International Journal of Application on Sciences, Technology and Engineering (IJASTE)
Volume 1, Issue 1, 2023. ISSN 2987-2499

Factors Affecting Digital Banking Customer Satisfaction in Indonesia

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Submitted: November-December 2022, Revised: January 2023, Accepted: February 22, 2023

ABSTRACT

This paper aims to determine the factors that influence the satisfaction of using digital banking. The method used is UTAUT (Model Unified Theory of Acceptance and Use of Technology) 2 Modification to help specify variables such as Responsiveness, Usefulness, Ease of Use, History, Access Control, Data Privacy, Assurance, etc. Trust, Quality Transaction, User Intention, and User Satisfaction. This research collects data in a questionnaire distributed to digital banking users through a non-probability sampling method using a data collection technique, namely, snowball sampling. For information, the number of respondents obtained is 410 respondents, of which 56% are male and 44% are female. Further analysis concluded that the various variables significantly affect user satisfaction in using digital banks. For example, the access control variable has a value of 3.453 (on t-statistics), which shows that the access control variable has a significant value among other variables.

INTRODUCTION

The development of science and technology is increasingly encouraging efforts to renew the use of technology. It causes other economic factors, such as changes in characteristics, demand, and growth, to be urgently needed. [1]. According to Mr. Pieter Abdullah, the development of information technology has a global impact on banking. It was previously only centered on conventional and became the driving force for the national economy's movement towards digital. The banking industry has faced a competitive environment [2]. On the other hand, competition within the environment and across borders forces the banking industry to maximize financial performance in the future. For information, the banking industry is knowledge-intensive technological innovation and customer interaction [3]. It has a positive impact on the banking world in providing better and advanced services to its customers, namely by offering speed in transactions and the convenience and convenience of completing various financial and non-financial transactions online without requiring customers to come. and wait their turn at the bank [4]

RESEARCH METHODS

Theory

Digital banking is a digitalization or change from manual to automation with technology for all banking service activities and programs provided to customers. [5]

Online Banking + Mobile Banking = Digital Banking

Online banking is a banking service provided through a site where users can access the site from technology devices. Users can access it to check balances or pay for any transactions. In addition, users can

also access various other features, such as applying for loans, credit cards, etc. Online banking also allows users to handle multiple personal financial needs without leaving the place where they are. [6]. On the other hand, the definition of Mobile Banking is an application or software which used to access various banking features provided through technological devices such as smartphones or tablets. The application belongs to the bank and gives users who have accounts and use the same login access as the user's online banking portal if they go through the banking site in question. [6].

Security as a Service (SecaaS) was the package of security services. It delivers most of the security responsibilities by the providers. The benefits usually offered are authenticity, antivirus, anti-malware, intrusion detection systems, and system configuration of an incident. [7]. However, some of these things need to test more deeply, which ones are required or not by the companies that use them [8]. This research used the Extended UTAUT2 (Unified Theory of Acceptance and Use of Technology) model. The research model built was to analyze various factors or variables that affect the acceptance of a technology use [9]. This model was chosen because it can clearly and straightforwardly explain the research objectives between the intention of using the services and the user behavior, such as user satisfaction.

