

UTAUT Model Integration Analysis in the Context of BCA e-Banking Adoption

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Abstract

Abstract

This study aims to analyze the UTAUT Model Integration in the context of e-Banking BCA adoption. Research related to the use of Internet Banking often uses E-Service Quality. Therefore, it is necessary to do research about the effect of service quality using BCA Internet Banking. The Study was conducted by determining a sample of 121 student who use BCA Internet Banking. The research used Structural Equation Modeling (SEM) analysis with IBM SPSS AMOS V.20. The finding show that: (1) Web design perceptions will not have a positive relationship with the intention of adoption users and will have a positive relationship with the intention of adoption users; (2) Service perceptions to consumers will not have a positive relationship with the of adoption users and will be positively related to the intention of adoption users; (3) Perception of assurance will not be positively related to the intention of adoption users and will be positively related to the intention of adoption users; (4) Perception of reliability will not be positively related to the intention of adoption users and will be positively related to the intention of adoption users. From the research results, it can be seen that Assurance and Reliability have a significant effect on User Intention to adopt Internet Banking, however Web Design and Customer Service do not have a significant effect on User Intention to adopt Internet Bankin

Keywords: UTAUT, E-Service Quality, SEM, User Intention to adopt Internet Banking.

INTRODUCTION

The rapid development of technology now makes it easy for people to meet their needs in everyday life. According to the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia has increased by around 25.5 million users or 8.9% compared to last year. Survey results showed an increase in the second quarter of 2020 reaching 196.7 million users or 73.3% of the Indonesian population are already internet access users (1). Using the Internet not only seeks information, but can also be used to carry out transactions in the banking world. Banks will compete in developing their technology systems to create efficient, fast and comfortable transactions. This system is known as internet banking.

Internet banking is an activity that makes it easier for customers to carry out non-cash transactions by utilizing media technology such as computers, laptops, tablets and smartphones connected to the internet network. With Internet banking, customers can carry out banking transactions without being limited by time and place and do not have to come to the bank concerned (2). According to the Financial Services Authority (OJK), the number of Internet banking users increased by 270%, from 13.6 million customers in 2012 to 50.4 million customers in 2016 (3). This proves that customers prefer non-cash transactions. Internet banking users in Indonesia will depend on user interest, if it is still minimal it is because customers still do not understand how to access Internet banking. Not only that, they will think that Internet banking can be detrimental because of criminal acts such as scamming and hacking (4).

One of the largest banks in Indonesia that experienced the highest growth in Internet banking transactions is Bank Central Asia (BCA). BCA's Internet banking service is called KlikBCA. The features in KlikBCA consist of balance

information, fund transfers, purchases and payments. Because there were many positive responses to KlikBCA's service facilities, the increase in BCA customers was high. When making transactions using the KlikBCA service, you need a tool in the form of a token called KeyBCA to authorize all transactions using KlikBCA. Usually this token is obtained when we register the KlikBCA service via Customer Service. KeyBCA will issue a password that always changes every time you make a financial transaction, so that transaction security will be more guaranteed (5).

This research aims to determine the perspective of students in Batam City regarding user intentions regarding service quality at Bank Central Asia (BCA) Internet banking. We use the unified theory of acceptance and use of technology (UTAUT) model as a synthesis of the technology acceptance model that will be used to evaluate Bank Central Asia (BCA) internet banking. The reason we chose to research in Batam City was because we wanted to try to answer questions about the unique community in Batam City. This unique community usually has the same background or different similarities.

LITERATURE REVIEW

This research was conducted based on inspiration from an article that used the UTAUT model to expand four dimensions of e-service quality, namely website design, customer service, assurance and reliability to investigate user intention to adopt among commercial bank users in Pakistan (6). By using the e-Service Quality model to get more comprehensive results. From data collection using a questionnaire, 650 data were then analyzed using a combination approach of Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) and obtained quite interesting results. The performance expectancy and effort expectancy variables have a significant influence on website design, customer service and customer intention to adopt internet banking. Another research regarding the quality of mobile banking services at Bank Syariah Indonesia in Surabaya. By using the e-Service Quality model and analysis using Partial Least

Square for Structural Equation Modeling (PLS-SEM), it was found that enjoyment, security, design and application systems of Sharia banks have a significant effect on customer satisfaction (7).

