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The Role of Trust in Mediation the Effect of Perception of Ease of Use and Perception of Usefulness on Intention to Re-Using the Mobile Banking Service



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Abstract

The purpose of this study was to examine and explain the role of trust in mediating the effect of perceived ease of use and perceived usefulness on the intention to reuse mobile banking on the BNI Mobile Banking application. This research is categorized as an associative quantitative research conducted in Denpasar City. Data consists of 160 samples, collected by distributing questionnaires containing open and closed questions and statements that have been tested for validity and reliability. The analysis technique used is the Structural Equation Model (SEM) using an analysis tool in the form of SmartPLS 3.0 software. The results of this study indicate that perceived ease of use and perceived usefulness have a positive and significant effect on intention to reuse, and trust has a positive and significant effect on intention to reuse as well as partially mediate the relationship between perceived ease of use and perceived usefulness with intention to reuse to the BNI Mobile Banking application in Denpasar City.

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1 Introduction

Technological developments in various fields are running very fast, including in banking services. In general, the Bank uses branch office channels, call centers, and e-banking facilities to interact and provide services to its customers. E-Banking provides many benefits for customers, banks, and authorities. For customers, e-banking provides convenience for transactions in terms of time, place and cost. According to OJK, the benefits of e-banking for banks are to increase fee-based income and reduce operational costs when compared to transaction services through relatively large branch offices to pay employees, building rent, security, electricity, and others. For the authorities, the development of e-banking technology encourages the realization of a less cash society (Verma & Sinha, 2018; Ray & Dasgupta, 2019; Josephine, 2021).

Through access to SMS banking, internet banking and mobile banking services, customers can use non-financial features such as balance information and account mutations, and for financial services such as making transfers, bill payments, purchasing prepaid vouchers, top up e-wallet and others that can be done at any time. As long as it has a connection to the internet network and specifically for SMS banking applications, there must be credit on the user's cellphone. In accordance with the Financial Services Authority Regulation No.12/POJK.03/2018 of 2018 concerning the Implementation of Digital Banking Services by Commercial Banks, it is explained that mobile banking is part of digital banking. Based on the regulations of Bank Indonesia and the Financial Services Authority (OJK), mobile banking is included as a digital banking application (digital banking).

Mobile banking is part of digital banking with banking product services using mobile phones with ease that can be accessed anywhere and anytime to perform various types of transactions without having to come to the bank or ATM (Purwanto & Mutahar, 2020). Using mobile banking is one way to support Bank Indonesia's (BI) program, namely the National Non-Cash Movement (GNNT). Bank Indonesia (BI) noted that the value of digital banking transactions in July 2021 grew 53.08 percent (year on year) and transaction volume grew 56.07 (year on year). This development indicates increasing public expectations and preferences for the need for economic transactions and digital banking amid the COVID-19 outbreak (Antaranews.com, 2021). The rapid pace of digitalization encourages banks to carry out transformations so that operations can take place effectively and efficiently (www.bi.go.id).

PT. Bank Negara Indonesia (Persero) Tbk. hereinafter abbreviated as BNI, is one of the SOEs engaged in banking. BNI is currently focusing on transforming to go digital. Reporting from the BNI website (www.bni.co.id, 2021) the acceleration of BNI's digitalization transformation focuses on transactional banking, Application Programming Interface or API Digital services and increasing mobile banking capabilities. BNI Mobile Banking service is prepared as a service facility for retail customers. Quoted from Antaranews.com, year on year transaction growth in BNI Mobile Banking reached 54.2 percent, transaction volume grew 31.8 percent and users grew 56.82 percent in the second quarter of 2021. With various features provided by BNI Mobile Banking services expected to meet various customer transaction needs. Based on the Bank Service Excellence Monitor (BSEM) 2021 survey conducted by Marketing Research Indonesia (MRI), BNI Mobile Banking is the best banking service provider application among other national banks (Kumparan.com, 2021), but in terms of active users of BNI Mobile Banking is in fourth place (Liputan6.com, 2021).

To get a direct picture of the use of BNI Mobile Banking services, interviews were conducted with 30 BNI customers using BNI Mobile Banking in Bali. As many as 30 respondents answered that they already had the BNI Mobile Banking application, and 28 respondents used the application at least 3 times in the last 3 months which reflects that the respondents have been using the BNI Mobile Banking application for a long time. Based on the results of interviews, for ease of use 25 respondents answered agree and 5 respondents answered no, while for the effect of perceived usefulness 27 respondents answered agree and the rest did not (Sharma & Sharma, 2019; Shareef et al., 2018; Wu & Wang, 2005). These results indicate that the majority of respondents agree that the ease of use and perceived usefulness affect the intention to reuse BNI Mobile Banking. Based on the results of the pre-survey, it was also found that trust is one of the important factors influencing the desire to reuse BNI Mobile Banking, with all respondents giving agreeable answers. This means that the higher the trust, the higher the desire to reuse BNI Mobile Banking. Presurvey results also show that 26 respondents have the intention to reuse BNI Mobile Banking and 4 respondents answered no.

Previous studies related to the adoption of information technology were carried out using the TAM theory approach. It can be seen that TAM has been adopted and expanded to include many factors in the field of mobile internet or similar mobile systems such as mobile commerce, mobile payment and mobile shopping (Alalwan et al., 2018).

