

Analysis of Factors Affecting Customers in Opening a Digital Account Using the UTAUT Method

Yogi Pratama Putra¹, Rina Noviana²

¹Business Information System, Gunadarma University, Depok, Indonesia, Indonesia-16424

²Business Information System, Gunadarma University, Depok, Indonesia, Indonesia-16424

Email address: ¹y.pratamaputra97 @ gmail.com, ²rina_n @ staff.gunadarma.ac.id

Abstract— Digital Banking is a service in banking activities using electronic means so that customers can carry out banking transactions independently without having to visit a branchless banking. Digital Account Opening is a banking service created as a form of digital banking innovation to offer the convenience and convenience of opening savings by simply accessing a link or scanning a QR Code via a smartphone, opening an account digitally without the need to come to a branch. The purpose of this study was to determine the effect of variables from the Unified Theory of Acceptance and Use of Technology (UTAUT) model on the intention of potential customers to open accounts digitally. From the results of the Spearman's Rank correlation analysis with the help of the SPSS version 26 for Macbook application, it can be concluded that the variables of Performance Expectancy, Effort Expectancy, Social Influence, Facilitation Conditions have a positive effect on Behavior Intention to Use in the intention of potential customers to open accounts digitally. Performance Expectancy have a moderate correlation, while the other three variables have a strong correlation.

Keywords— Digital Banking, digital accounts, Spearman's Rank correlation, SPSS, UTAUT.

I. INTRODUCTION

Along with the rapid development of technology at this time, encouraging fierce competition in world business. Companies are required to determine strategies and innovate in order to survive in business competition, so that they can maintain customer satisfaction. Therefore, companies must have innovations and creative business ideas that make it easier to meet the needs of society.

Digital Account Opening is a banking service created as a form of digital banking innovation to offer the convenience and convenience of opening savings by simply accessing a link or scanning a QR Code via a smartphone, opening an account digitally without the need to come to a branch [1]. This service is relatively new, especially in banking in Indonesia, so an analysis of the intentions of potential customers in using digital account opening services is required [2].

The Unified Theory of Acceptance and Use of Technology (UTAUT) method is a method for measuring the behavioral intentions and intentions of technology users which was developed from 8 theories to 1, and the main variables were found, namely performance expectations, effort expectations, social influence, and facilitation conditions [3].

The intention to use behavior is someone's motivation to carry out or carry out certain behaviors. Behavior is also directly influenced by the attitude of using technology, users

will have the intention to use it if users of technology are positive about the technology used and have positive values for their work and vice versa.

Based on the description above, this study identifies and explains the factors that affect prospective customers in opening accounts digitally. This research uses the UTAUT model which contains the performance expectancy, effort expectancy, social influence, and facilitation conditions. Data management used validity tests, reliability tests, and analysis was carried out using the Spearman's Rank with the help of the Statistical Package for Social Science (SPSS) application version 26 for the Macbook.

II. STUDY LITERATURE

A. Analysis

Analysis of an activity investigating an event to look for a pattern, besides analysis is a way of thinking by systematic testing to determine the relationship between parts and the total [4]. Analysis does not have a specific method that is suitable to be followed, but looks for a method that is felt by its research.

B. Digital Account

Digital Banking services use electronic means that allow Bank Customers to obtain information, communicate, register, carry out banking transactions, and close accounts [5]. Digital account is a digital banking service that offers easy opening an account by simply accessing a link or scanning a QR Code or mobile banking application, opening an account does not need to be in a branch.

C. Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) is the development of 8 models of technology acceptance by Venkatesh, namely theory of reasoned action (TRA), technology acceptance model (TAM), motivational model (MM), theory of planned behavior (TPB), combined TAM and TOB, model of PC utilization (MPTU), innovation diffusion theory (IDT) and social cognitive theory (SCT). This model measures the behavioral intention of technology users with 4 main variables: performance expectancy, effort expectancy, social influence, and facilitating conditions.