Other research also conducted research on the quality of mobile banking services at XYZ Bank in Jakarta. By distributing data to Bank XYZ customers who use the Bank XYZ application system, there were 505 respondents in Jakarta. By using the e-Service Quality model and analysis using Structural Equation Modeling (PLS-SEM). This research shows that the quality of mobile banking services at Bank XYZ and customer perception values have a significant influence on customer satisfaction, but are not significant on customer loyalty (8).

Previous research results related to the topic of internet banking and mobile banking adoption have had less consistent results. We intend to carry out confirmation and testing in Batam City and contribute to knowledge related to technology adoption in banking. We also use the e-Service Quality model as used by previous researchers (6)(7)(8). The research instrument that we will develop is in accordance with the instrument used by previous researchers (6). The analysis we use is Partial Least Square for Structural Equation Modeling (PLS-SEM) like previous researchers (7) and potential respondents are millennial and unique students who use the BCA internet banking application system like previous researchers (8). Our goal is to provide knowledge related to internet banking adoption.

METHOD

The population in this study were students in the city of Batam. The sampling method we used was Cluster Disproportional Random Sampling with a cluster of 4 leading universities in Batam City. The research model used in this research is based on an article that uses the UTAUT model with the constructs of Web Design, Customer Service, Guarantee and Reliability as independent variables and User Intention to Adopt Internet Banking as the dependent variable (6) (See Figure 1).

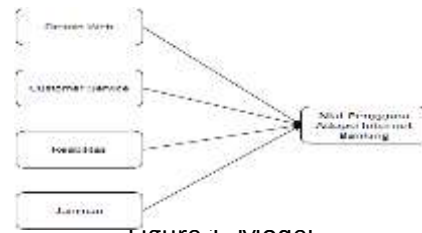


Figure 1. Model

Table 1. Operasional Variable Definition

VARIABLE	INDICATOR
Web Design	Helps complete online transactions easily. Easy Admission Easy to Understand Makes it possible to process things with one click.
Costumer Care	Guides in solving technical problems. Fast Process Perform service properly. Very accurate online transaction process.
Collateral	Use a reliable website. Feel relieved to make transactions via internet banking. Transaction data is strictly protected by internet banking sites.
Realibility	Can get what you want. Financial transactions are processed accurately. Financial transactions are carried out according to the specified time.
User Intention to Adopt Internet Banking	I intend to adopt internet banking in the next month. I predict I will use internet banking next month. I have plans to adopt internet banking in the next three months.

The hypothesis in this research is as follows:

H01 Web Design will not be positively related to User Intention to Adopt Internet Banking.

HA1 Web Design will be positively related to User Intention to Adopt Internet Banking.

H02 Customer Service will not be positively related to User Intention to Adopt Internet Banking.

HA2 Customer Service will be positively related to User Intention to Adopt Internet Banking.

H03 Collateral will not be positively related to User Intention to Adopt Internet Banking.

HA3 Guarantee will be positively related to User Intention to Adopt Internet Banking.

H04 Reliability will not be positively related to User Intention to Adopt Internet Banking.

HA4 Reliability will be positively related to User Intention to Adopt Internet Banking.

Data collection in this research used an online questionnaire in the form of a Google Form which was distributed to the population via social media such as Whatsapp, Instagram and Line. The analytical method we use to test the quality of the data is to test the validity with the Pearson correlation test where if you get a significant correlation coefficient it is said to be valid and the reliability test with Cronbach's Alpha with a minimum standard of 0.7. To test the hypothesis, we used the Structural Equation Modeling (SEM) test using the IBM SPSS Amos v application. 20.

Result and Discussion

A. Respondent Data Descriptive

In this research, descriptive respondent data consists of gender, study program and occupation with the aim of knowing the background of the respondents who were the samples in this research. A total of 121 samples have been collected from the online questionnaire that has been distributed and data that is suitable for testing from the results of this online questionnaire are 115 samples shown in Table 2.

Table 2. Gender

Gender	Respondent	Percentage
Male	46	40%
Female	69	60%

Source: Test Result , 2021

Based on the results of the data shown in the table above, as many as 115 respondents in this study showed that the larger gender category was women, who showed a total of 69 respondents (60%), while male respondents amounted to 46 respondents (40%).