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According to Mansour (2016), TAM is the most commonly used model and has been validated in explaining customer beliefs, attitudes, intentions, and behavior in relation to information technology applications. Modification of the TAM theory by using additional variables has been carried out in various studies such as those conducted by Hanafizadeh et al. (2014), in the context of e-wallet with the addition of trust and pleasure variables, Nelwan et al. (2021), with the trust variable in his research on mobile banking and internet banking, in the context of mobile banking Alalwan et al. (2018), added the variables of pleasure, innovation and trust, and Akbari et al. (2020), in the context of acceptance of 5G technology by using trust as a mediating variable between perceived ease of use and perceived usefulness on intention to use. Empirical results from previous studies (Madhavaiah & Bashir, 2015; Alalwan et al., 2017; Alalwan et al., 2018; Giovanis et al., 2019; Dewi et al., 2020; Miandari et al., 2021; Rahmayanti et al., 2021; Nelwan et al., 2021; Nonis, 2022), which uses the TAM theory with variables of perceived ease of use, perceived usefulness, belief and behavioral intentions showing varying results, or there are differences. -differences in perception that affect consumer or customer intentions towards the use of new technology.

Alalwan et al. (2017) in his empirical study of the factors that influence the adoption of mobile banking among bank customers in Jordan found that perceived ease of use is the main predictor of using mobile banking services, as in Daniyan-Bagudu et al. (2017), in the context of internet banking, Purwanto & Mutahar (2020), in their research on mobile banking users, Hanafizadeh et al. (2014), in their study of mobile wallets and Troise et al. (2020) regarding online food delivery that combines TAM and Theory of Planned Behavior (TPB), found a significant positive relationship with the effect of ease of use on intention to use. Different results in the study of Alalwan et al. (2018), perceptions of ease of use have no effect on intentions to use mobile internet services, Madhavaiah & Bashir (2015), in the internet banking context, as well as on mobile banking services (Santos et al., 2020).

Research Giovanis et al. (2019), regarding the adoption of mobile banking services found that perceived usefulness has the effect of increasing customer intention to use mobile banking services, perceived usefulness will increase interest in using mobile internet. These results are also supported by research by Chawla & Joshi (2019), and Hanafizadeh et al., (2021), in which perceived usefulness has a significant influence on customer intentions to use mobile wallets. Results of other empirical studies (Yasa et al., 2022; Krishanan et al., 2016; Wida et al., 2016; Lai, 2016; Roh & Park, 2019; Sana et al., 2019; Aji & Dharmmesta, 2019; Ventre & Kolbe, 2020), found that perceived usefulness had a significant positive effect on intention to use, but in other studies (Santos et al., 2020; Troise et al., 2020; Purwanto & Mutahar, 2020; Nelwan et al., 2021), found that perceived usefulness has a positive but not significant effect on intention to use.

The results of a number of studies that seem inconsistent with the intention to use which are explained by the perceived ease of use and perceived usefulness variables indicate the need for the presence of other variables, one of which is the trust variable. Research conducted by Baganzi & Lau (2017), regarding the adoption of mobile money in Uganda found that trust reduces perceived risk and improves service performance expected by users. His research also reveals that trust can be a major mediating construct for studying behavioral intentions. In the research of Singh & Sinha (2019); Al-Sharafi et al. (2017); Mustika & Puspita (2020); Akbari et al. (2020), found that trust mediates positively and significantly the effect of perceived ease of use on intention to use, and research conducted by Al-Sharafi et al. (2017); Iqbal et al. (2018); Chawla & Joshi (2019); Akbari et al. (2020), found that trust mediates positively and significantly the effect of perceived usefulness on intention to use.

Al-Sharafi et al. (2017), conducted research related to the use of online banking services, with the variables of perceived ease of use, perceived usefulness and trustworthiness, the results of his research stating that perceived ease of use and perceived usefulness have a role in increasing trust, this is in line with the research of Akbari et al. (2020). Likewise, the easier a system is to use, the higher user trust will be (Kumar et al., 2018; Rahmayanti & Rahyuda, 2020; Ventre & Kolbe, 2020), and the more useful a system will be, the more user trust will increase (Iqbal et al., 2018; Safari et al., 2020; Nelwan et al., 2021).

Research conducted by Siyal et al. (2019), on barriers to m-banking adoption found that lack of awareness, trust and compatibility as well as risk perceived by customers are the main salient barriers to the use of mobile banking, and correcting these barriers will result in continued intention to use and increase the propensity of new mobile banking users. In a study conducted by Alalwan et al. (2018) regarding the adoption of mobile internet use in Saudi Arabia by expanding the TAM model with variables of perceived pleasure, innovation and trust, statistical results show that perceptions of pleasure, innovation and trust have a positive and significant impact on intention to use, the higher trust will increase interest in using the mobile internet. The empirical study of Nelwan et al. (2021), regarding the factors that influence the intention to reuse mobile banking and internet banking found that trust has a positive and significant influence on the intention to reuse mobile banking and internet banking, the results of this study are in line with

previous research (Chiu et al., 2017; Gao & Waechter, 2017; Khalilzadeh et al., 2017; Cho et al., 2019; Chawla et al., 2019; Nag & Gilitwala, 2019).

