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How Ease of Use, Convenience, Risk, Trust, and Security Affect Mobile Banking Use via Satisfaction

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ABSTRACT

This study investigates the impact of ease of use, convenience, risk, trust, and security on the adoption of BNI (*Bank Negara Indonesia*) mobile banking, emphasizing the mediating role of customer satisfaction. The research is grounded in the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). Data were collected through a survey of 148 BNI mobile banking users in Bali and analyzed using Partial Least Squares (PLS). The findings reveal that convenience and security significantly influence customer satisfaction and the intention to use the application, with satisfaction partially mediating the relationship between convenience and intention. In contrast, ease of use, risk, and trust do not have a significant impact on satisfaction or intention. These results underline the critical role of convenience and security features in driving customer satisfaction and promoting the use of BNI mobile banking. To enhance the user experience, banks should focus on optimizing these aspects. Future studies could expand the scope by comparing these findings with those of other mobile banking platforms to identify the relative strengths and areas for improvement in BNI mobile banking services.

1. INTRODUCTION

PT. Bank Negara Indonesia (Persero) Tbk, commonly known as BNI, is a pioneer in the banking industry in addressing and meeting its customers' digital transaction needs and expanding access to digital banking services through BNI Mobile Banking. The COVID-19 pandemic, which hit Indonesia in the first quarter of 2020, has prompted customers to shift from cash transactions to digital transactions. In the first quarter of 2020, digital transactions in BNI's electronic service network grew by a total of 31% compared to the same period the previous year. This increase occurred in transactions via SMS Banking, Internet Banking, and BNI Mobile Banking. Notably, the growth in transactions on BNI Mobile Banking contributed the largest increase, reaching 84.4% compared to the first quarter of 2019 (www.bni.co.id, 2021)

The growth of BNI Mobile Banking users in the first five months of 2023, quoted from the website www.bni.co.id, (2023), increased by 23.9% year-on-year (YoY), from 11.8 million users in May 2022 to 14.7 million users. The number of BNI Mobile Banking transactions also grew rapidly in May 2023, reaching 374.1 million transactions. This figure increased by 69.2% compared to May 2022, which saw 221.2 million transactions. Furthermore, the volume of BNI mobile banking transactions in May 2023 was IDR 445.63 trillion, a significant increase of 53.6% compared to the same period the previous year, which reached IDR 290.21 trillion.

As reported on the service disruption site www.cekgangguan.id, (2023), BNI Mobile Banking users experiencing issues have highlighted their problems as follows: a) BNI Mobile Banking failed to log in 50%; b) BNI Mobile Banking error 25%; c) BNI Mobile Banking unable to transfer 25%. This is an issue that must be resolved to achieve customer trust and satisfaction with BNI Mobile Banking, thereby increasing customer intention in using BNI Mobile Banking.

Bank BNI has a significant number of mobile banking users and ranks in the top 4 of the Top Brand Award (Table 1). However, the phenomenon is that many customers are still unwilling to use mobile banking despite the increasing number of features offered, which provide ease and convenience for customers. This phenomenon presents a challenge that must be addressed to maintain customer intention in using BNI Mobile Banking and to stay competitive with other banks.

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Table 1. Top Mobile Banking Ratings for 2019 – 2023

Bank Name	2019	2020	2021	2022	2023
m-BCA	44,50%	45,50%	47,50%	47,40%	47,90%
BRI Mobile	17,00%	20,50%	17,00%	19,40%	19,80%
m-Banking Mandiri	16,60%	13,80%	12,90%	12,90%	13,00%
BNI Mobile	12,30%	11,30%	14,00%	11,20%	11,30%
CIMB Niaga Mobile	3,40%	4,00%	4,10%	3,80%	4,20%

Source: Top Brand Award (www.topbrand-award.com, 2023)

While BNI Mobile Banking has seen substantial growth in both users and transaction volume, there remains a notable discrepancy in user adoption compared to other mobile banking platforms. The factors influencing adoption, such as ease of use, convenience, risk, trust, and security, are well-documented as essential components in user acceptance models like the Technology Acceptance Model (TAM). However, inconsistencies in previous research findings indicate gaps in understanding how these factors interact in the context of mobile banking.

Previous studies provide mixed results. For example, while Rahmatika & Fajar (2019) found that perceived ease of use positively affects the intention to use e-money, Baabdullah et al. (2019) observed no significant impact of ease of use on mobile banking adoption. This discrepancy raises questions about whether perceived ease of use functions differently in banking apps compared to other financial technologies. Similarly, convenience is consistently linked to ease-of-use system (Chen & Tsai, 2019; Wang et al., 2022) but how convenience directly influences user intention in the unique context of mobile banking remains underexplored.