D. Behavioral Intention To Use

Behavioral intention is a person's motivation or intention in carrying out a certain behavior. A person will carry out a

behavior if he has the motivation or intention to carry out. Previous studies have shown that behavioral intention is a good predictor of technology use by technology users. Users will have an intention to use if the attitude of the technology user is positive towards the technology that has been used and the technology is felt to have a positive value to his work, and conversely, the user will not have the intention to use if the attitude of the technology user is negative towards the technology that has been used and the technology does not have positive value even the technology is felt to have a negative value to his work [6].

E. Likert Scale

Scales are tiered measures. Likert scale is a tool to measure and collect data to assess something with tiered choices, for example 0-10. The measurement method used to measure the attitudes, opinions and perceptions of a person or group about social phenomena [7]. The Likert scale is used to measure a person's agreement and disagreement with an object, which levels can be arranged, namely strongly agree, agree, neutral, disagree, and strongly disagree.

F. Validity Test

Validity shows the extent to which a tool is able to measure something that should be measured [8]. A valid instrument means that the instrument can be used to measure what it is supposed to measure. This test was conducted to find out the statements in the questionnaire can be understood by the respondents so that they can provide appropriate answers. This test aims to determine the accuracy of the instruments prepared.

G. Reliability Test

Reliability test is a tool to measure a questionnaire which is an indicator of a variable. Reliability is a measurement that repeatedly produces the same or consistent data [8]. Reliability has various other meanings such as trust, exemplary, or stable.

H. Spearman's Rank Correlation Test

The Spearman's Rank Correlation Test is used to measure the relationship between two variables where both variables are in the form of ratings [9]. In the correlation analysis, there is no term independent variable (X) or dependent variable (Y). Thus, it can be interpreted that the two correlated variables are independent of each other, meaning that each variable stands alone and does not depend on each other. The purpose of Spearman's Rank correlation analysis is to see the level of strength of the relationship between two variables, to see the direction of the relationship between two variables, to see whether the relationship is significant or not.

III. RESEARCH METHODS

This study uses the framework shown in Figure 1. Based on Figure 1, the stages are described to facilitate research, with detailed explanations of the steps as follows:

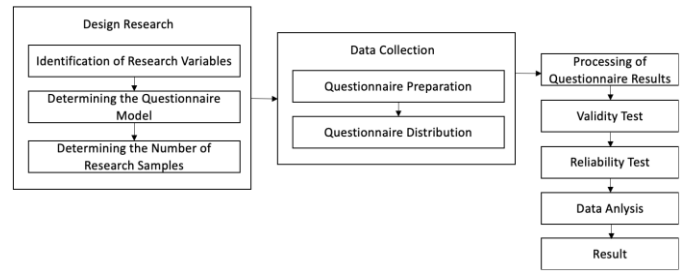


Fig. 1. Research Steps

1. Design Research

Identify and formulate research variables in the form of questions answered for research purposes. The determination of the questionnaire model must be relevant to the research objectives, its definition must be clear and good, and the data obtained is easy to process. The sample used in this study is prospective customers in opening digital accounts, as many as approximately 100 people.

2. Data Collection

After determining the research variables, a questionnaire was compiled using the Google Form (Online) feature, a questionnaire containing 20 questions distributed to prospective customers via social media.

3. Processing of Questionnaire Results

Data collection is complete, then data processing is carried out. Manage data so that the data information presented is easier for interpretation and further analysis. Processing the data from the questionnaire results by testing the validity test, and testing the reliability. Then, data analysis was performed using descriptive analysis and Spearman's Rank correlation analysis. All testing and analysis techniques were assisted by using the Statistical Package for Social Science (SPSS) version 26 for Macbook application. The results of testing and analysis can conclude the influential variables and the significance value and level of correlation between the influential variables.

The variables used in this study consisted of independent/independent variables and dependent/dependent endogenous variables. The independent variables in this study are performance expectancy, effort expectancy, social influence, facilitating conditions. While the dependent variable used is behavioral intention.

