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THE INFLUENCE OF PERCEIVED CONVENIENCE, PERCEIVED RISK AND SOCIAL INFLUENCE ON INTEREST IN USING MOBILE BANKING (STUDY ON CUSTOMERS OF BANK SUMUT, AJAMU PANAI HULU BRANCH OFFICE)

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Abstract. This research aims to determine and analyze the relationship between perceived convenience, perceived risk and social influence on customers' intentions to use mobile banking. This research is quantitative descriptive research, with a total sample size of 250 customers. Data collection uses surveys with questionnaires. The analysis tool used is the Structural Equation Model using the Smart PLS analysis tool.

Keywords: Perceived convenience, perceived risk, social influence, intention to use mobile banking.

INTRODUCTION

A bank is a company belonging to the financial services sector. Currently information systems and technology have been adopted by banks, and are actively providing satisfactory results for bank growth. According to Kasmir (2014) banks are business entities that collect funds from the public in various forms, such as loans, savings and then distribute them back to the community in the form of credits or loans with the aim of improving people's welfare and standard of living.

As technology develops, it directly forces banks to continue to improve technology in every operational activity, including in service to customers. One form of use of banking technology today is mobile banking. Mobile Banking is a technology-based service provided by banks to support smooth and easy transactions (Rema & Setyohadi, 2016).

Previously, transaction services using mobile banking could only be done in several forms, namely checking balances, transfers between accounts, checking transaction transfers, but now banks continue to add convenience features, namely being able to carry out other bill transactions, such as purchasing credit, electricity tokens or other forms of bills (Ifham, (2015). Research conducted by Zhou et al., (2010) states that bank mobile banking can improve the quality of their services while reducing service costs (Zhou et al., 2010).

Mobile banking services are used by almost all banks in Indonesia, one of which is Bank Sumut. As reported in the Annual Report of Bank Sumut in 2020, to make customer transactions easier, Bank SUMUT has developed a Digital Banking application, namely a Mobile Banking Application which can help customers with banking activities without having to come to the Bank. However, in its implementation, there are still obstacles as a result of users not fully understanding how to use the new features in the new application after it is launched, as well as bottlenecks/congestion events occurring in the

data flow process (data transmission) when transaction traffic is high in office units, apart from mobile Bank Sumut banking is also not widely used by customers, especially in sub-urban areas.

Many studies have previously been conducted that examine the use of mobile banking, for example Oktavianita (2022) conducted research on Bank Syariah Indonesia, then Puspitosari and Hidayat (2020) on Bank BNI Syariah and Mandatra, & Sutarso, (2019) on Bank Mandiri. However, research examining intentions to use mobile banking at Bank Sumut has never been carried out, especially in sampling in sub-urban areas. Based on the research gaps, it is important to carry out this research by analyzing the factors that influence individuals in using mobile banking, such as perceived convenience, perceived risk and social influence on interest in using mobile banking.

According to Tahar, Riyadh, Sofyani & Purnomo, (2020) perceived ease is related to how easy it is to access a technological system and its appearance. Based on the Technology Acceptance Model (TAM) introduced by Davis (1986), users' perceived ease of use is one of the most important factors in their acceptance of a system. Davis (1986) defines ease of use as the extent to which users believe that by using a particular system, they will be free of effort. In other words, the more users feel a system is easy to use, the higher their interest in using the system.

Apart from perceived convenience, perceived risk is one of the factors that influences a person's intention to use mobile banking. Perceived risk refers to the different types of risks that users consider associated with mobile banking, including data hacking, possible handset theft, and failed transactions" (Ha et al., 2012, p. 221). Consumer trust in the use of mobile banking has a significant effect on customers' intentions to use mobile banking (Oktavianita, 2022). In the definition of trust, banks need to consider that trust helps consumers to overcome potential risk perceptions and engage in behavior that allows sharing of data or personal information between them and the vendor (McKnight, Choudhury, & Kacmar, 2002) in the case of this research, between consumers and applications mobile banking available on mobile devices.

Social norms, subjective norms or normative pressure are terms used for social influence (Makanyeza, 2017). Individuals are more likely to adopt a service if they perceive that important people in their lives will agree to use mobile banking services. Several researchers found that an individual's intention to use mobile banking is significantly influenced by the people around him (Ahmad, 2018; Kumar et al., 2017; Singh & Srivastava, 2018). Singh, Srivastava and Srivastava (2010) revealed that individuals' decisions to adopt mobile commerce services are influenced by friends and family members and argued that these users are part of the social network, not just technology users. As concluded in Makayeza's (2017) research, social influence has a positive effect on behavioral intentions to adopt mobile banking services.