Based on the results of previous studies, the following research hypotheses were developed: H1: Perceived ease of use has a positive and significant effect on intention to reuse; H2: Perceived usefulness has a positive and significant effect on trust; H3: Perceived usefulness has a positive and significant effect on trust; H4: Perceived usefulness has a positive and significant effect on intention to reuse; H6: Trust mediates positively and significantly the effect of perceived ease of use on intention to reuse; H7: Trust mediates positively and significantly the effect of perceived usefulness on re-use intention.

2 Materials and Methods

The research design is associative and causal research with quantitative methods. The independent variables in this study are perceived ease of use (X1) and perceived usefulness (X2), the dependent variables in this study are trust (Y1) and intention to reuse (Y2). The location of this research is in Denpasar City, because according to data from the online news site Lokadata (2019) it is stated that in the 2018 BPS National Socio-Economic Survey, internet penetration is centered on the islands of Java and Bali. The percentage of users in Java is 40.29 percent and Bali 42.91 percent, the majority of which are in Denpasar City at 54.2 percent.

The population of this study is BNI's individual customers, users of mobile banking applications, and domiciled in Denpasar City. The sampling technique used is non-probability sampling with purposive sampling method. This study uses 16 indicators so that the sample size is 160 samples, obtained from 10 x 16 indicators. The requirements of the respondents in this study are individual BNI customers who use the BNI Mobile Banking application domiciled in Denpasar City, intend to reuse BNI Mobile Banking, and have a minimum education of high school or equivalent, with the intention that the respondent understands the contents of the questionnaire, and can answer the questionnaire independently. Data collection methods used in this study were interviews and questionnaires using google form. The data analysis technique used for this research is descriptive statistics and inferential statistics. This study uses the Structural Equation Model (SEM) method with the Partial Least Square (PLS) approach.

3 Results and Discussions

The results of the validity test that have been carried out show that all research instruments used to measure the variables of perceived ease of use, perceived usefulness, trustworthiness and intention to reuse have a correlation coefficient value with a total score of all statement items greater than 0.361. This shows that the statement items in the study are valid and feasible to be used as research instruments. The results of the reliability test show that all instruments have a Cronbach's Alpha coefficient greater than 0.6. So that it can be stated that all variables have met the requirements of reliability or reliability so that they can be used to conduct research.

The convergent validity test carried out is greater than 0.60, so it can be stated that the data in the study is valid and this means that the reflective indicator with the latent variable score has a good correlation. The results of the discriminant validity test using cross loading show that all cross-loading values for each indicator on each variable are greater than 0.50. Thus, it can be stated that the data in the study is valid, meaning that the latent variable has become a good comparison for the research model.

Table 1 Convergent validity test results using average variance extracted (AVE)

Variable	Average Variance Extracted (AVE)
Perceived Ease of Use (X1)	0.811
Perceived Usefulness (X2)	0.797
Trust (Y1)	0.854
Intention to Reuse (Y2)	0.902
Source: Primary data processed, 2022	

Prayudi, I. G., Sukaatmadja, I. P. G., Yasa, N. N. K., & Giantari, I. G. A. K. (2022). The role of trust in mediation the effect of perception of ease of use and perception of usefulness on intention to re-using the mobile banking service. International Research Journal of Management, IT and Social Sciences, 9(4), 482-493. https://doi.org/10.21744/irjmis.v9n4.2102

All AVE values of convergent validity are greater than 0.5. Thus, it can be stated that the data in the study are valid, which means that the latent variable is able to explain more than half of the variance of the indicators in the average.

Table 2 Validity test results using Fornell Larcker validity test

Variable	Trust (Y ₁)	Reuse Intention (Y ₂)	Perceived usefullness (X ₂)	Perceived ease of use (X_1)
Trust (Y1)	0.924			
Intention to Reuse (Y2)	0.835	0.950		
Perception of Usefulness (X2)	0.779	0.878	0.893	
Perceived Ease of Use (X1)	0.779	0.855	0.866	0.901

Source: Primary data processed, 2022

Discriminant validity in this study can also be seen from the value of the root square of average variance extracted (RSAVE) for each construct with a correlation between one construct and another. The test results show that the construct variables of perceived ease of use, perceived usefulness, trust and intention to reuse have met the criteria of discriminant validity. It can be seen from the square root value of AVE in bold which has a greater value than the correlation between constructs. The reliability test using Cronbach's Alpha and composite reliability of all constructs have good internal consistency to be used in the model test, so that the data in the research can be stated as reliable.

Table 3
Cronbach's Alpha reliability test results and composite reliability

Variables	Cronbach's Alpha	Composite Reliability
Trust (Y1)	0.957	0.967
Intention to Reuse (Y2)	0.946	0.965
Perception of Usefulness (X2)	0.915	0.940
Perceived Ease of Use (X1)	0.923	0.945

Source: Primary data processed, 2022

Table 4
R-square test results

	R Square	R Square Adjusted	
Trust (Y1)	0,651	0,646	
Intention to Reuse (Y2)	0,842	0,839	

