reasons for choosing a bank. In addition, limitations of e-banking transactions to services and security issues as well as difficulty in understanding the offer are still some obstacles of using e-banking. Some customers will look for the branch office to resolve these concerns [7].

The Technology Acceptance Model (TAM) is used to assess the acceptance of a system. Then, this model also explains how the relationship between the benefits of a system and the convenience obtained by its users. If all the factors are considered to be very precise, then the innovation and its application are declared to have been successfully used by users [2]. This model is used in this study to observe that the electronic banking application used by banking customers can make it easier and customers feel that of using the application they get several benefits.

In TAM, there is perceived benefit which can be interpreted as a subjective probability to application users that will increase one's work performance. Meanwhile, perceived ease-of-use refers to someone expecting a system to make it easier for them to use an application.

BNI e-banking services make it easy for customers to transfer money between banks and to other banks, purchase credit and PLN tokens, make payments for cellphones, electricity, e-commerce, and credit cards bills, top-up emoney, linkAja, Go-pay, OVO, M-Tix, and electronic money, as well as open digital savings via smartphones. Everything can be done directly through several BNI ebanking such as BNI Mobile Banking, BNI ATM, BNI SMS Banking, BNI Internet Banking, BNI Phone Banking, Agen46, and BNI Debit Online.

#### II. METODOLOGY

#### > Research Location and Design

This research was conducted in Makassar City, with BNI e-banking users as the object of research. This research design is quantitative research type by conducting hypothesis testing. The data used are primary data using a questionnaire as a means of collecting basic data which is distributed to customers who use BNI e-banking services in Makassar.

# > Population dan Sample

The population in this research is all BNI customers in Makassar, consisting of savings, current and time deposits customers totaling 3,345,000. The sampling technique used in the study, random sampling, is a random sampling method in which each member of the population has an equal chance of being selected as a sample. Then to determine the number of samples from each customer using the sloving formula, in order to obtain a sample size of 100 respondents.

## ➤ Method of Collecting Data

In obtaining data, information or various theories as support for this study, researchers use data collection techniques: Field research, using questionnaire data collection (questionnaire) and library research.

## ➤ Data Analysis Method

This study uses partial regression analysis (Partial Least Square / PLS) to test the five hypotheses proposed in this study. Each hypothesis will be analyzed using Smart PLS 2.0 software to test the relationship between variables.

## III. RESULT AND DISCUSSION

Based on the results of the path coefficient analysis processed using Smart PLS 3.0 on the ease-of-users of using BNI e-banking services, the coefficient value obtained is 0.775, this indicates that the higher the self-efficacy of the customer, the perceived ease-of-users of using the service BNI e-banking will continue to increase. It can be indicated that high self-efficacy of customers will affect user perceptions of using BNI e-banking services.

Then observed from the statistical value = 7,660 and pvalue of 0,000, because the statistical value is 7.660 > 1.96 and pvalue is 0,000 < 0.05, it means that perceived self-efficacy has a significant influence on the perceived ease-of-users of using e-banking BNI services. The results of this test indicate that the perceived self-efficacy has had a real effect in increasing the perceived ease-of-users of using BNI e-banking services.

The results of testing the effect of perceived self-efficacy with perception of ease of using BNI e-banking services indicates that the high self-efficacy of each customer, particularly at PT. Bank Negara Indonesia Tbk, will cause customers to provide positive and significant perceptions of ease of using BNI e-banking services. It can be indicated that the existence of self-efficacy for each customer will lead to ease of using e-banking services at PT. Bank Negara Indonesia Tbk. This is based on the perception of respondents' answers, where there is customer trust of using e-banking services even though the bank has online instructions as a reference.

The perception of the respondent's answers, where there are trust in e-banking services even though no one has told customers how to use e-banking. Furthermore, in distributing questionnaires, most customers believe in using e-banking services, even though they have never used an application and other than that, respondents' answers give the perception that overall customers trust in their knowledge to use e-banking services. Thus, it can be said that the high self-efficacy of customers of using e-banking services will have an impact on increasing the perception of convenience by customers of using BNI e-banking services.