Based on the background above, this research aims to analyze and determine the influence of perceived convenience, perceived risk and social influence on customers' intentions to use mobile banking at Bank Sumut in sub-urban areas.

RESEARCH METHOD

This study uses a quantitative approach. This research is deductive in nature where the problem formulation is answered using a theory formulated into a hypothesis. The sampling method used was nonrandom (Non-Probably Sampling) using purposive

sampling (Judgment sampling). The number of samples taken for this research was 180 respondents who were registered as customers of the North Sumatra Bank, Ajamu Unit Office. The research instrument used was a questionnaire which was distributed directly to Bank Sumut customers. The data analysis used is a Structural Equation Model using the Smart PLS analysis tool.

RESULTS AND DISCUSSIONS

This research classifies respondents into several characteristics which are depicted in the table below:

Table 1. Respondents Classification

Characteristics		Amount	Percentage
Type Sex	Man	113	62.8%
	Woman	67	37.2%
Age	20-30 Years	79	43.9%
	31-40 Years	61	33.9%
	41-50 Years	25	13.9%
	>50 Years	15	8.3%
Education	Senior High	101	56.1%
	School		
	Bachelor	58	32.2%
	Masters	2	1.1%
	Other	19	10.6%
Income	1 - 2 Million	18	10.0%
	2.1 - 3 Million	83	46.1%
	3.1 - 4 Million	43	23.9%
	>4 Million	36	20.0%

Source. Data analysis using SmartPLS.

In the table above, it can be explained that the characteristics of respondents based on gender are dominated by men, namely 113 respondents (62.8%) and women, 67 respondents (37.2%), which means that visitors and customers are found at the North Sumatra Bank, Ajamu Branch. males are more dominant than females. Furthermore, the characteristics of respondents based on age are dominated by those aged 20-30 years, namely 79 respondents (43.9%), aged 20-30, meaning that respondents fall into the age category that understands the meaning of each statement submitted. The next characteristic of respondents is education, which is dominated by high school level with 101 (56.1%) respondents, then bachelor's degrees with 58 respondents (32.2%) and the rest at master's level and others. The respondent has a fairly good education, meaning that the respondent's intellect is considered sufficient to understand the meaning of the questionnaire submitted. Finally, the characteristics of respondents based on income found that respondents tended to have an income of 2.1-3 million, namely 83 respondents or 46.1%.

Based on the results of data analysis, the validity test can be seen in the following table:

Convergent Validity

Table 2. Convergent Validity

	Perceived	Perceived	Social	Interest in Using Mobile Banking (Y)
	Convenience	Risk	Influence	
	(X1)	(X2)	(X3)	
X1.1	0.804			
X1.2	0.923			
X1.3	0.801			
X1.4	0.828			
X2.1		0.661		
X2.2		0.701		
X2.3		0.826		
X2.4		0.812		
X2.5		0.770		
X2.6		0.864		
X2.7		0.686		
X2.8		0.766		
X2.9		0.806		
X2.10		0.792		
X2.11		0.791		
X2.12		0.722		
X2.13		0.780		
X2.14		0.540		
X3.1			0.883	
X3.2			0.903	
X3.3			0.887	
X3.4			0.857	
Y1				0.888
Y2				0.928
Y3				0.865
Y4				0.854

Source. Data analysis using SmartPLS.

Based on the first data processing on the Perceived Risk variable, there are 3 invalid instruments (<0.7) and the rest are valid. So the loading factor value <0.70 is removed from the model. To meet the required convergent validity, namely higher than 0.7, a second test needs to be carried out. The following is an image of the results of the second data processing.

Table 3. Second Test of Convergent Validity

	Perceived Convenience (X1)	Perceived Risk (X2)	Social Influence (X3)	Interest in Using Mobile Banking (Y)
X1.1	0,804			
X1.2	0,923			
X1.3	0,801			
X1.4	0,828			

X2.2	0,711	
X2.3	0,846	
X2.4	0,855	
X2.5	0,794	
X2.6	0,902	
X2.8	0,811	
X2.9	0,834	
X2.10	0,829	
X2.11	0,828	
X2.12	0,749	
X2.13	0,766	
X3.1	0,883	
X3.2	0,903	
X3.3	0,887	
X3.4	0,857	
Y1		0,887
Y2		0,928
Y3		0,865
Y4		0,854

Source. Data analysis using SmartPLS.