Table 3. Major

MAJOR	RESPONDENT	PRESENTASE
Fakultas Eksakta	76	66%
Fakultas non-Eksakta	39	34%

Source: Test Result , 2021

Berdasarkan hasil data yang tertera pada tabel diatas, responden yang paling banyak mengisi kategori program studi ini merupakan responden berasal dari fakultas eksakta yang menunjukkan hasil sebanyak 76 responden (66%) dibandingkan hasil dari fakultas non-eksakta dengan jumlah 39 responden (34%).

Tabel 4. Pekerjaan

PEKERJAAN	RESPONDEN	PERCENT
Student	66	57%
Private Staff	40	35%
Entrepreneur	9	8%
Government Staff	0	0%

Source: Test Result , 2021

Based on the results of the data shown in the table above, the respondents who chose the job category were mostly students who showed results of 66 respondents (57%), private employees with a total of 40 respondents (35%), entrepreneurs with a total of 9 respondents (8%) and no results for civil servants.

B. Outlier test

The analysis to test outliers is by using the linear regression analysis method. This research uses Microsoft Excel and SPSS to process and analyze the data which can be useful so the data is no more than 3. The research sample data that has been collected is 121 students. From this amount of data, outlier testing was carried out and outliers were detected in 6 sample data.

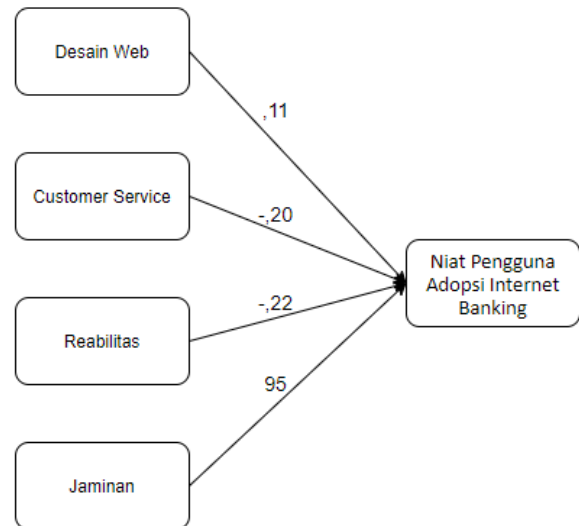
C. Validity dan Reability Test

Research results are declared valid if there are similarities between the data collected and the actual data at the time of the research. A valid instrument uses a tool to measure the test it wants to measure. Meanwhile, data is declared reliable if there are similarities at different times. Reliable instruments are used to measure the same object so that they can produce the same data (9).

Based on the data validity testing that has been carried out, the validity test is carried out by comparing the Sig. (2-tailed) less than 0.05. If the value is positive then it is declared valid. Meanwhile, for the reliability tests that have been carried out, the analysis shows that all variables have a Cronbach's Alpha value greater than 0.07 to meet the reliability requirements. With the results of the validity and reliability tests, it can be concluded that the five variables consisting of 4 independent and 1 dependent in this research are declared valid and reliable.

D. Structural Model and Hypotesis Test

Hypothesis data analysis is declared accepted if the test is carried out with a C.R criterion value of more than 1.96 and a p-value



of less than 0.05, the results of which can be seen in the following figure.

Figure 2. Structural Model

Table 4. Structural Model dan Hypothesis

INDEX	ESTIMATE	S.E.	C.R	P
NA<-DW	,190	,111	1,715	,086
NA<-CS	-,438	,143	-3,067	,002
NA<-R	-,401	,121	-3,313	***
NA<-J	2372	,305	7,767	***

Source: Test Result , 2021

Based on Figure 2 above, it can be concluded that through the C.R and P-values, there are 2 hypotheses which are declared accepted, and 2 other hypotheses which are declared not accepted.

Hypothesis Discussion

Based on the results of the variable tests that have been carried out, the hypothesis which states that there is a relationship between Web Design and User Intention to Adopt Internet Banking gives an insignificant value. This is because the P-value resulting from this hypothesis is 0.086 and exceeds the valid P-value limit, namely 0.05. This provides an understanding that it is necessary to provide education and understanding about the features of the website appearance to customers and does not affect the user's intention to adopt Internet Banking.