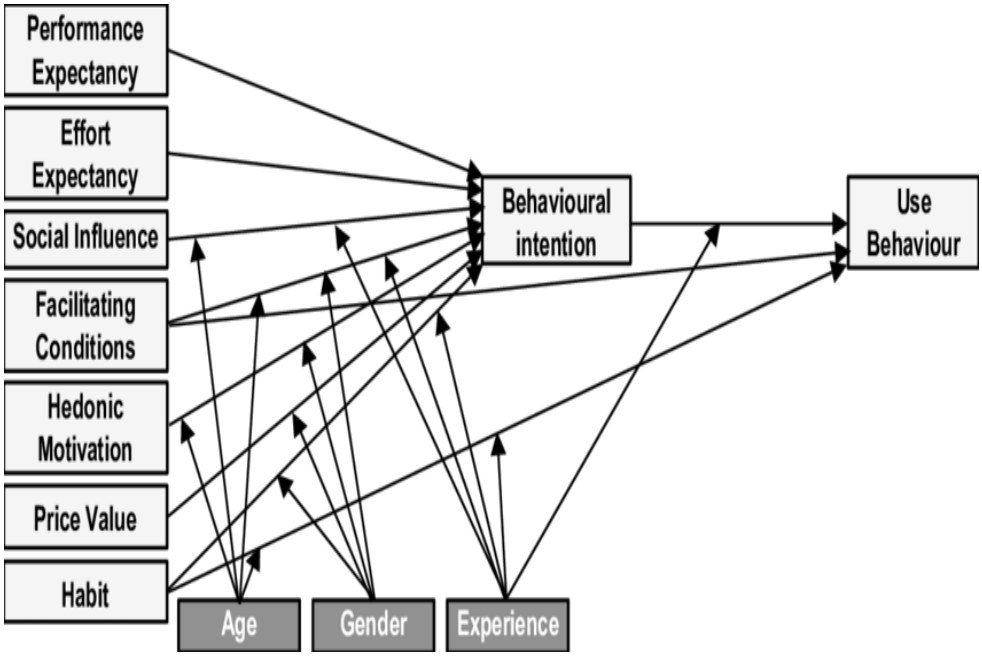

FIGURE 1. UTAUT 2 Model

In this study, the author uses a quantitative method, where the hypothesis used is an alleged quick answer based on the theory used to answer the identification of problems that arise. Tests are carried out on various predetermined variables to gain confidence in the variables in question. This population gets from users of cloud-based services. The sample receives from a part or representative of the population in question. Sampling in this study used a non-probability sampling technique, namely snowball sampling. The data used in this study is primary data from direct and indirect questionnaires to respondents who have used digital banking technology. Each question represents an indicator of the research variables. Due to currently still in a pandemic condition, the distribution of questions directly or indirectly is done by sharing a virtual link, in this case, a form on Google, to respondents through various social media and existing social networks [9]. In this study, the Likert scale used was (1) Strongly Disagree, (2) Disagree, (3) Disagree, (4) Moderately Agree, (5) Agree, and (6) Strongly Agree. The Likert has been used to determine the user's assessment of the questions. After the data was obtained and grouped by age, gender, occupation, and education, in this process, the author uses Microsoft Excel software to process acceptable and appropriate raw data to be followed up to the next test step. After the data processing is fine, the authors use SPSS to test the valid and reliable data provided and make the model with the SMART PLS software. [10].

Proposed Diagram

In this study, the Extended UTAUT2 model adding several independent variables: Trust [8], Access Control [10], Data Privacy [11], History [12], Assurance [13], Transaction Quality [7], and Response [14]. In addition, there are also three moderating variables, namely age, gender, and experience. Figure 2 below shows the model that will use in this research. The author tries to combine various variables taken from various previous journal references, in order to see whether the selected variables have an impact and influence if they are included as part of the desired model.