Furthermore, the role of risk and trust in digital transactions highlights another gap. Although trust is known to mitigate perceived risk in mobile banking (Liébana-Cabanillas et al., 2019; Pavlou, 2003). Purnama et al. (2023) suggest that in certain m-payment systems, perceived risk may not deter usage intentions. This contradiction points to an incomplete understanding of how security concerns influence adoption behavior across diverse mobile financial applications.

Addressing these inconsistencies, this study aims to explore the interplay of ease of use, convenience, risk, trust, and security within BNI Mobile Banking, providing new insights into the factors that drive or inhibit user adoption in Indonesia. By investigating these variables through the TAM framework, this research seeks to fill the gaps in the literature and contribute to a more comprehensive understanding of mobile banking adoption.

Concept and Hypothesis

Theory of Planned Behavior (TPB)

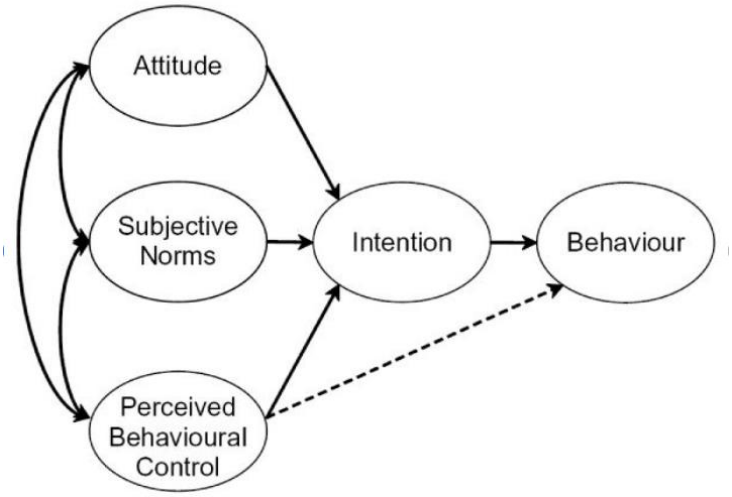
The Theory of Planned Behavior (TPB) is a theory that outlines the factors influencing behavioral intentions. Behavioral intention will only arise if individuals feel they have control over the behavior. Perceived behavioral control is the degree of control individuals feel they have over the behavior, which determines whether the behavior will be performed or not. Thus, this factor explains the level of control individuals have over a behavior (Fishbein & Ajzen, 1977). Figure 1 illustrates the factors that can influence intention and are related to an individual's behavior.

Technology acceptance model (TAM)

The Technology Acceptance Model (TAM) is an adaptation of the Theory of Reasoned Action (TRA). Davis modified the relationships between belief, attitude, intention, and user behavior inherited from the components of the Theory of Reasoned Action, specifically to explain computer user behavior. TAM is one of the models developed to analyze and understand the factors that influence the acceptance of computer technology use, explaining the behavior of end users of information technology with a highly diverse user population (Davis, 1989). TAM explains that to use a system, a person's behavioral intention plays a crucial role, which is influenced by three determinants: perceived usefulness (PU), perceived ease of use (PEOU), and attitudes towards usage (ATU).

Ease of Use (X1)

According to the Technology Acceptance Model (TAM), perceived ease of use specifically measures users' perceptions of how easy it is to understand, learn, and use a technology system without feeling burdened by its complexity or operational difficulties (Davis, 1989).



Source: Ajzen, (1991)

Figure 1. Theory of Planned Behavior

Convenience (X2)

The relationship between the Technology Acceptance Model (TAM) and convenience is that an individual's attitude towards satisfaction or convenience in using technology depends on the technology's ability to enhance their work performance (Finannafi'ah & Witono, 2022). Information technology will be useful and easy to use in decision-making if it provides convenience (S, Annas et al., 2023). The intention to adopt any service is positively influenced by perceived convenience. Studies show that the perception of convenience has a positive impact on perceived usefulness (R. Malik et al., 2021).

Risk (X3)

Bauer (1967) defines perceived risk as the uncertainty regarding the possible consequences of using a product or service. This implies that the level of risk perceived by an individual and their own tolerance for risk-taking are factors that influence their attitude in making a decision to perform or not perform a behavior. Perceived risk is an individual's subjective belief about the potential negative consequences of decisions made by consumers (Rahmatika & Fajar, 2019). Risk is an uncertainty that can create the potential for loss for the decision-maker.