Then seen from the perceptions made by Lacovou whose research found that self-efficacy has a positive influence on perceived benefits. Meanwhile, the results of research conducted by researchers found that self-efficacy

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have a significant influence on the perceived ease of using BNI e-banking services. Thus it can be said that this study is in line with Lacovou's research results [6].

Based on the results of data analysis processed using Smart PLS 3.0, a coefficient value of -0.514 is obtained, this means that the higher the complexity, the lower the perceived ease of using BNI e-banking services. It can be indicated that complexity has an impact on the low perceived ease-of-users of using BNI e-banking services.

Then from the results of data analysis, it is obtained that  $t_{value} = 2.761$  and povalue of 0.006, where the  $t_{value} = 2.761 > 1.96$  and besides, it has a sig = 0.006 <0.05. It can be said that there is a significant influence between complexity and perceived ease-of-users of using BNI e-banking services. It can be indicated that complexity can have a significant effect on the low perceived ease-of-users of using BNI e-banking services.

Based on the results of the research that has been performed, it can be said that complexity has a negative impact on the perceived ease of using e-banking services. It can be concluded that the higher the perceived complexity, the lower the perception of customers of using e-banking services at Bank Negara Indonesia.

Then observed from the significant test results, it can be indicated that complexity has a negative effect on customer perceptions of using e-banking services where it can be said that the perceived complexity will have a significant effect on the low perceived ease of using e-banking services at PT BNI.

The results of research indicate that complexity has a positive effect on the perceived ease of using BNI e-banking services. Furthermore, it can be said that the findings obtained by researchers are not in line with those found by Lacovou, then in this study it is found that complexity has a negative effect on the perceived ease of using BNI e-banking services. This can be observed from the respondent's answer, that is, there are still customers who give the perception that using e-banking services requires a lot of effort. So that in this study it can be said that the hypothesis that has been previously proposed is proven [6].

The results of the research data analysis are the effect of trust on the perceived benefits of using BNI e-banking services where the coefficient value is 0.222, it can be said that the higher customer trust, the perceived benefits of using BNI e-banking services will increase. It can be indicated that the high level of trust will have an impact on the high perceived benefits of using e-banking services at PT. Bank Negara Indonesia.

Then, observed from the t-statistic value of 2.470 and pvalue = 0.014. Because with a statistical value of 2.470 > 1.96 and pvalue = 0.014 < 0.05, it can be said that the perceived trust has a significant influence on the perceptions of benefits of using BNI e-banking services, it can be

indicated that the perceived trust has an effect on perception of benefits of using BNI e-banking services.

The results of the analysis of research data that have been stated indicate that the perceived trust has a positive influence on the benefits of using BNI e-banking services. It can be indicated that the higher the customer's perception of the perceived trust will have an impact on increasing the benefits of using BNI e-banking services.

Then, observed from the results of the hypothesis test, it shows that there is a significant effect on perceived benefits of using BNI e-banking services. It can be said that the perceived trust will have a significant effect on the increase of perceived benefits of using BNI e-banking services.

The perception of respondents' answers regarding the trust felt by customers is that transactions with e-banking services can be trusted and besides that most customers who trust in e-banking transactions regarding security systems can further guarantee that there is no theft of customer funds and besides that, trust in e-banking facilities banking due to transparency from the bank by providing notification of transactions directly to customers.

This study is in line with the findings of a study conducted by Wijayanti which found that a person's trust proves a significant influence on the perceived ease of using e-banking services. Thus, this research is not in line with what the researchers found, where the researchers found that trust had an impact on the high perceived ease of using BNI e-banking services. Furthermore, this study is not in line with that found by Wijayanti [11].

The results of data analysis using Smart PLS 3.0 are the effect of perceived compatibility on the perception of benefits of using BNI e-banking services, where the coefficient value is 0.250, it can be said that compatibility has a positive influence on the perception benefits of using BNI e-banking services. It can be indicated that the perceived compatibility has an impact on the high perception benefits of using BNI e-banking services.