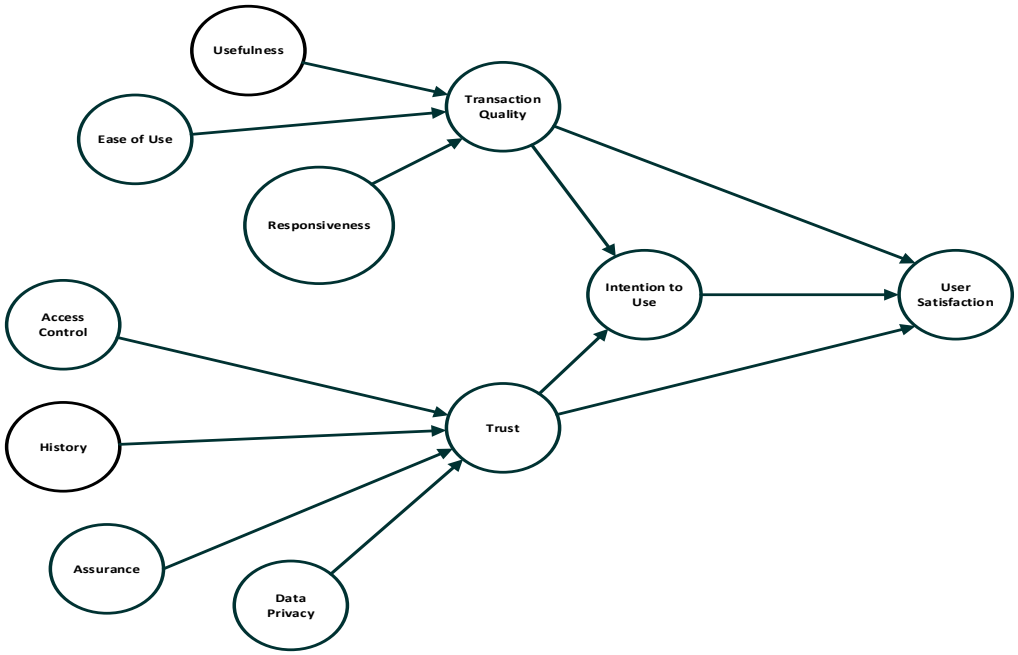

FIGURE 2. Proposed Model

Data Research

In this study, the respondents referred to are users who understand cloud computing. The questionnaires distribute online using Google Forms with a data collection period from January 6, 2021, to January 18, 2022. The number of respondents was 410 respondents. Demographics of respondents in this study include age, gender, education, occupation, domicile, and minimal understanding of digital banking. From the 410 respondents, there were 261 users under the age of 21-30 years old (approximately 63.66%), 99 users aged under 21 years old (about 24.15%), 44 users aged between 31 to 40 years old (10.73%), and six users between 41 to 50 years old (1.46%). In the results of the questionnaire analysis, the user is dominated by the male sex with a total of 230 respondents (56%), while the female gender is 180 respondents (44%). In terms of job status, 253 respondents from higher education (61.71%), 86 respondents from private employers (20.98%), 32 respondents from entrepreneurs (7.8%), 19 respondents from government companies (4.63%), eight respondents from the student (1.95%), eight respondents from government company (1.95%), and four respondents from housewife (0.08%). For the number of respondents who live in Indonesia, there are 310 respondents (approximately 75.61%) who lived in the Jabodetabek area (inside Java Island Area), and 26 respondents (approx. 6.34%) lived outside of Jabodetabek Area (inside Java Island Area), 70 respondents (approx. 17.07%) lived at the outside of Java Island Area. Four respondents (approx. 1%) lived outside the Indonesian Area. Of the 410 respondents who used digital banking, 294 respondents used Blu services by BCA (71.7%), 65 respondents used Jago services by Bank Jago (15.85%), and the rest used Jenius services by BTPN (around 12.45%).

Research Hypothesis

TABLE 1. Hypothesis Description

Hypothesis	Description
H1	Assurance has a significant effect on the Trust Factor
H2	Access Control has a significant effect on the Trust Factor
H3	Data Privacy has a significant effect on the Trust Factor
H4	Ease of Use has a significant effect on the Quality Transaction Factor
H5	History has a significant effect on the Trust Factor
H6	Responsiveness has a significant effect on the Quality Transaction Factor
H7	Usefulness has a significant effect on the Quality Transaction Factor
H8	Trust has a significant effect on the User Intention Factor
H9	Trust has a significant effect on the User Satisfaction Factor
H10	Quality Transaction has a significant effect on the User Intention Factor
H11	Quality Transaction has a significant effect on the User Satisfaction Factor
H12	User Intention has a significant effect on the User Satisfaction Factor

Variables and Symbol

TABLE 2. Variable, Symbol, and Sources

	Variable	Sources
	Responsiveness	(Albarg, 2013)
	Usefulness	(Tyas & Darma, 2017)
	Ease of Use	(Tyas & Darma, 2017)
	History	KBBI
	Access Control	(Sandhu & Samarati, 1994)
	Assurance	(Supriyanto, 2010)
	Data Privacy	(Kominfo)
	Transaction Quality	(Blut, 2007)
	User Intention	(Davis, 1989)
	Trust	(Juniwati, 2015)
	User Satisfaction	Barbara H. Wixson, 2005)

RESULT AND DISCUSSION

Research Path Diagram

The writing process in the research carried out begins with making a path diagram model [11]. The path diagram model consists of several exogenous variables such as Responsiveness (R) [12], Usefulness (U) [12], Ease of Use (EU) [13] [14], History (H), Access Control (AC) [15], Assurance (A) [16], Data Privacy (DP) [17], then the intervening variable is Quality Transaction (TQ), Trust (T) and Intention to Use (EU) [18] and endogenous variables, namely User Satisfaction (US) [18].