Trust (X4)

Trust has been found to be an important influence on behavioral intentions to adopt technology because of its inverse relationship with risk. Trust is a crucial element in every business relationship and plays a significant role in mobile banking, as it can reduce the risk of uncertainty (Baabdullah et al., 2019). Most online transactions involve a level of risk and uncertainty for potential buyers. In this situation, trust acts as a source of information that directly reduces information asymmetry and feelings of threat in uncertain situations.

Security (X5)

Mobile service platforms must be secure and reliable, and this security must also encompass mobile channels and the operation of mobile networks. Therefore, commercial banks must invest in comprehensive security systems to encourage the adoption of mobile banking by their clients. Security risk is inversely related to the level of mobile banking adoption. Security systems have been found to be a significant factor motivating Thai customers to adopt mobile banking (Boonsiritomachai & Pitchayadejanant, 2019).

Satisfaction (Y1)

According to Setiawan & Fachmi (2018), consumer satisfaction is a person's feeling of pleasure or disappointment that arises after comparing the perceived performance (results) of a product with the expected performance. The variable of user satisfaction is added to measure users' opinions of the information system. When there is a need to use an information system, user satisfaction should encompass the entire user experience with the application and is an important way to test the success of an information system. User satisfaction explains how users evaluate the information system before using it and compare it with its actual performance (DeLone & McLean, 2003).

As a result, the present study examines a model in which satisfaction is included as an independent variable:

H1. Ease of use has a positive effect on customer satisfaction in using the BNI Mobile Banking application.
H2. Convenience has a positive effect on customer satisfaction in using the BNI Mobile Banking application.
H3. Risk has a negative impact on customer satisfaction in using the BNI Mobile Banking application.
H4. Trust has a positive effect on customer satisfaction in using the BNI Mobile Banking application.
H5. Security has a positive effect on customer satisfaction in using the BNI Mobile Banking application.

Intention (Y2)

According to the Theory of Reasoned Action (TRA), behavioral intention is a person's intention in performing a specific behavior. This intention is the primary determinant of whether or not a person will perform the behavior. TRA states that behavioral intention is influenced by two main factors: a) Attitude toward the behavior: This refers to a person's evaluation of the behavior, i.e., the extent to which they have a positive or negative assessment of performing the behavior; b) Subjective norms: This refers to a person's perception of social pressure or social norms that influence whether they should or should not perform the behavior (Ajzen, 1985).

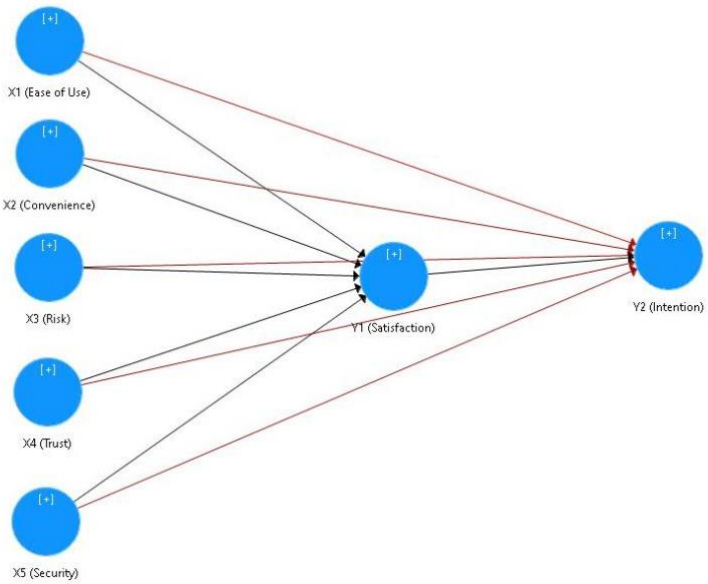


Figure 2. Conceptual Framework

As a result, in the present study, a model in which intention is included as an independent variable is examined:

H6. Ease of use has a positive effect on customer intention to use the BNI Mobile Banking application.
H7. Convenience has a positive effect on customer intention to use the BNI Mobile Banking application.
H8. Risk has a negative effect on customer intention to use the BNI Mobile Banking application.
H9. Trust has a positive effect on customer intention to use the BNI Mobile Banking application.
H10. Security has a positive effect on customer intention to use the BNI Mobile Banking application.
H11. Satisfaction has a positive effect on customer intention to use the BNI Mobile Banking application.