Then observed from the statistical value of 2.584 which is greater than 1.96 and has a value of value = 0.010 > 0.05, it can be said that compatibility has a significant effect on perception of benefits of using BNI e-banking services where it can be said that high perceived compability can have a significant effect in increasing perception of benefits of using BNI e-banking services.

The results of data analysis in this study indicate that compatibility has a positive impact on the perceived benefits of using BNI e-banking services. From these results, it can be said that the higher the compatibility will increase the benefits of using BNI e-banking services.

Then from the results of hypothesis testing, it is found that the perceived compatibility has a significant effect on the use of BNI e-banking services. It can be said that the

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perceived of compatibility has a significant effect in increasing the perceived benefits of using e-banking services offered by BNI companies.

The perception of respondents' answers regarding the compatibility of e-banking services at BNI has been categorized as good, where using e-banking services has facilitated the distribution of all bank transaction activities and in addition to the customer's perception that overall the use of e-banking services is in accordance with the transaction needs banks and other than that, every transaction in the use of e-banking is in accordance with the expectations and desires of BNI customers. From the results of this study accept the proposed hypothesis.

The results of data analysis regarding the effect of perceived ease-of-use on the perception of benefits of using BNI e-banking services obtained a coefficient value of 0.524. This means that there is a positive influence between ease-of-use and perception of benefits of using BNI e-banking. It can be indicated that the higher the perceived ease-of-use, the higher the perception of benefits of using BNI e-banking services.

Then, observed from the statistical value of 5.903 and pvalue = 0.000, because of a statistical value of 5.903 > 1.96 and pvalue = 0.000 < 0.05, it can be said that the perceived ease-of-use has a significant effect on the perception of benefits of using BNI e-banking services. Thus, it can be said that it empirically indicates that the perceived ease-of-users has a significant effect in increasing the perceived benefits of using e-banking services at Bank Negara Indonesia.

The results of the analysis of research conducted on the effect of perceived ease-of-use on the benefits of using BNI e-banking services. Where in this study found that there is a positive effect of perceived ease-of-use on the benefits of using e-banking services. This can be indicated that the higher the perception of ease-of-use, the higher the benefits of using BNI e-banking services.

Then in testing the research hypothesis that has been performed that the perceived ease-of-use of e-banking services has a significant effect on the perception of benefits of using e-banking services. This can be indicated that the perceived ease-of-use has a real impact in increasing the perceived benefits of using e-banking services at BNI. This is based on respondents' answers where e-banking services have increased customer efficacy of using banking products as well as customer perceptions that e-banking services can facilitate the use of banking products. Besides, in the perception of the respondents' answers, customers have stated that e-banking service makes it easy to use for transactions and sending money easily and quickly. In connection with the description above, it can be said that the hypothesis of this research that has been conducted is proven.

#### IV. CONCLUSION

Based on the results of the research data analysis that has been conducted, several conclusions can be presented as follows: Perceived efficacy of having an impact in increasing the perceived ease-of-use of using BNI e-banking services. It can be indicated that high perceived self-efficacy from customers will have a real effect in increasing the perception of ease of using BNI e-banking services. Complexity has a negative effect on later perceptions of using e-banking services. It can be indicated that the complexity that occurs significantly affects the low level of customer perception of the ease of using e-banking services. The effect of perceived trust has an impact on increasing perceptions of benefits in the use of BNI e-banking services, where high level of trust by customers will have a significant effect on increasing perceived ease-of-use of e-banking services. The effect of perceived compatibility on perception of benefits of using BNI e-banking services. These results indicate that high compatibility has a significant impact on increasing perception of benefits of using BNI e-banking services. The effect of perceived ease-of-use has an impact on perception of benefits of using BNI e-banking services. It can be indicated that the perceived ease-of-use has had a significant effect on increasing the use of BNI e-banking services.

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