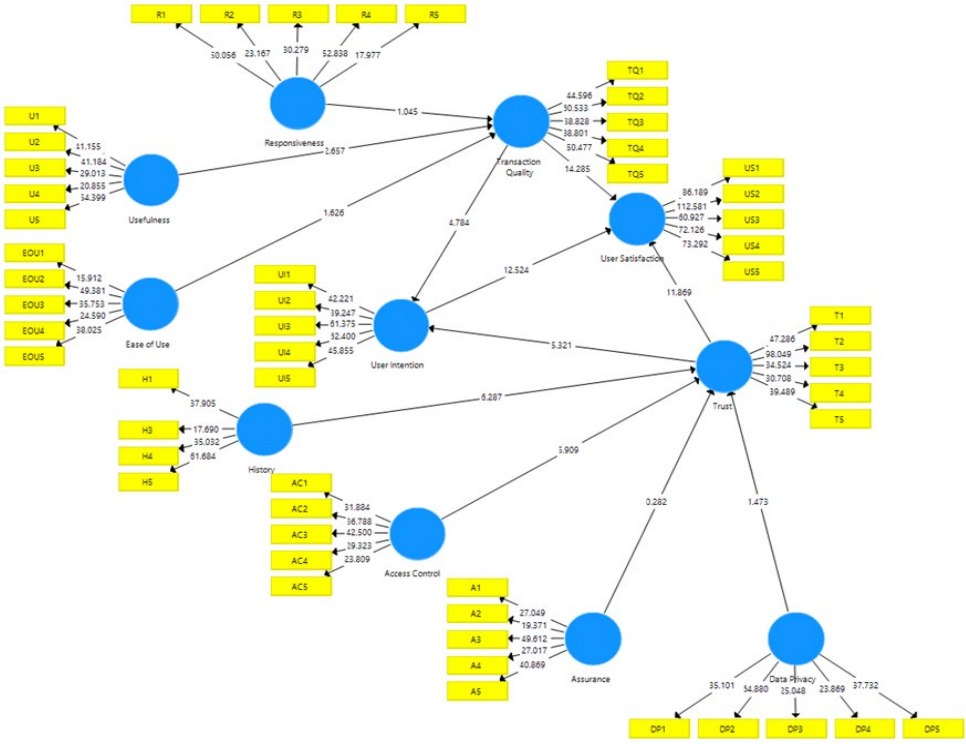

Figure 2. Path Diagram

Construct Reliability and Validity Result

After the formation of the model, the following testing stage is to measure the *Cronbach Alpha (CA), Composite Reliability (CR),* and *Average Variance Extracted (AVE)* values owned by each exogenous and endogenous variable. If the entered AVE value is more than or equal to 0.5, it indicates that the construction average explains more than half of the variance of the indicator [19]

TABLE 3. Construct Reliability

	Cronbach's Alpha	Composite Reliability	Rule of Thumbs	Average Variance Extracted (AVE)	Rule of Thumbs	Result	
						CA/CR	AVE
A	0.903	0.928	> 0.7	0.722	> 0.5	Reliable	Valid
AC	0.863	0.902	> 0.7	0.648	> 0.5	Reliable	Valid
DP	0.927	0.945	> 0.7	0.775	> 0.5	Reliable	Valid
EoU	0.873	0.908	> 0.7	0.664	> 0.5	Reliable	Valid
H	0.826	0.879	> 0.7	0.594	> 0.5	Reliable	Valid
R	0.895	0.923	> 0.7	0.705	> 0.5	Reliable	Valid
T	0.927	0.945	> 0.7	0.774	> 0.5	Reliable	Valid
TQ	0.941	0.955	> 0.7	0.809	> 0.5	Reliable	Valid
U	0.893	0.919	> 0.7	0.655	> 0.5	Reliable	Valid
UI	0.924	0.942	> 0.7	0.766	> 0.5	Reliable	Valid
US	0.952	0.963	> 0.7	0.839	> 0.5	Reliable	Valid

Based on Table 3 above, the Construct Reliability test result shows that each study variable has a value of more than 0.7 and 0.5 [20]. It indicates that each variable tested offers reliability and validity in the study [21].