The first analysis used in this study is the validity test. In testing the validity of each item in the questionnaire, the r-count with the r-table is compared. If r-count > r-table then the variable is considered valid, and vice versa if r-count < r-table then it is invalid [7].

The second analysis is the reliability test. This test is carried out when all variables are declared valid. If the Cronbach Alpha value > 0.60 then the variable is declared reliable, and vice versa if the Cronbach Alpha value < 0.600 then the variable is declared unreliable [8].

The third test is the Spearman's Rank correlation test, this test is used to measure the relationship between two variables where both variables are in the form of rank (rank) [9].

The basis for decision making is in Spearman's Rank correlation, if the significance value is < 0.05 then it is correlated, while if the significance value is > 0.05 then it is not correlated. The criteria for the direction of the relationship between two variables, if the correlation coefficient value is positive, then the relationship between the two variables is unidirectional, while if the correlation coefficient value is negative, then the relationship between the two variables is not unidirectional.

IV. RESULT

The research that has been done is distributing questionnaires with the results of 129 prospective customer respondents. The results of this test use the SPSS version 26 application for Macbook.

A. Validity Test

The validity test was carried out by comparing the values of r-count and r-table, in this study the number of samples used (n) = 129 and alpha = 0.05, obtained r-table = 0.176. All variables shown in Table I are all declared valid because r-count is greater than r-table.

TABLE I. Validity Test Result

Variable	Indicator	R-Count	R-Table	Information
Performance Expectancy (PE)	PE1	0,621	0,176	Valid
	PE2	0,614	0,176	Valid
	PE3	0,575	0,176	Valid
	PE4	0,664	0,176	Valid
Effort Expectancy (EE)	EE1	0,703	0,176	Valid
	EE2	0,629	0,176	Valid
	EE3	0,680	0,176	Valid
	EE4	0,502	0,176	Valid
Social Influence (SI)	SI1	0,760	0,176	Valid
	SI2	0,799	0,176	Valid
	SI3	0,495	0,176	Valid
	SI4	0,627	0,176	Valid
Facilitating Condition (FC)	FC1	0,473	0,176	Valid
	FC2	0,581	0,176	Valid
	FC3	0,575	0,176	Valid
	FC4	0,617	0,176	Valid
Behavioral Intention to Use (BIUS)	BIUS1	0,804	0,176	Valid
	BIUS2	0,784	0,176	Valid
	BIUS3	0,670	0,176	Valid
	BIUS4	0,730	0,176	Valid

B. Reliability Test

After all variables are declared valid, then the reliability test is done by looking at the Cronbach Alpha value > 0.60 . All variables shown in Table II are declared reliable because the Cronbach Alpha value is more than 0.60 so that all variables are feasible to use.

C. Reliability Test

Hypothesis testing uses Spearman's Rank correlation test to see the level of strength of the relationship between two variables, see the direction of the relationship, and see whether the two relationships are significant or not.

1. First Hypothesis

The first hypothesis (H1) is the effect of Performance Expectancy on Behavior Intention to Use in the intention of prospective customers to open a digital account. The results of

the analysis can be seen in Figure 2.

TABLE II. Reliability Test Result

Variable	Indicator	Cronbach Alpha	Ket
Performance Expectancy (PE)	PE1	0,918	Reliable
	PE2	0,918	Reliable
	PE3	0,919	Reliable
	PE4	0,917	Reliable
Effort Expectancy (EE)	EE1	0,916	Reliable
	EE2	0,918	Reliable
	EE3	0,917	Reliable
	EE4	0,922	Reliable
Social Influence (SI)	SI1	0,915	Reliable
	SI2	0,914	Reliable
	SI3	0,923	Reliable
	SI4	0,918	Reliable
Facilitating Condition (FC)	FC1	0,922	Reliable
	FC2	0,919	Reliable
	FC3	0,919	Reliable
	FC4	0,918	Reliable
Behavioral Intention to Use (BIUS)	BIUS1	0,913	Reliable
	BIUS2	0,914	Reliable
	BIUS3	0,918	Reliable
	BIUS4	0,915	Reliable