Source: Primary data processed, 2022

The R-square value for the perceived ease of use variable and the perceived usefulness variable on trust is 0.651 which indicates that it has a large influence of 65.1 percent. The R-Square (R2) value of 0.651 confidence is a fairly strong model, meaning that the perceived ease of use and perceived usefulness variables are able to explain the confidence variable by 65.1 percent and the remaining 34.9 percent is explained by other factors outside the model. The R-square value for the variables of perceived ease of use, perceived usefulness and trust has a large influence of 84.2 percent. The R-Square (R2) value of intention to reuse is 0.842 including a fairly strong model which can be interpreted that the perceived ease of use, perceived usefulness and trustworthiness variables are able to explain the variable of intention to reuse by 84.2 percent and the remaining 15.8 percent is explained by factors other outside the model. Based on the calculation results, the Q-square value of 0.945 is greater than 0, so it can be concluded that the model has predictive relevance or the model deserves to be said to have relevant predictive values. The results of this test prove that the structural model is classified as very good. Based on the value of Q2, it can be interpreted that 94.5 percent of endogenous constructs can be explained by exogenous constructs, while the remaining 5.5 percent is explained by other variables not included in the model

Table 5
Direct effect test results

No.	Relationship between variables	Path Coef.	t Statistics	P Values	Information
1	Perceived Ease of Use (X1) -> Intention to Reuse (Y2)	0.246	2.095	0.037	Significant
2	Perceived Usefulness (X2) -> Intention to Reuse (Y2)	0.415	3.738	0.000	Significant
3	Perceived Ease of Use (X1) -> Trust (Y1)	0.418	3.044	0.002	Significant
4	Perceived Usefulness (X2) -> Trust (Y1)	0.417	2.975	0.003	Significant
5	Trust (Y1) -> Reuse Intention (Y2)	0.320	3.045	0.002	Significant

Source: Primary data processed, 2022

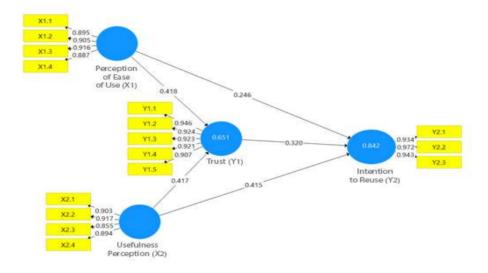


Figure 1. Structural model Source: Primary data processed, 2022

Testing the hypothesis on the effect of perceived ease of use on intention to reuse produces a regression coefficient value of 0.246, so perceived ease of use has a positive effect on intention to reuse. P-values of 0.037 which are smaller than 0.05 (0.037 < 0.05) indicate that perceived ease of use has a significant effect on intention to reuse. Thus, hypothesis 1 (H1) which states that perceived ease of use has a positive and significant effect on intention to reuse is accepted. Testing the hypothesis on the effect of perceived usefulness on intention to reuse produces a regression coefficient value of 0.415, so perceived usefulness has a positive effect on intention to reuse. P-values of 0.000 which are smaller than 0.05 (0.000 < 0.05) indicate that perceived usefulness has a significant effect on re-use intention. Thus, hypothesis 2 (H2) which states that perceived usefulness has a positive and significant effect on intention to reuse is accepted.

Hypothesis testing on the effect of perceived ease of use on trust produces a regression coefficient value of 0.418, so the perceived ease of use has a positive effect on trust. P-values of 0.002 which are smaller than 0.05 (0.002 < 0.05) indicate that perceived ease of use has a significant effect on trust. Thus, hypothesis 3 (H3) which states that perceived ease of use has a positive and significant effect on trust is accepted. Hypothesis testing on the effect of perceived usefulness on trust produces a regression coefficient value of 0.417, so perceived usefulness has a positive effect on trust. P-values of 0.003 which are smaller than 0.05 (0.003 < 0.05) indicate that perceived usefulness has a significant effect on trust. Thus, hypothesis 4 (H4) states that perceived usefulness has a positive and significant effect on trust.

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Hypothesis testing on the effect of trust on intention to reuse produces a regression coefficient value of 0.320, so trust has a positive effect on intention to reuse. P-values of 0.002 which are smaller than 0.05 ($0.002 \le 0.05$) indicate that trust has a significant effect on intention to reuse. Thus, hypothesis 5 (H5) which states that trust has a positive and significant effect on the intention to reuse is accepted.

Table 6
Recapitulation of Mediation Variable Test Results

No.	Relationship between variables		Eff	Information		
NO.		(A)	(B)	(C)	(D)	Information
	Perception of Ease of Use $(X1) \rightarrow$					_
1	Trust $(Y1) \rightarrow$	0,134	0,246	0,418	0,320	Partial Mediation
	Intention to Reuse (Y2)	(Sig.)	(Sig.)	(Sig.)	(Sig.)	
	Usefulness Perception $(X2) \rightarrow$					
2	Trust $(Y1) \rightarrow$	0,134	0,415	0,417	0,320	Partial Mediation
	Intention to Reuse (Y2)	(Sig.)	(Sig.)	(Sig.)	(Sig.)	

Source: Processed primary data, 2022

Description: significance (sig.) = t-statistic>1,96 on a=5%

Trust is able to mediate the effect of perceived ease of use on intention to reuse. This result is shown from the mediation test that has a significant value. Thus, trust is able to mediate partially (partially mediated) on the effect of perceived ease of use on intention to reuse, and directly or indirectly perceived ease of use affect intention to reuse. Although the perception of ease of use is able to create a re-use intention, the presence of positive trust will increase the re-use intention to be higher. Based on these results, it can be interpreted that the higher the perceived ease of use, it can increase trust so that the intention to reuse will increase.