This study also proposes satisfaction as a mediating variable between ease of use, convenience, risk, trust, and security with the intention to use BNI Mobile Banking:

H12. Ease of use positively influences customer intention to use the BNI Mobile Banking application, with satisfaction acting as a mediator.
H13. Convenience positively influences customer intention to use the BNI Mobile Banking application, with satisfaction acting as a mediator.
H14. Risk positively influences customer intention to use the BNI Mobile Banking application, with satisfaction acting as a mediator.
H15. Trust positively influences customer intention to use the BNI Mobile Banking application, with satisfaction acting as a mediator.
H16. Security positively influences customer intention to use the BNI Mobile Banking application, with satisfaction acting as a mediator.

Based on the literature review discussion and the proposed hypothese, the research model is illustrated in Figure 2.

2. METHODS

The data source used in this study is primary data. Data collection was conducted using a self-administered survey method through a structured questionnaire designed to gather respondents' opinions on various factors affecting the use of BNI Mobile Banking. The questionnaire was organized into several sections, each focusing on key constructs such as ease of use, convenience, risk, trust, security, satisfaction, and intention to use BNI Mobile Banking.

Each construct was measured using multiple items adapted from established scales in the literature to ensure reliability and validity. For instance, the ease of use and perceived convenience items were inspired by the Technology Acceptance Model (TAM) and previous studies on mobile banking adoption. Respondents rated each item on a 10-point Likert scale, enabling them to express their perceptions and experiences in greater detail than smaller scales allow, thus supporting a more nuanced data analysis. The questionnaire underwent a review by subject matter experts to verify content validity and ensure clarity in each item. Additionally, a pilot test was conducted with a small subset of BNI Mobile Banking users to refine the wording and confirm the questionnaire's comprehensibility.

The final questionnaire was distributed online to BNI Mobile Banking users in Bali province using Google Forms. The sampling method used in this study was purposive sampling and analyzed using the Partial Least Squares (PLS) technique. A total of 148 questionnaires were successfully collected and are described in Table 2. The table shows the demographic profile of respondents in this study, including gender, domicile (regency/city), age, education level, occupation, monthly income, duration of being a BNI customer, duration of using BNI Mobile Banking, and the number of BNI Mobile Banking features used.

Table 2. Demographic Profile of Respondent

Description	Number of Respondents (People)	Percentage)
Gender		
Male	81	55%
Female	67	45%
Total	**148**	**100%**
Domicile (Regency/City)		
Denpasar	80	54%
Badung	18	12%
Tabanan	23	16%
Gianyar	16	11%
Klungkung	2	1%
Bangli	2	1%
Jembrana	1	1%
Buleleng	6	4%
Karangasem	0	0%
Total	**148**	**100%**
Age (Years)		
17 - 25	22	15%
>25 - 35	50	34%
>35– 45	50	34%
>45– 55	26	17%
Total	**148**	**100%**
Educational Level		
Elementary School	0	0%
Junior School	0	0%
Senior School	14	10%
Diploma	17	11%
Bachelor's Degree	117	79%
Total	**148**	**100%**
Occupation		
Civil Servant (ASN)	29	20%
Private Employee	44	30%
Entrepreneur	5	3%
Professional	3	2%
Student	5	3%
Others	62	42%
Total	**148**	**100%**
Monthly Income		
< IDR 5 Million	37	25%

Description	Number of Respondents (People)	Percentage)
IDR 5 Million to Rp 10 Million	66	45%
> IDR 10 Million to IDR 20 Million	39	26%
> IDR 20 Million	6	4%
Total	**148**	**100%**
Length of Being a BNI Customer (Years)		
< 1	8	6%
1 - 5	27	18%
> 5 - 10	33	22%
> 10	80	54%
Total	**148**	**100%**
Length of Using BNI Mobile Banking (Years)		
< 1	7	5%
1 - 2	9	6%
> 2 - 4	25	17%
> 4	107	72%
Total	**148**	**100%**
Number of BNI Mobile Banking Features Used		
< 3	20	14%
3-6	70	47%
7-9	33	22%
> 9	25	17%
Total	**148**	**100%**

Table 3 shows the mean value of Research Indicators and Variables. In summary, all variables except Risk are perceived as high by respondents, indicating overall positive perceptions of ease of use, convenience, trust, security, satisfaction, and intention to use mobile banking. Risk is perceived as low to medium, suggesting that respondents tend to feel free from the risks of theft, fraud, and high costs.