In the second data processing, all variables were declared valid because the factor loading value was greater than 0.7.

Discriminant Validity

Discriminant validity assessment has become a generally accepted prerequisite for analyzing relationships between latent variables. The results of the discriminant validity data analysis can be seen in the following table:

Table 4 Cross Loading Values

	D1	D1	C: -1	Internal in II-in - M-1:1- D1: (M)
	Perceived	Perceived	Social	Interest in Using Mobile Banking (Y)
	Convenience	Risk (X2)	Influence	
	(X1)		(X3)	
X1.1	0,804	0,693	0,281	0,186
X1.2	0,923	0,725	0,256	0,237
X1.3	0,801	0,588	0,100	0,200
X1.4	0,828	0,728	0,111	0,150
X2.2	0,714	0,711	0,100	0,104
X2.3	0,739	0,846	0,273	0,227
X2.4	0,794	0,855	0,191	0,172
X2.5	0,791	0,794	0,197	0,171
X2.6	0,914	0,902	0,227	0,224
X2.8	0,804	0,811	0,244	0,214
X2.9	0,808	0,834	0,277	0,191
X2.10	0,800	0,829	0,173	0,148
X2.11	0,774	0,828	0,302	0,203
X2.12	0,366	0,749	0,354	0,401

X2.13	0,394	0,766	0,428	0,508
X3.1	0,196	0,317	0,883	0,725
X3.2	0,152	0,236	0,903	0,774
X3.3	0,233	0,360	0,887	0,736
X3.4	0,227	0,354	0,857	0,794
Y1	0,263	0,386	0,823	0,887
Y2	0,196	0,287	0,833	0,928
Y3	0,225	0,344	0,661	0,865
Y4	0,140	0,238	0,699	0,854

Source. Data analysis using SmartPLS.

The results of table 4 show that the loading value of each indicator item on the construct is greater than the cross loading value. Thus, it can be concluded that all constructs or latent variables already have good discriminant validity, where in the block the construct indicators are better than the indicators in other blocks.

Reliability Test Results

The results of the reliability test can be seen in table 5 below:

Table 5. Reliability Test Results

	Cronbach's alpha	Composite reliability	
Perceived Convenience (X1)	0,861	0,883	
Perceived Risk (X2)	0,954	1,027	
Social Influence (X3)	0,905	0,906	
Interest in Using Mobile Banking (Y)	0,907	0,916	

Source. Data analysis using SmartPLS.

Table 5 shows that the composite reliability and Cronbach's alpha values for all constructs are above 0.70, which indicates that all variables are declared reliable.

Inner Model Test Results

After the estimated model meets the outer model criteria, the structural model (inner model) is tested. The inner model describes the relationship of one variable with other variables. Inner model testing is carried out to test the relationship between latent variables based on the research hypothesis, so that it is able to provide answers to research questions:

Table 6. R² Test Result

	R-square	R-square adjusted
Interest in Using Mobile Banking (Y)	0,742	0,737

Source. Data analysis using SmartPLS.

Based on the results of the analysis above, it can be concluded that the bank performance variable obtained by the Adjusted R Square value is 0.737. This finding explains that the percentage of employee performance that can be explained by justice and benevolence is 73.7%, while 26.3% is influenced by other factors not included in this research. Thus, the Adjusted R Square value of 73.7% is in the strong category.

Hypothesis Testing Results

This research hypothesis testing was carried out by looking at the Bootstrapping calculation results. In this study, a confidence level of 95% was used so that the limit of inaccuracy (α) = 5% = 0.05, the t-table value was 1.96. If the t-statistic value is smaller than the t-table value (t-statistic < 1.96), then H01 is accepted and H1 is rejected. If the t-statistic value is greater than or equal to the t-table (t-statistic > 1.96), then H01 is rejected and H1 is accepted. The following are the results of Bootstrapping calculations in this research:

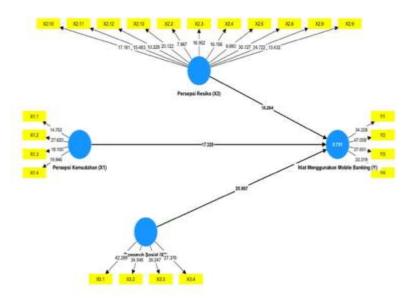


Figure 3. Bootstrapping result

The results of the bootstrapping analysis using SmartPLS are as follows:

Table 7. Path Coefficient Values

	Original	Standard	T statistics	P
	sample	deviation	(O/STDEV	val
	(O)	(STDEV))	ues
Social Influence (X3) -> Interest in	0,842	0,040	20,867	0,00
Using Mobile Banking (Y)				0
Perceived Convenience (X1) ->	0,735	0,106	17,328	0,00
Interest in Using Mobile Banking				2
(Y)				
Perceived Risk (X2) -> Interest in	0,929	0,108	18,264	0,00
Using Mobile Banking (Y)				0

Source. Data analysis using SmartPLS.