Trust is able to mediate the effect of perceived usefulness on intention to reuse. This result is shown from the mediation test that has a significant value. Thus, trust is able to mediate partially (partially mediated) on the effect of perceived usefulness on intention to reuse, and directly or indirectly perceived usefulness affects intention to reuse. Although the perception of usefulness is able to create a re-use intention, the presence of positive trust will increase the re-use intention to be higher. Based on these results, it can be interpreted that the higher the perception of usefulness, it can increase trust so that the intention to reuse will increase.

The mediating role of the trust variable is shown in Table 5.17. In the initial calculation, the coefficient of the direct influence of perceived ease of use on the intention to reuse is 0.246. The addition of the trust variable as a mediating variable has a different effect on the total effect of perceived ease of use with intention to reuse, which is 0.380. Table 5.17 shows that the VAF value is 0.353 or 35.3%. The mediation value of 35.3% is in the range of 20 percent to 80 percent, this means that the mediation variable is classified as a partial mediation variable. Thus, trust can partially mediate the effect of perceived ease of use on intention to reuse (Gu et al., 2009; Luo et al., 2010; Shaik & Karjaluoto, 2015).

The next role of trust mediation is on the effect of perceived usefulness on intention to reuse. In the initial calculation, the coefficient value of the direct influence of perceived usefulness on the intention to reuse is 0.415. The addition of the trust variable as a mediating variable has a different effect on the total effect of perceived usefulness with the intention to reuse being 0.549. Table 5.17 shows that the VAF value is 0.244 or 24.4%. The mediation value of 24.4% is in the range of 20 percent to 80 percent, this means that the mediation variable is classified as a partial mediation variable. Thus, trust can partially mediate the effect of perceived usefulness on re-use intention.

Table 7
Effect of total variables, and calculation of VAF

No.	Relationship Between Variables	Pengaruh Total		
NO.		Correlation coefficient	t-Statistics	
1	Perception of Ease of Use $(X1) \rightarrow$ Intention to Reuse $(Y2)$	0,380	3,597	
2	Perceived Usefulness $(X2) \rightarrow$ Intention to Reuse $(Y2)$	0,549	5,240	
3	Perceived Ease of Use $(X1) \rightarrow Trust (Y1)$	0,418	3,044	

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4	Perception of Usefulness (X2)		
	\rightarrow Trust (Y1)	0,417	2,975
5	Perception of Usefulness (X2)	0,320	3,045
	Indirect Effect VAF /	0,353	
	Total Effect (0.134/0.380)	0,333	
	Indirect Effect VAF /	0.244	
	Total Effect (0.134/0.549)	0,244	

Source: Primary data processed, 2022 (Appendix 8)

The results of the analysis show that perceived ease of use has a positive and significant effect on intention to reuse. This means that the higher the perceived ease of use perceived by BNI Mobile Banking users, the higher the intention to reuse BNI Mobile Banking. Vice versa, the lower the perceived ease of use perceived by BNI Mobile Banking users will reduce the intention to reuse BNI Mobile Banking users. The results of this study are in accordance with previous studies by Farah et al. (2018), which provides that perceived ease of use has a positive and significant effect on customer intentions to use mobile banking services. The results of this study also support the research conducted by Baabdullah et al. (2019), which states that ease of use is one of the factors for adopting mobile banking services. The results of this study are also supported by previous research conducted by Purwanto & Mutahar (2020), who state that ease of use has a positive and significant effect on intention to use.

The results of the research analysis found that perceived usefulness had a positive and significant effect on intention to reuse. The results of the study confirm that the statements contained in the perception of usefulness have a significant impact on the intention to reuse BNI Mobile Banking by users. The perceived usefulness as measured by indicators: useful in everyday life, makes activities faster, increases productivity, and is useful for transaction activities as an acceptable indicator, has been proven to be able to influence the intention to reuse BNI Mobile Banking users. With the more useful applications that are used, helping activities faster, being able to increase productivity, and being useful in banking activities, it will make the desire to reuse BNI Mobile Banking by users to be higher.

The results of this study are in accordance with previous research conducted by Alalwan et al. (2018), who get the results that an increase in perceived usefulness results in an increase in intention to use. This research is also supported by Giovanis et al. (2019), which found that increasing perceptions of usefulness had an effect on increasing intention to use. The results of this study are also supported by the results of the research of Safari et al. (2020)), who found that perceived usefulness had a significant positive effect on intention to use.

The results of the analysis show that perceived ease of use has a positive and significant effect on trust. The results of the above analysis indicate that the values contained in the perception of ease of use have a significant impact on the trust of BNI Mobile Banking users. Perceptions of ease of use as measured by indicators: easy to learn to use, easy to access services, clear and understandable interactions, and easy to use as accepted indicators, are proven to be able to influence user trust in BNI Mobile Banking. The results of this study can be interpreted that the easier it is to learn to use, easy to access, the application is clear and easy to understand, and the easier the BNI Mobile Banking application is to use, the more users trust in BNI Mobile Banking.