Table 3. Descriptive Statistics of Research Indicators and Variables

Variable	Indicator	Std. Deviation	Mean	Category
Ease of Use (X1)	X1.1	0,836	9,53	High
	X1.2	0,947	9,41	High
	X1.3	0,907	9,48	High
Ease of Use (X1)			**9,48**	**High**
Convenience (X2)	X2.1	1,032	9,45	High
	X2.2	0,830	9,61	High
	X2.3	0,784	9,68	High
Convenience (X2)			**9,58**	**High**
Risk (X3)	X3.1	3,374	4,34	Medium
	X3.2	2,037	2,09	Low
	X3.3	2,719	3,30	Low
Risk (X3)			**3,24**	**Low**
Trust (X4)	X4.1	1,089	9,36	High
	X4.2	1,630	7,71	High
	X4.3	1,413	8,82	High
	X4.4	1,247	9,09	High
Trust (X4)			**8,75**	**High**
Security (X5)	X5.1	1,072	9,33	High

Variable	Indicator	Std. Deviation	Mean	Category
	X5.2	1,028	9,39	High
	X5.3	1,533	9,10	High
Security (X5)			**9,27**	**High**
Satisfaction (Y1)	Y1.1	0,935	9,45	High
	Y1.2	1,015	9,34	High
	Y1.3	1,067	9,34	High
Satisfaction (Y1)			**9,38**	**High**
Intention (Y2)	Y2.1	0,951	9,47	High
	Y2.2	0,936	9,54	High
Intention (Y2)			**9,50**	**High**

Measurement Model Assessment

The measurement model assessment is a crucial step in evaluating the validity and reliability of the constructs in a research model. It ensures that the indicators (observed variables) accurately and consistently measure the latent constructs. It consists of testing convergent validity, discriminant validity, and reliability. Table 4 indicates that, except for the dropped indicator X5.3, all other indicators have high outer loadings and are valid (>0.7). This demonstrates strong convergent validity for the constructs, as evidenced by AVE values greater than 0.5.

Table 4. Convergent Validity Testing Result

Variable	Average Variance Extracted (AVE)	Remark	Indicator	*Outer Loadings*	Remark
Ease of Use (X1)	0,828	Valid	X1.1	0,875	Valid
			X1.2	0,901	Valid
			X1.3	0,952	Valid
Convenience (X2)	0,765	Valid	X2.1	0,819	Valid
			X2.2	0,934	Valid
			X2.3	0,866	Valid
Risk (X3)	0,65	Valid	X3.1	0,805	Valid
			X3.2	0,83	Valid
			X3.3	0,783	Valid
Trust (X4)	0,619	Valid	X4.1	0,83	Valid
			X4.2	0,518	Valid
			X4.3	0,849	Valid
			X4.4	0,893	Valid
Security (X5)	0,729	Valid	X5.1	0,897	Valid
			X5.2	0,895	Valid
			X5.3	0,198	Not Valid
			X5.4	0,762	Valid
Satisfaction (Y1)	0,866	Valid	Y1.1	0,958	Valid
			Y1.2	0,902	Valid
			Y1.3	0,931	Valid
Intention (Y2)	0,919	Valid	Y2.1	0,956	Valid
			Y2.2	0,962	Valid

Discriminant Validity implies that a construct is unique and represents a phenomenon not captured by other constructs in the model. The Fornell-Larcker Criterion test in Table 5 shows that the square root of the AVE for a construct is greater than the correlations between that construct and any other construct, indicating that each construct shares more variance with its own indicators than with other constructs. This supports the discriminant validity of the constructs in the model.

Table 5. Results of Discriminant Validity Testing with the Fornell-Larcker Criterion

	X1	X2	X3	X4	X5	Y1	Y2
X1	**0,910**						
X2	0,759	**0,874**					
X3	-0,394	-0,427	**0,806**				
X4	0,775	0,726	-0,474	**0,887**			
X5	0,776	0,679	-0,453	0,840	**0,854**		
Y1	0,767	0,817	-0,391	0,757	0,745	**0,931**	
Y2	0,680	0,776	-0,364	0,695	0,743	0,822	**0,959**

The reliability test results shown in Table 6 indicate that all research instruments are reliable, and all instruments are suitable for data collection.