The statistical t value of the Perceived Convenience variable on Interest in Using Mobile Banking is 17.32 > 1.96, so H0 is rejected and H1 is accepted. This means that there is a direct influence between Perceived Convenience on Interest in Using Mobile Banking. Then the results of the next calculation on the path coefficient obtained a value of 0.735 with a P-Value value of 0.002 < 0.05. This means that if the Perceived Convenience variable is added by one unit, it will also be followed by an addition to the Interest in Using Mobile Banking variable value of 0.002. Because the P-Value Sig value of 0.002 is smaller than 0.05, it is declared statistically significant.

The statistical t value of the Perceived Risk variable on Interest in Using Mobile Banking is 18.26 > 1.96, so H0 is rejected. H1 is accepted. This means that there is a direct influence between Perceived Convenience on Interest in Using Mobile Banking. Then the results of the next calculation on the path coefficient obtained a value of 0.929 with a P-Value value of 0.000 < 0.05. This means that if the Perceived Risk variable is added by one unit, it will also be followed by an addition to the Interest in Using Mobile Banking variable value of 0.000. Because the P-Value Sig value of 0.000 is smaller than 0.05, it is declared statistically significant.

The statistical t value of the Social Influence variable on Interest in Using Mobile Banking is 20.86 > 1.96, so H0 is rejected. H1 is accepted. This means that there is a direct influence between Perceived Convenience on Interest in Using Mobile Banking. Then the results of the next calculation on the path coefficient obtained a value of 0.842 with a P-Value value of 0.000 < 0.05. This means that if the risk influence variable is added by one unit, it will also be followed by an addition to the Interest in Using Mobile Banking variable value of 0.000. Because the P-Value Sig value of 0.000 is smaller than 0.05, it is declared statistically significant.

Discussion

The results of this research found that Perceived Convenience has a positive and significant effect on customers' intentions to use mobile banking. This means that the easier the technology offered to use, the higher the customer's intention to adopt it. Ease of use is significantly related to behavioral intentions because internet banking or mobile banking is new for customers. Therefore, banks must strive to ensure that transactions can be carried out via mobile phones easily (Gu, Lee, & Suh, 2009). This research is in line with research conducted by Rahayu, 2019; Pranoto & Setianegara, 2020; Rozi & Ziyad, 2019; Cakra, 2021). In this case, Bank Sumut, as one of the regional banks, can continue to ensure that the use of new technology offered to customers must be able to meet the category of easy to use so that customers will be more interested in switching from traditional services to information technology.

This research also found that Perceived Risk has a positive and significant effect on Interest in Using Mobile Banking. This means that the higher the risk felt or imagined by the customer, the lower the customer's intention to use mobile banking. In this way, Bank Sumut can provide a smaller percentage to all customers in transactions, so that Interest in Using Mobile Banking will also increase. The results of this research support research conducted by Oktavianita and Siregar, 2022; Nusapatuah, 2022) who found that Perceived Risk had a positive and significant effect on the millennial generation's intention to use mobile banking.

The results of further research found that Social Influence influences Interest in Using Mobile Banking. This means that the higher the Social Influence felt by customers, the higher their intention to use mobile banking. Social Influence is defined as "the extent to which consumers feel that significant others believe that they should use a particular technology" (Venkatesh and Thong, 2012). This research is in line with research conducted by Merhi, Hone & Tarhini, 2019 and Oktavianita, 2022) which found that Social Influence includes family, friends, colleagues, media and social media and significantly influences user perceptions and behavior in using mobile technology. banking.

CONCLUSIONS

Conclusions

This research found that Perceived Convenience has a positive and significant effect on Interest in Using Mobile Banking. This means that the higher the Perceived Convenience felt by the customer, the higher their intention to use mobile banking. The results of further research found that Perceived Risk had a positive and significant effect on Interest in Using Mobile Banking. This means that the higher the risk perceived by customers, the lower their intention to use mobile banking. Finally, this research found that Social Influence has a positive and significant effect on Interest in Using Mobile Banking. This means that customers who are frequently exposed to Social Influence will tend to increase their intention to use mobile banking.