The results of this study are in accordance with previous research conducted by Kumar et al. (2018), which shows that the increasing ease of use will further increase trust. This study is also supported by research by Chawla et al. (2019), which states that perceived ease of use is a factor that positively and significantly affects trust. Previous research conducted by Akbari et al. (2020); Ventre & Kolbe (2020); Wang et al. (2021), who found that perceived ease of use had a positive and significant effect on trust. The study found that perceived usefulness had a positive and significant effect on trust. The results of the study confirm that the statements contained in the perception of usefulness have a significant impact on user trust in BNI Mobile Banking. Perception of usability as measured by indicators: useful in daily life, making activities faster, increasing productivity, and useful for transaction activities as acceptable indicators, proven to be able to influence user trust. With more useful applications being used, helping activities faster, being able to increase productivity, and feeling useful in banking activities carried out, it will make users' trust in BNI Mobile Banking even higher.

The results of this study are consistent with research conducted by Mansour (2016), which found that perceived benefits have a positive and significant effect on trust. The results of this study are also in accordance with the previous study conducted by Safari et al. (2020); Wang et al. (2021), who obtained research results that perceived usefulness had a positive and significant effect on trust. The results of the analysis show that trust has a positive and significant effect on intention to reuse. The results of the analysis show that the values contained in trust have a significant impact

on the intention to reuse BNI Mobile Banking users. Perceived trust as measured by indicators: confident in service, not doubting honesty, confident that the technology structure is sufficient to protect against problems, prioritizing customer interests, and having the ability to meet needs as accepted indicators, proven to be able to influence users' intention to reuse BNI Mobile Banking.

The results of this study are in accordance with previous research conducted by Kwateng et al. (2018); Rahmayanti & Rahyuda (2020), which stated that trust is the main factor influencing the adoption and use of the system, and increasing trust will increase the intention to use from users. The studies conducted by Alalwan et al. (2018); Cho et al. (2019); Nag & Gilitwala (2019), also support the results of this study, which found that trust had a positive and significant effect on intention to use. This result is also consistent with that of Nelwan et al. (2021), in the context of mobile and internet banking who found that trust had a positive and significant effect on re-use intention. The results of the analysis show that trust is able to mediate the effect of perceived ease of use on intention to reuse. The results of this study are in accordance with previous research conducted by Akbari et al. (2020), using trust and concentration as mediating variables. The results showed that trust was able to mediate with positive results and a significant relationship between perceived ease of use and intention to use. The results of this study are also consistent with research conducted by Mustika & Puspita (2020), who found that the convenience felt by customers in mobile banking services would increase trust, thereby increasing intention to use the service. ease of intention to use positively and significantly.

The results of the analysis show that trust is able to mediate the effect of perceived usefulness on intention to reuse. The results of this study are in accordance with previous research conducted by Iqbal et al. (2018), on online shopping intentions, his research found that trust was able to mediate positively and significantly the effect of perceived usefulness on online shopping intentions. The results of this study are also in line with research conducted by Rahmayanti & Rahyuda (2020), which states that trust is able to mediate with positive and significant results the relationship between perceived usefulness and intention to use a technology. The empirical study of Singh and Sinha (2020) also supports the results of this study, the statistical results show that trust is able to mediate the relationship between perceived usefulness and intention to use positively and significantly.

4 Conclusion

Based on the results of the research analysis and the results of the discussion in the previous chapter, the conclusions in this study are as follows: Perception of ease of use has a positive and significant effect on the intention to reuse BNI Mobile Banking users. Perception of usefulness has a positive and significant effect on the trust of BNI Mobile Banking users. The perception of ease of use has a positive and significant effect on the trust of BNI Mobile Banking users. Perception of usability has a positive and significant effect on the trust of BNI Mobile Banking users. Trust has a positive and significant effect on the intention to reuse BNI Mobile Banking users. Trust is able to mediate the effect of perceived ease of use on the intention to reuse BNI Mobile Banking users. Trust is able to mediate the effect of perceived usefulness on the intention to reuse BNI Mobile Banking users. Based on the results of research analysis, discussion and conclusions, there are several suggestions, namely to increase the intention to reuse BNI Mobile Banking users, it is recommended for BNI management to create a user-friendly mobile banking application so that it is easy to learn and easy to use, and strengthen the service system so that it is easy to use. accessed by the user. In addition, mobile banking applications must have the required features in order to provide benefits for users. For BNI management to strengthen the technology structure so that users will increasingly believe that BNI Mobile Banking can meet user transaction needs and avoid problems in using BNI Mobile Banking. Further research can be done by expanding the scope of mobile banking users.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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References