Table 6. Reliability Test Results

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Remark
Ease of Use (X1)	0,896	0,925	0,935	Reliable
Convenience (X2)	0,845	0,846	0,907	Reliable
Risk (X3)	0,738	0,764	0,848	Reliable
Trust (X4)	0,792	0,856	0,862	Reliable
Security (X5)	0,812	0,827	0,889	Reliable
Satisfaction (Y1)	0,922	0,926	0,951	Reliable
Intention (Y2)	0,912	0,916	0,958	Reliable

3. RESULTS AND DISCUSSIONS

Results

The hypothesis testing results in Table 7 show that the following hypotheses are accepted: H2 (Convenience -> Satisfaction), H5 (Security -> Satisfaction), H7 (Convenience -> Intention), H10 (Security -> Intention), H11 (Satisfaction -> Intention), and H13 (Convenience -> Satisfaction -> Intention) because their T-Statistic values are greater than 1.96 and P-Values are less than 0.05. In contrast, the hypotheses H1 (Ease of use -> Satisfaction), H3 (Risk -> Satisfaction), H4 (Trust -> Satisfaction), H6 (Ease of use -> Intention), H8 (Risk -> Intention), H9 (Trust -> Intention), H12 (Ease of use -> Satisfaction -> Intention), H14 (Risk -> Satisfaction -> Intention), H15 (Trust -> Satisfaction -> Intention), and H16 (Security -> Satisfaction -> Intention) are rejected because their T-Statistic values are less than 1.96 and P-Values are greater than 0.05.

Table 7. Hypothesis Testing Results

Hypothesis Number	Relationship Between Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Description
1	X1 -> Y1	0,156	0,155	0,118	1,325	0,186	Rejected
2	X2 -> Y1	**0,477**	0,477	0,104	4,566	**0,000**	**Accepted**
3	X3 -> Y1	0,029	0,031	0,042	0,698	0,486	Rejected
4	X4 -> Y1	0,137	0,126	0,092	1,493	0,136	Rejected
5	X5 -> Y1	**0,198**	0,213	0,100	1,990	**0,047**	**Accepted**
6	X1 -> Y2	-0,117	-0,107	0,116	1,008	0,314	Rejected

Hypothesis Number	Relationship Between Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Description
7	X2 -> Y2	**0,320**	0,322	0,122	2,635	**0,009**	**Accepted**
8	X3 -> Y2	0,029	0,024	0,056	0,522	0,602	Rejected
9	X4 -> Y2	-0,071	-0,083	0,099	0,710	0,478	Rejected
10	X5 -> Y2	**0,353**	0,372	0,112	3,160	**0,002**	**Accepted**
11	Y1 -> Y2	**0,451**	0,432	0,156	2,894	**0,004**	**Accepted**
12	X1 -> Y1 -> Y2	0,071	0,060	0,051	1,381	0,168	Rejected
13	X2 -> Y1 -> Y2	**0,215**	0,214	0,103	2,087	**0,037**	**Accepted**
14	X3 -> Y1 -> Y2	0,013	0,015	0,021	0,633	0,527	Rejected
15	X4 -> Y1 -> Y2	0,062	0,054	0,047	1,316	0,189	Rejected
16	X5 -> Y1 -> Y2	0,090	0,093	0,058	1,535	0,125	Rejected

Description: ease of use (X1), convenience (X2), risk (X3), trust (X4), security (X5), satisfaction (Y1), intention (Y2)

Discussion

The Effect of Ease of Use on Satisfaction

The first hypothesis test results show that ease of use does not affect satisfaction. Most respondents (72%) have been using BNI mobile banking for over four years (Table 2), indicating adequate experience with the technology. Therefore, they tend to overlook issues related to complexity. Thus, it can be concluded that ease of use does not positively affect customer satisfaction with the BNI mobile banking application, leading to the rejection of the first hypothesis (H1). These findings align with Deliyana et al., (2021) who also found that ease of use does not positively impact mobile banking customer satisfaction.

The Effect of Convenience on Satisfaction

The results of the second hypothesis test suggest that convenience has a positive impact on satisfaction. Users of the BNI mobile banking application experience convenience due to the time savings provided by the application, which can potentially increase customer satisfaction. These findings are consistent with previous research by Diantari et al., (2021). which also found that convenience positively influences satisfaction.