Path Coefficient Result

TABLE 4. Hypothesis and T-Test

Hypothesis	Path Variables	Original Sample (O)	T Statistics (|O/STDEV|)	Result
H1	A → T	-0.019	0.282	Not Sig.
H2	AC → T	0.364	5,909	Sig..
H3	DP → T	-0.093	1,473	Not Sig.
H4	EoU → TQ	0.191	1,626	Not Sig.
H5	H → T	0.480	6,287	Sig.
H6	R → TQ	0.205	1,045	Not Sig.
H7	U -> TQ	0.460	5,321	Sig.
H8	T → UI	0.375	11,869	Sig.
H9	T → US	0.454	4,784	Sig.
H10	TQ → UI	0.327	14,285	Sig.
H11	TQ → US	0.379	2,657	Sig.
H12	UI → US	0.382	12,524	Sig.

To analyze whether each exogenous variable has a strong influence or on endogenous variables, the standard value used as a reference is the path coefficient value above 0.1 (indicated by the original sample in table 4) and the t-statistic value, which must be greater than 1,96 (95% confidence scale) [22].

Hypothesis Result

TABLE 6. Conclusion of Hypothesis Testing

Hypothesis	Description	Result
H1	Assurance has a significant effect on the Trust Factor	**H Null accepted**, and **H Alt. rejected**
H2	Access Control has a significant effect on the Trust Factor	**H Null rejected,** and **H Alt. accepted**
H3	Data Privacy has a significant effect on the Trust Factor	**H Null accepted,** and **H Alt. rejected**
H4	Ease of Use has a significant effect on the Quality Transaction Factor	**H Null accepted,** and **H Alt. rejected**
H5	History has a significant effect on the Trust Factor	**H Null rejected,** and **H Alt. accepted**
H6	Responsiveness has a significant effect on the Quality Transaction Factor	**H Null accepted,** and **H Alt. rejected**
H7	Usefulness has a significant effect on the Quality Transaction Factor	**H Null rejected,** and **H Alt. accepted**
H8	Trust has a significant effect on the User Intention Factor	**H Null rejected,** and **H Alt. accepted**
H9	Trust has a significant effect on the User Satisfaction Factor	**H Null rejected,** and **H Alt. accepted**
H10	Quality Transaction has a significant effect on the User Intention Factor	**H Null rejected,** and **H Alt. accepted**
H11	Quality Transaction has a significant effect on the User Satisfaction Factor	**H Null rejected,** and **H Alt. accepted**
H12	User Intention has a significant effect on the User Satisfaction Factor	**H Null rejected,** and **H Alt. accepted**

CONCLUSION

Conclusion

Based on the research conducted, several factors that significantly influence and become the satisfaction of digital banking users, including Access Control (AC), History (H), Usefulness (U), Trust (T), and Quality Transaction (TQ) factor, while those that do not affect are the Assurance (A), Data Privacy (DP), Ease of Use (EU) and Responsiveness (R) factor. In terms of model fit, the model is categorized as a fit model under what is desired in the study. It is indicated by the SRMR with the value of 0.097 for the estimated model and 0.063 for the saturated model and is still below the required conditions less than 0.1 or 0.08 [23]. Several things might be explored: digital banking users' patterns and behavior towards the assurance and data privacy attached to the technology. It can explain why assurance and data privacy are not essential factors will be well explained later.

Acknowledgment

The Research and Technology Transfer Office supports this work, Bina Nusantara University, as a part of Bina Nusantara University's International Research Grant entitled Application of Cloud Computing Management Systems for Creative Industries: Studies on Micro and Small Enterprises in Indonesia with contract number: No.026/VR.RTT/IV/2020 and contract date: April 6, 2020.

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