- Aji, H. M. & Dharmmesta, B. S. (2019). Subjective norm vs dogmatism: Christian consumer attitude towards Islamic TV advertising. *Journal of Islamic Marketing*, 10 (3), 961–980.
- Akbari, M., Rezvani, A., Shahriari, E., Zúñiga, M. A., & Pouladian, H. (2020). Acceptance of 5 G technology: Mediation role of Trust and Concentration. *Journal of Engineering and Technology Management*, 57, 101585. https://doi.org/10.1016/j.jengtecman.2020.101585
- Alalwan, A.A., Baabdullah A., Rana, N.P., Tamilmani, K., & Dwivedi, Y.K. (2018). Examining adoption of mobile internet in Saudi Arabia: Extending TAM with perceived enjoyment, innovativeness and trust. *Technology in Society*, 55 (1), 100-110.
- Alalwan, A.A., Dwivedi, Y.K, & Rana, N.P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37 (3), 99–110.
- Al-Sharafi, M.A., Herzallah, F.A.T., Abdullah, R. & Alajmi, Q. (2017). The Effect of Perceived Ease of Use and Usefulness on Customers Intention to Use Online Banking Services: The Mediating Role of Perceived Trust. *International Journal of Innovative Computing*, 7 (1), 9-14.
- Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Patil, P., & Dwivedi, Y. K. (2019). An integrated model for m-banking adoption in Saudi Arabia. *International Journal of Bank Marketing*.
- Baganzi, R., & Lau, A. K. (2017). Examining trust and risk in mobile money acceptance in Uganda. *Sustainability*, 9(12), 2233.
- Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India An empirical study. *International Journal of Bank Marketing*, 37 (7), 1590-1618.
- Chiu, J.L., Bool, N.C., & Chiu, C.L. (2017). Challenges and factors influencing initial trust and behavioral intention to use mobile banking services in the Philippines. *Asia Pacific Journal of Innovation and Entrepreneurship*, 11 (2), 246-278.
- Cho, M., Bonn, M.A. & Li, J. J. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*, 77 (1), 108-116.
- Daniyan-Bagudu, H., Khan, S. J. M., & Roslan, A.-H. (2017). The effect of mobile banking on the performance of commercial banks in Nigeria. *International Research Journal of Management, IT and Social Sciences*, 4(2), 74-80. Retrieved from https://sloap.org/journals/index.php/irjmis/article/view/449
- Dewi, C. R. A., Yasa, N. N. K., Giantari, I. G. A. K., Sukawati, T. G. R., Setiawan, P. Y., & Setini, M. (2020). The Effect of Security, Trust and Ease of Use towards Repurchase Intentions Mediated by E-satisfaction on Online Travel Agent. *Jour of Adv Research in Dynamical & Control Systems*, 12(8), 340-354.
- Farah, M.F., Hasni, M.J.S. & Abbas, A.K. (2018). Mobile-banking adoption: empirical evidence from the banking sector in Pakistan. *International Journal of Bank Marketing*. 36 (7), 1386-1413.
- Gao, L., & Waechter, K. A. (2017). Examining the role of initial trust in user adoption of mobile payment services: An empirical investigation. *Information Systems Frontiers*, 19(3), 525–548.
- Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile banking services: A comparative analysis of four competing theoretical models. *International Journal of Bank Marketing*, 37 (5), 1165-1189.
- Gu, J. C., Lee, S. C., & Suh, Y. H. (2009). Determinants of behavioral intention to mobile banking. *Expert Systems with Applications*, *36*(9), 11605-11616. https://doi.org/10.1016/j.eswa.2009.03.024
- Hanafizadeh, P., Behboudi, M., Koshksaray, A. A., & Tabar, M. J. S. (2014). Mobile-banking adoption by Iranian bank clients. *Telematics and informatics*, *31*(1), 62-78. https://doi.org/10.1016/j.tele.2012.11.001
- Iqbal, M.K., Raza, A.S.A, Mushtaq, H., & Faraz, N.A. (2018). An Empirical Study on the Effect of Perceived Usefulness and Ease of Use on Purchase Intention Through Mobile Devices in Pakistan: A Mediating Role of Online Trust. *European Journal of Business and Management*, 10 (17), 30-35.
- Josephine, C. O. (2021). The effects of e-payment system on the efficiency of banks in Nigeria. *International Research Journal of Management, IT and Social Sciences*, 8(6), 548-558. https://doi.org/10.21744/irjmis.v8n6.1941
- Khalilzadeh, J., Ozturk, A. B., & Bilgihan, A. (2017). Security-related factors in extended UTAUT model for NFC based mobile payment in the restaurant industry. *Computers in Human Behavior*, 70 (-), 460–474.
- Krishanan, D., Khin, A. A., Teng, K. L. L., & Chinna, K. (2016). Consumers' perceived interactivity & intention to use mobile banking in structural equation modeling. *International Review of Management and Marketing*, 6(4), 883-890.

Kumar, A., Amit, A., & Kampan, M. (2018). The effect of perceived security and grievance redressal on continuance intention to use M-wallets in a developing country. *International Journal of Bank Marketing*, 36 (7), 1170-1189.