The Effect of Risk on Satisfaction

The study found that risk does not affect customer satisfaction in using the BNI mobile banking application, contradicting the initial hypothesis (H3). The descriptive analysis in Table 3 shows that the mean value of the risk variable is 3.240, indicating low perceived risk among respondents. Despite feeling free from risks like theft and fraud, user satisfaction remains unaffected. Hypothesis testing in Table 7 shows that convenience has a very high T-statistic value (4.566) and significantly impacts satisfaction. According to the Theory of Planned Behavior, users' positive attitudes toward the application's ease and efficiency. This positive attitude can reduce the influence of risk on satisfaction. Customers focus more on the convenience benefits, which compensates for their risk concerns. These findings are consistent with the research conducted by Amalia & Kurnianti, (2023), which found that risk does not significantly affect customer satisfaction with digital applications.

The Effect of Trust on Satisfaction

The fourth hypothesis test results show that trust does not affect customer satisfaction in using the BNI mobile banking application. Whether users trust the application or not, does not influence their satisfaction. This finding contradicts the initial hypothesis that trust positively affects satisfaction. According to the study, more than half of the respondents (54%) have been BNI customers for over 10 years. These long-term customers likely have a stable and high level of trust in BNI and are very familiar with its services, including mobile banking. As a result, their satisfaction depends more on the actual performance of the mobile banking service rather than trust, which may be more relevant for new or less experienced customers. The research conducted by Berlianto, (2019) similarly found that trust does not significantly influence user satisfaction with technology.

The Effect of Security on Satisfaction

The TPB framework helps to understand why security positively impacts satisfaction in this study. The respondents' satisfaction with the security measures suggests that they feel in control and confident

when using the application, as the two-factor authentication provides an additional layer of security. This sense of control can significantly contribute to their overall satisfaction, as it reduces anxiety and perceived risks associated with mobile banking. Therefore, security positively affects customer satisfaction in using the BNI mobile banking application. These findings are also consistent with previous research conducted by Deliyana et al., (2021).

The Effect of Ease of Use on Intention

The sixth hypothesis test shows that ease of use does not affect the intention to use the BNI mobile banking application, leading to the rejection of hypothesis (H6). According to Table 2, 79% of respondents have higher education (bachelor's degree), suggesting they are likely to overlook complexity issues due to better technology literacy. These findings align with research by Yulistina & Maradona, (2024), Baabdullah et al., (2019), and Purnama et al., (2023), which found that ease of use does not influence the intention to use technology.

The Effect of Convenience on Intention

The hypothesis test results indicate that convenience positively affects the intention to use the BNI mobile banking application. This means that when users find the application convenient, their intention to use it increases. These seventh hypothesis test results align with the Technology Acceptance Model (TAM), which states that perceived usefulness (convenience) influences the intention to use technology (Chen & Tsai, 2019;Wang et al., 2022).

The Effect of Risk on Intention

Risk does not affect customers' intention to use the BNI mobile banking application, leading to the rejection of the eighth hypothesis (H8). The study found that 68% of respondents are aged 25-45, a group with complex financial needs and substantial experience with digital technologies. Their familiarity with managing risks makes risk a less significant factor in their intention to use the BNI mobile banking application. Research conducted by A. N. A. Malik & Annuar, (2021) and Purnama et al., (2023) also found that risk does not significantly affect the intention to use technology.

The Effect of Trust on Intention

The extended TAM (TRITAM) theory suggests that trust influences the intention to use technology. However, hypothesis testing shows that trust (X4) does not affect the intention (Y2) to use the BNI mobile banking application. Over half of the respondents (54%) have been BNI customers for more than 10 years and are well-acquainted with BNI mobile banking. Their deep understanding of its benefits and security means that trust does not impact their intention to use the application. These findings are consistent with studies by Purnama et al., (2023) and Abdennebi, (2023).

The Effect of Security on Intention

The results of the tenth hypothesis test indicate that security (X5) positively affects the intention (Y2) of customers to use the BNI mobile banking application. The Theory of Planned Behavior (TPB) states that an individual's perceived behavioral control over security influences their intention. This finding aligns with the extended TAM theory, which posits that security impacts intention. It also corroborates previous research by Utami & Kusumawati, (2017), Kimiagari & Baei, (2022) and Aditya & Mahyuni, (2022), which found that security positively influences the intention to use technology.

The Effect of Satisfaction on Intention

The results of the eleventh hypothesis test indicate that satisfaction positively affects the intention of customers to use the BNI mobile banking application. This finding is consistent with previous research by Hayuningtyas & Widiyanto, (2015), leading to the acceptance of the eleventh hypothesis (H11). This means that the higher the satisfaction with using the BNI mobile banking application, the greater the intention to continue using it.