REFERENCES

- Ahmad, S. F. (2018). The Development of Technology Acceptance Model for Adoption of Mobile Banking in Pakistan, (May).
- Cakra, S. D. P. (2021). Pengaruh Persepsi Kemanfaatan, Perceived Convenience, Dan Persepsi Risiko Terhadap Minat Berkelanjutan Menggunakan Layanan M Banking Pt. Bank Rakyat Indonesia Cabang Unit Tanggul, Jember.
- 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.
- Ifham, A. (2015). Ini Lho Bank Syariah. Memahami Bank Syariah dengan Mudah. PT. Gramedia Pustaka Utama. Jakarta.
- Kasmir. (2014). Manajemen Perbankan. Jakarta: PT.Raja Grafindo Persada.
- Kumar, V. V. R., Lall, A., & Mane, T. (2017). Extending the TAM Model: Intention of Management Students to Use Mobile Banking: Evidence from India. Global Business Review, 18(1), 238–249.
- Makanyeza, C. (2017). Determinants of consumers' intention to adopt mobile banking services in Zimbabwe. International Journal of Bank Marketing, 35(6), 997–1017.
- Mandatra, M. I., & Sutarso, Y. (2019). Pengaruh kegunaan, kesesuaian, keuntungan, motivasi, dan risiko terhadap niat perilaku pada mobile banking Bank Mandiri di Surabaya. Journal of Business and Banking, 9(1), 1-18.
- Nusapatuah, K. S. (2022). Niat Perilaku Untuk Menggunakan Mobile Banking Di Kalangan Generasi Millenial Studi Pada Nasabah Generasi Millenial Di Bank Syariah Indonesia Yogyakarta.
- Oktavianita, A. D., & Siregar, M. U. (2021). Pengaruh Faktor Model UTAUT (Unified Theory of Acceptance and Use of Technology) Terhadap Niat Generasi Milenial Dalam Menggunakan Mobile Banking di Indonesia. Jurnal Ekonomi dan Bisnis (EK&BI), 4(2), 649-660.
- Pranoto, M. O., & Setianegara, R. G. (2020). Analisis Pengaruh Persepsi Manfaat, Perceived Convenience, Dan Keamanan Terhadap Minat Nasabah Menggunakan Mobile Banking (Studi Kasus pada PT Bank Rakyat Indonesia (Persero) Tbk Kantor Cabang Semarang Pandanaran). Keunis, 8(1), 1-9.
- Puspitosari, R., & Hidayat, A. Determinants of Mobile Banking Adoption Behavior in Sub-Urban Areas.
- Rahayu, P. P. (2019). Pengaruh Persepsi Kegunaan, Perceived Convenience, Persepsi Kepercayaan, dan Persepsi Kenyamanan Terhadap Minat Penggunaan Mobile

- Banking (Studi Empiris pada Mahasiswa di Yogyakarta).
- Rema, Y. O. L., & Setyohadi, D. B. (2016). Faktor-faktor yang mempengaruhi penerimaan mobile banking studi kasus: BRI Cabang Bajawa. In Seminar Riset Teknologi Informasi (SRITI) (Vol. 1, No. 1, pp. 114-122).
- Rozi, F., & Ziyad, M. (2019). Pengaruh Kepercayaan, Persepsi Kegunaan, Perceived Convenience Dan Persepsi Kenyamanan Terhadap Minat Menggunakan Layanan Mobile Banking Bank BTN. Jurnal Sains Manajemen Dan Kewirausahaan, 3(2), 92-102.
- Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. International Journal of Bank Marketing, 36(2), 357–378
- Tahar, A., Riyadh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived ease of use, perceived usefulness, perceived security and intention to use e-filing: The role of technology readiness. The Journal of Asian Finance, Economics and Business, 7(9), 537-547.
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. Computers in human behavior, 26(4), 760-767.
- V. Venkatesh, J.Y.L. Thong, X. Xu, Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology, MIS Q. 36 (1) (2012) 157–178.
- Merhi, M., Hone, K., & Tarhini, A. (2019). A cross-cultural study of the intention to use mobile banking between Lebanese and British consumers: Extending UTAUT2 with security, privacy and trust. Technology in Society, 59, 101151.