- Kwateng, K.O., Atemio, K.A.O., & Appiah, C. (2018). Acceptance and use of mobile banking: an application of UTAUT2. *Journal of Enterprise Information Management*, 33 (6), 1321-1335.
- Lai, P.C. (2016). Design and security impact on consumers intention to use single platform E-payment. *Interdisciplinary Information Sciences*, 22 (1), 111-122.
- Luo, X., Li, H., Zhang, J., & Shim, J. P. (2010). Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services. *Decision support systems*, 49(2), 222-234. https://doi.org/10.1016/j.dss.2010.02.008
- Madhavaiah, C., & Bashir, I. (2015). Consumer attitude and behavioural intention towards internet banking adoption in India. *Journal of Indian Business Research*, Vol.7 (1), 67-102.
- Mansour, B.K. (2016). An analysis of business' acceptance of internet banking: an integration of etrust to the TAM. *Journal of Business & Industrial Marketing*. 31 (8), 982–994.
- Miandari, G. A. K. D. D., Yasa, N. N. K., Wardana, M., Giantari, I. G. A. K., & Setini, M. (2021). Application of Technology Acceptance Model to Explain Repurchase Intention in Online Shopping Consumers. *Webology*, *18*(1), 247-262.
- Mustika, N., & Puspita, R. E. (2020). Analysis of factors influencing the intention to use bank syariah Indonesia mobile banking with trust as mediation. *Islamic Economics & Financial Journal*. 7 (2), 14-35.
- Nag, K.A., & Gilitwala, B. (2019). E-Wallet-factors affecting its intention to use. *International Journal of Recent Technology and Engineering (IJRTE)*, 8 (4), 3411-3415.
- Nelwan, J., Yasa, N., Sukaatmadja, I., & Ekawati, N. (2021). Antecedent behaviour and its implication on the intention to reuse the internet banking and mobile services. *International Journal of Data and Network Science*, *5*(3), 451-464.
- Nonis, M. F. (2022). The Integration of Technology Acceptance Model (TAM) And Theory of Planned Behavior (TPB) on Online Purchase Intention of Shopee Marketplace Consumers. *Asia Proceedings of Social Sciences*, 9(1), 105-106
- Purwanto, E., & Mutahar, A. M. (2020). Examine the technology of acceptance model among mobile banking users in Indonesia. *Technol. Reports Kansai Univ*, 62(7), 3969-3979.
- Rahmayanti, P., Widagda, I., Yasa, N., Giantari, I. G. A. K., Martaleni, M., Sakti, D., ... & Anggreni, P. (2021). Integration of technology acceptance model and theory of reasoned action in pre-dicting e-wallet continuous usage intentions. *International Journal of Data and Network Science*, 5(4), 649-658.
- Rahmayanti, P.L.D. & Rahyuda, K, (2020). The Role of Trust in Mediating The Effect of Perceived Risk and Subjective Norm on Continuous Usage Intention on Gopay Users In Denpasar, *Russian Journal of Agricultural And Socio Economic Science*, 12 (108), 69-80
- Ray, A., Bala, P. K., & Dasgupta, S. A. (2019). Role of authenticity and perceived benefits of online courses on technology based career choice in India: A modified technology adoption model based on career theory. *International Journal of Information Management*, 47, 140-151. https://doi.org/10.1016/j.ijinfomgt.2019.01.015
- Roh, M., & Park, K. (2019). Adoption of O2O food delivery services in South Korea: the moderating role of moral obligation in meal preparation. *International Journal of Information Management*, 47 (-), 262-273.
- Safari, K., Bisimwa, A., & Armel, M. B. (2020). Attitudes and intentions toward internet banking in an under developed financial sector. *PSU Research Review*.
- Sana, P. A. A., Sri, S. N. W., Kerti, Y. N. N., & Gde, S. I. P. (2019). Technology acceptance model and trust in explaining customer intention to use internet banking. *Russian Journal of Agricultural and Socio-Economic Sciences*, 91(7), 254-262.
- Santos, M.A.D., Fuentes, Y.S., & Palma, V.A.V. (2020). Determinants of Mobile Banking Users' Loyalty. *Journal of Promotion Management*, 26 (5), 615-633.
- Shaikh, A. A., & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and informatics*, 32(1), 129-142. https://doi.org/10.1016/j.tele.2014.05.003
- Shareef, M. A., Baabdullah, A., Dutta, S., Kumar, V., & Dwivedi, Y. K. (2018). Consumer adoption of mobile banking services: An empirical examination of factors according to adoption stages. *Journal of Retailing and Consumer Services*, 43, 54-67. https://doi.org/10.1016/j.jretconser.2018.03.003

- Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65-75. https://doi.org/10.1016/j.ijinfomgt.2018.09.013
- Singh, N., & Sinha, N. (2020). How perceived trust mediates merchant's intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services*, 52, 101894.
- Siyal, A. W., Ding, D., & Siyal, S. (2019). M-banking barriers in Pakistan: a customer perspective of adoption and continuity intention. *Data Technologies and Applications*.
- Troise, C., O'Driscoll, A., Tani, M., & Prisco, A. (2020). Online food delivery services and behavioural intention—a test of an integrated TAM and TPB framework. *British Food Journal*.
- Ventre, I., & Kolbe, D. (2020). The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *Journal of International Consumer Marketing*. 32 (4), 1-13.
- Verma, P., & Sinha, N. (2018). Integrating perceived economic wellbeing to technology acceptance model: The case of mobile based agricultural extension service. *Technological forecasting and social change*, *126*, 207-216. https://doi.org/10.1016/j.techfore.2017.08.013
- Wang, F., Zhu, H., Srivastava, G., Li, S., Khosravi, M. R., & Qi, L. (2021). Robust collaborative filtering recommendation with user-item-trust records. *IEEE Transactions on Computational Social Systems*.
- Wida, P. A. M. W., Yasa, N. N. K., & Sukaatmadja, I. P. G. (2016). Aplikasi model tam (technology acceptance model) pada perilaku pengguna instagram. *Jurnal Ilmu Manajemen Mahasaraswati*, 6(2), 101948.
- Wu, J. H., & Wang, S. C. (2005). What drives mobile commerce?: An empirical evaluation of the revised technology acceptance model. *Information & management*, 42(5), 719-729. https://doi.org/10.1016/j.im.2004.07.001
- Yasa, N., Piartrini, P., Telagawathi, N. L. W. S., Muna, N., Rahmayanti, P., Wardana, M., ... & Suartina, I. (2022). The role of attitude to mediate the effect of trust, perceived behavior control, subjective norm and per-ceived quality on intention to reuse the COVID-19 website. *International Journal of Data and Network Science*, 6(3), 895-904.