Correlations

Spearman's rho	Performance Expectancy	Correlation Coefficient	Performance Expectancy	Behavioral Intention to Use
			1,000	.593**
		Sig. (2-tailed)		0,000
		N	129	129
	Behavioral Intention to Use	Correlation Coefficient	.593**	1,000
		Sig. (2-tailed)	0,000	
		N	129	129

** Correlation is significant at the 0.01 level (2-tailed).

Fig. 2. Results of Analysis of Performance Expectancy Variables with Behavioral Intention to Use

Based on the results of the analysis above, it is known that the significance value is 0.000, because the significance value is $0.000 < \text{less than } 0.05$, it means that both relationships are significant.

The level of strength of the two relationships, the Correlation Coefficient number is 0.593. That is, the level of correlation between variables is moderate.

The direction of the relationship between the two variables, the Correlation Coefficient number is positive, namely 0.593, so that the relationship between the two variables is unidirectional, thus it can be interpreted that Performance Expectancy is increased, Behavioral Intention to Use will increase.

2. Second Hypothesis

The second hypothesis (H2) is the effect of Effort Expectancy on Behavior Intention to Use in the intention of prospective customers to open a digital account. The results of the analysis can be seen in Figure 3.

Correlations

Spearman's rho	Effort Expectancy	Correlation Coefficient	Effort Expectancy	Behavioral Intention to Use
			1,000	.657**
		Sig. (2-tailed)		0,000
		N	129	129
	Behavioral Intention to Use	Correlation Coefficient	.657**	1,000
		Sig. (2-tailed)	0,000	
		N	129	129

** Correlation is significant at the 0.01 level (2-tailed).

Fig. 3. Results of Effort Expectancy Variable Analysis with Behavioral Intention to Use

Based on the results of the analysis above, it is known that the significance value is 0.000, because the significance value is $0.000 < \text{less than } 0.05$, it means that both relationships are significant.

The level of strength of the two relationships, the Correlation Coefficient number is 0.657. That is, the level of correlation between variables is strong.

The direction of the relationship between the two variables, the Correlation Coefficient number is positive, namely 0.657, so that the relationship between the two variables is unidirectional, thus it can be interpreted that if Effort Expectancy is increased, Behavioral Intention to Use will increase.

3. *Third Hypothesis*

The third hypothesis (H3) is the influence of Social Influence on Behavior Intention to Use in the intention of prospective customers to open accounts digitally. The results of the analysis can be seen in Figure 4.

		Social Influence	Behavioral Intention to Use
Spearman's rho	Social Influence	1,000	.738**
	Correlation Coefficient		
	Sig. (2-tailed)	0,000	
	N	129	129
Behavioral Intention to Use	Behavioral Intention to Use	.738**	1,000
	Correlation Coefficient		
	Sig. (2-tailed)	0,000	
	N	129	129

** Correlation is significant at the 0.01 level (2-tailed).

Fig. 4. Results of Analysis of Social Influence Variables with Behavioral Intention to Use

Based on the results of the analysis above, it is known that the significance value is 0.000, because the significance value is $0.000 < \text{less than } 0.05$, it means that there are two significant relationships.

The level of strength of the two relationships, the Correlation Coefficient number is 0.738. That is, the level of correlation between variables is strong.

In the direction of the relationship between the two variables, the Correlation Coefficient number is positive, namely 0.738, so that the relationship between the two variables is unidirectional, thus it can be interpreted that if Social Influence is increased, Behavioral Intention to Use will increase.

4. *Fourth Hypothesis*

The fourth hypothesis (H4) is the effect of the Facilitating Condition on Behavior Intention to Use in the intention of prospective customers to open accounts digitally. The results of the analysis can be seen in Figure 5.