The results of this research are not in accordance with research conducted by Samar Rahi which explains that website design must be ensured to run well and meet customer requirements so that it has a positive effect on user intentions to adopt Internet Banking (6). If users feel that the Internet Banking Web Design is easy to use and does not require a lot of effort to make things difficult, then there will be an opportunity for high performance expectations regarding the use of technology (10). The UTAUT model is a development model for receiving and using technology. There are 2 UTAUT variables that influence Web Design, namely, Performance expectancy which is defined as the extent of the use of technology and Effort expectancy which is the level of ease of using technology. The implication here is to develop features and advantages to attract non-users of Internet Banking, as well as strengthening decisions to retain actual users of Internet banking and increase its efficient character (11).

Based on the results of the variable tests that have been carried out, the hypothesis which states that there is a relationship between Service to Consumers and User Intention to Adopt Internet Banking gives an insignificant value. This is because the P-value resulting from this hypothesis is 0.002 or a value less than the valid P-value limit, namely 0.05. This provides an understanding that it is necessary to provide fast response such as a Call Center to customers when they have problems or problems when using Internet banking and does not affect the User's intention to adopt Internet Banking.

The results of this research are in accordance with research conducted by Samar Rahi which explains that services to consumers can increase trust in Internet banking users so that they have a positive effect on users' intentions to adopt Internet Banking (6). Because when users feel that technology is easy to use and does not require much effort, they have high hopes for obtaining the desired performance. Users will ask Customer Service for help with problems and questions (12). In the UTAUT model there are 2 UTAUT variables that influence consumer services, such as

performance expectancy and effort expectancy, which are the same as web design.

Based on the results of the variable tests that have been carried out, the hypothesis which states that there is a relationship between Reability and User Intention to Adopt Internet Banking is stated to have a significant positive influence. This can be seen from the Estimate value of -0.401, C.R of -3.313 and P-value ≤ 0.001 . This provides an understanding that the quality of service (Reability) of Internet Banking service providers influences User Intentions to adopt Internet Banking.

The results of this research are in accordance with research conducted by Samar Rahi which explains that Reability is the second most important factor and has a medium behavioral effect so that it has a positive influence on User Intention to adopt Internet Banking (6). Because users expect that while using Internet Banking users will get information and product availability, transactions can run accurately. And also Internet Banking must have an architecture that guarantees sufficient reliability to satisfy the public (13).

Based on the results of the variable tests that have been carried out, the hypothesis which states that there is a relationship between Guarantee and User Intention to Adopt Internet Banking is stated to provide a positive relationship value. This can be seen from the Estimate value of 2.372, SE of 305, C.R of 7.767 and P-value ≤ 0.001 . This provides an understanding that Internet Banking provides a guarantee of security and its use for carrying out transactions greatly influences the User's intention to adopt Internet Banking.

The results of this research are in accordance with research conducted by Samar Rahi which explains that Guarantee is the most influential variable factor among all and has a positive effect on User Intention to adopt Internet Banking (6). Because if fraud or theft occurs while using Internet Banking, the Internet Banking Service Provider must provide guarantee protection to the user. By promoting awards and recognition obtained by the Bank to increase the use of Internet Banking among current and new users (14).

CONCLUSION AND SUGGESTION

Based on data analysis, it can be concluded that the Intention to Use Internet Banking Adoption model shows that the Guarantee variable is the most important variable among all other service quality variables. This research is in line with research by Samar Rahi (6). This shows that the use of Internet

Banking pays more attention to guarantees and guarantors. Reliability is the second most important factor influencing Intention to Use Internet Banking Adoption, it is recommended to introduce reliable Internet Banking services. Therefore, Guarantee and Reliability are considered the most important factors to determine User Intention to adopt Internet Banking.

Overall, Web Design and Consumer Services are also important in predicting User Intentions to adopt Internet Banking so it needs to be considered again. Therefore, Internet Banking Web Design must contain adequate information so that it can guarantee customers that carrying out financial transactions will be safer and more secure by using Internet Banking. Researchers also ensure that the Web Design can run well and meet Consumer Service requirements, including Reliability and Guarantee. Thus, appropriate Web design and adequate customer service can increase customer confidence in the application of Internet Banking (6).

Based on the conclusions regarding the integration analysis of the UTAUT model in the context of BCA e-banking adoption, in this section, the author would like to provide suggestions to other researchers, especially those who have the same problem and are interested in conducting similar research so that this research can become a reference. In the future, hopefully there will be further researchers to solve this technical problem

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