The Effect of Ease of Use on Intention Mediated by Satisfaction

The hypothesis testing results in Table 7 show that ease of use does not positively affect satisfaction or intention. Consequently, satisfaction cannot mediate the relationship between ease of use and intention, leading to the rejection of hypothesis H12. According to Table 2, 79% of respondents have higher education (bachelor's degree). These respondents likely understand the benefits of mobile banking regardless of their satisfaction. They prioritize economic value, efficiency, or convenience (which influences intention as found in Table 7) when determining their intention.

The Effect of Convenience on Intention Mediated by Satisfaction

The results in Table 7 show that convenience positively affects both satisfaction and intention. Therefore, satisfaction mediates the relationship between convenience and intention, leading to the acceptance of hypothesis H13. Since the direct relationship between convenience and intention in hypothesis H7 is significant, satisfaction serves as a partial mediator.

The Effect of Risk on Intention Mediated by Satisfaction

The main characteristics of the respondents in this study show that most have been BNI customers for over 10 years (54%). This long experience likely makes them more trusting and comfortable with the services provided, reducing their perception of risk. The study also found that risk does not negatively affect satisfaction and intention (Table 7). Consequently, satisfaction cannot mediate the relationship between risk and intention, leading to the rejection of hypothesis H14.

The Effect of Trust on Intention Mediated by Satisfaction

The test results do not support the hypothesis (H15) that trust positively affects the intention to use the BNI mobile banking application, mediated by satisfaction. According to the main characteristics of the respondents, 54% of the respondents reside in Denpasar. This area's characteristics may influence their perceptions of trust and satisfaction due to better access to and use of technology, which may differ from other regions. Better access to technology and digital infrastructure might lead users to directly assess their trust in the application based on a seamless and reliable technological experience. If the technology performs well and consistently, their trust in the application will be high without needing satisfaction as a mediator.

The Effect of Security on Intention Mediated by Satisfaction

The results in Table 7 show that security does not positively affect satisfaction but does influence intention. Most respondents have a bachelor's degree (79%), which likely allows them to objectively evaluate security and intend to use the application directly, without the mediation of satisfaction. Therefore, satisfaction cannot mediate the relationship between security and intention, leading to the rejection of hypothesis H16.

4. CONCLUSION

The results show that convenience and security have significant positive impacts on both satisfaction and intention. Satisfaction itself also significantly influences intention. The mediation effect of satisfaction on the relationship between convenience and intention is significant, while other mediation effects are not supported. The implications of this study empirically confirm the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) in the context of factors influencing satisfaction and intention to use the BNI mobile banking application. The research shows that perceived behavioral control over convenience and security positively affects user satisfaction and intention. Positive attitudes towards these factors also drive usage intention, suggesting BNI should focus on enhancing them. While subjective norms were not explicitly studied, social influence, such as recommendations from other users, can increase usage intention. Within the TAM framework, convenience (perceived usefulness) significantly impacts satisfaction and intention, even though ease of use is not significant. Therefore, BNI should continue to improve the convenience and security of their application to boost adoption and usage.

Given that convenience positively impacts customer satisfaction and intention to use the BNI mobile banking application, the provider should focus on enhancing convenience by simplifying the user interface, improving transaction speed, and ensuring accessibility anytime and anywhere. Although risk does not affect satisfaction and intention, BNI should continue educating customers about their security measures to alleviate concerns and enhance the sense of security, potentially increasing customer intention to use the app. Since security positively influences intention, BNI should keep improving security features like two-factor authentication to ensure customers feel safe using the application. With respondents aged 25-45 focusing on practical benefits, BNI should highlight the tangible advantages of mobile banking, such as time savings and convenience, in their marketing strategies. Future research could compare BNI mobile banking users with users of other bank applications to provide insights into BNI's strengths and weaknesses relative to competitors.

This study contributes novel insights into mobile banking adoption by showing that, contrary to much of the existing literature, ease of use, risk, and trust do not significantly impact satisfaction or intention among established users of BNI Mobile Banking. This divergence suggests that as users gain experience, they prioritize different factors, shifting focus from initial usability concerns to other aspects.

Notably, the study underscores the critical role of security and convenience, which emerged as primary drivers of satisfaction and intention to use the platform. This finding emphasizes the importance of robust security features, such as two-factor authentication, and a seamless user experience in retaining long-term customers, providing valuable guidance for digital banking providers looking to enhance customer engagement through targeted improvements.

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