		Facilitating Condition	Behavioral Intention to Use
Spearman's rho	Facilitating Condition	1,000	.647**
	Correlation Coefficient		
	Sig. (2-tailed)	0,000	
	N	129	129
Behavioral Intention to Use	Behavioral Intention to Use	.647**	1,000
	Correlation Coefficient		
	Sig. (2-tailed)	0,000	
	N	129	129

** Correlation is significant at the 0.01 level (2-tailed).

Fig. 5. Results of Variable Analysis of Facilitating Condition with Behavioral Intention to Use

Based on the results of the analysis above, it is known that

the significance value is 0.000, because the significance value is $0.000 < \text{less than } 0.05$, it means that there are two significant relationships.

The level of strength of the two relationships, the Correlation Coefficient number is 0.647. That is, the level of correlation between variables is strong.

In the direction of the relationship between the two variables, the Correlation Coefficient number is positive, namely 0.647, so that the relationship between the two variables is unidirectional, thus it can be interpreted that if Social Influence is increased, Behavioral Intention to Use will increase.

V. CONCLUSION AND SUGGESTION

A. *Conclusion*

Based on the data obtained from the distribution of questionnaires with 129 respondents. The data has been tested for validity & reliability, and is proven to have passed.

From the results of hypothesis testing, it can be concluded that the variable Performance Expectancy or Effort Expectancy or Social Influence or Facilitating Condition has an effect on Behavior Intention to Use in the intentions of prospective customers in opening digital accounts.

The variables that are very influential in the application of the UTAUT model to analyze the intentions of prospective customers in opening an account online are the Effort Expectancy, Social Influence, and Facilitating Condition variables, because the correlation is strong. Meanwhile, the Performance Expectancy variable has a moderate correlation.

The direction of the relationship between the variables Performance Expectancy or Effort Expectancy or Social Influence or Facilitating Condition, the correlation value is positive, so the relationship between the variables and Behavior Intention to Use is unidirectional, it can be interpreted that if the four UTAUT variables are increased, the intention of the Behavior Intention to Use variable will increase.

B. *Suggestion*

Suggestions that can be given from the results of this study are for further research to consider adding other variables that if it can explain the results of the study, it is recommended to use more samples and complete the analysis with other methods and use different theories.

REFERENCES

- [1] Abdus S. Dz, "Inklusi Keuangan Perbankan Syariah Berbasis Digital-Banking: Optimalisasi dan Tantangan", Al-Amwal, Vol. 10, No. 1, 2018.
- [2] M. D. Irawan, "Pengaruh Kualitas Layanan Pembukaan Rekening Online Melalui Mobile Banking Mandiri Syariah Mobile Terhadap Kepuasan Nasabah Di Area Surabaya Kota", Available at: <http://repository.unair.ac.id/100051/> [Accessed 29 March 2021], 2020.
- [3] Venkatesh, V., Morris, M. G., Davis, G. B., and Davis F. D, "User Acceptance of Information Technology", MIS Quarterly, Vol. 27, No. 3, pp. 425-478, 2003.
- [4] Sugiyono, "Metode Penelitian Kombinasi (Mix Methods)", Bandung: Alfabeta, 2015.
- [5] Otoritas Jasa Keuangan, "Panduan Penyelenggaraan Digital Branch oleh Bank Umum", Available at: <https://www.ojk.go.id/id/kanal/perbankan/>

- Pages/Panduan-Penyelenggaraan-Digital-Branch-oleh-Bank-Umum.aspx [Accessed 01 December 2020], 2016.
- [6] Amirul M., Rizal R., dan Herry W., "Penerapan Model UTAUT untuk Perilaku Pengguna "PAYLATER" di dalam Traveloka", *Jurnal Computer & Bisnis*, Vol. 13, No. 2, pp. 81-90, 2019.
- [7] Sugiyono, "Metode Penelitian Kuantitatif. Kualitatif dan R&D", Bandung: Alfabeta, 2013.
- [8] Sugiyono, "Metode Penelitian Administrasi", Bandung: Alfabeta, 2012.
- [9] Celine A. H., Bambang S., dan Asro N., "Penerapan Model UTAUT2 untuk Mengevaluasi Aplikasi Ruang Guru", *Jurnal Teknologi Informasi*, Vol. 3, No. 2, e-ISSN: 2615-2738, 2019.