

FACTORS INFLUENCING CIMB NIAGA'S MOBILE PHONE ACCOUNT CONTINUATION USAGE: A STUDY OF TECHNOLOGY ACCEPTANCE MODEL (TAM)

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ABSTRACT

As smartphone capabilities, technological complexity, and other developments increase, banks must adapt to meet demand. CIMB Niaga, a private-owned bank, has some digital banking products, one of which is a mobile phone savings account. The objective of this study is to prove and analyze whether the TAM variables affect the continued use of CIMB Niaga's mobile phone account. These variables include perceived usefulness, perceived ease of use, perceived risk, perceived trust, and perceived satisfaction. Using 70 respondents who hold CIMB Niaga's mobile phone account, the regression analysis reveals that, unless perceived risk, all variables in the TAM variables positively influence the continued use of mobile phone accounts. Perceived risk negatively impacts the usage and continuation of mobile phone accounts. This study provides evidence to the management of the CIMB bank regarding factors that may encourage the frequency of using a digital banking product.

Keywords: *Technology Acceptance Model (TAM), mobile phone account, digital banking, mobile banking, usage continuation.*

INTRODUCTION

Both the business sector and the supply channel model need to be revamped in light of the increasing number of disruptive technological innovations. At first, everything was done by hand and offline. However, nowadays, a lot of sectors are embracing digital media and are completely automated. Financial institutions are significantly affected by this life-threatening condition (Rahi et al., 2017). Financial institutions adapted to this shift by developing mobile banking systems, which combine digital features with more conventional banking services into a single app (Albort-Morant et al., 2022; Alnemer, 2022). According to Alkhawaiter (2020), banks can obtain a significant competitive edge through the use of technology, which also makes banking services more efficient.

In light of the sharp increase in internet use, the cellular industry is expanding at a breakneck pace (Choi, 2018). More and more people are thinking of smartphones as their main means of communication. Eventually, this is the main reason why smartphone sales skyrocketed around the world (Wismantoro et al., 2020). The Central Statistics Agency (BPS) noted that the percentage of mobile phone users in Indonesia will reach 67.88% in 2022. This figure has increased by 2.01% points compared to the previous year, which was 65.87% (Sadya, 2023). Looking at the trend, the percentage of mobile phone



users in Indonesia tends to show an increase. However, the figure was corrected in 2020 due to the COVID-19 pandemic.

In line with the prediction of the growth of mobile phone users in Indonesia and the recent technological disruption, CIMB Niaga, one of the leading private-owned banks in Indonesia, pioneered mobile accounts that functioned more or less the same as e-wallets long before e-wallets or digital wallets became popular as a means of payment for the public (Pradana, 2022). As the name suggests, a mobile phone account (Rekening Ponsel) is an account that uses a cellphone number as an identity instead of an account number, like banking savings in general.

The mobile phone account is the forerunner of electronic money and can be said to be a combination of the concepts of a digital bank and a digital wallet. Even though you don't use an account number, the mobile account can be used for transactions like banking products in general. In March 2013, CIMB Niaga introduced a mobile phone account for the first time. At that time, an account that used a cellphone number as an ID instead of an account number was the latest innovation in banking services and was the first in Indonesia and Southeast Asia. CIMB Niaga itself has been around the financial world in Indonesia since 1955 and has consistently been one of the private banks with the best quality in Indonesia.

As still cited in Pradana (2022), the mobile phone account is growing promisingly. At the end of the year after launch, the mobile account recorded an average growth of 68% per month and recorded 1.5 million transactions per month. As of June 2014, Rekening Ponsel (in this paper, mobile phone account and Rekening Ponsel are used interchangeably) had been used by more than 503,000 customers, an increase of 370% compared to the year it was released. A year after its launch, Mobile Phone Account became the first electronic money in Indonesia by introducing a new way of making transactions at offline merchants without the need for cash, debit cards, or credit cards. At that time, mobile phone accounts collaborated with 1,300 offline merchants throughout Indonesia.

When CIMB Niaga's mobile application, Go Mobile, was released, mobile phone accounts were incorporated into this banking application. Currently, Go Mobile has been rebranded as OCTO Mobile, an application that is predicted to become a super app by CIMB Niaga. Mobile Account is one of the features embedded in OCTO Mobile.

The purpose of this research is to find out if CIMB Niaga's mobile phone account stays active when the TAM variables are included. To find out what keeps people using their mobile phone accounts, this study employs the extended TAM factors. A number of factors come into play, including how useful, easy, risky, trustworthy, and satisfying something is viewed. Despite the extensive literature on TAM in relation to digital banking products (Afshan et al., 2018; Gbongli et al., 2019; Guner & Acarturk, 2020; Iqbal et al., 2018; Juliani et al., 2021; Kazi & Mannan, 2013; Kusumaningtyas & Wardani, 2022; Lule & Mwololo Waema, 2012; Luna et al., 2017; Mutahar et al., 2018; Rahmawati & Haq, 2019; Riza & Hafizi, 2019; Zhang et al., 2018), this study focuses on CIMB Niaga's mobile phone account—a banking product that boomed on cellular and internet infrastructure long before e-wallets or digital wallets were widely used.

LITERATURE REVIEW

Banks Go Digital

As mobile phone accounts are part of CIMB Niaga's digital banking products, this section elaborates on digital banking. Because digital banking eliminates the necessity for banks to make expenditures on or construct infrastructure, it enables residents in economically deprived areas to have access to financial institutions (Ozili, 2018). Both financial institutions and their customers stand to gain from the widespread use of digital banking services. Digital technology helps banks reduce time and operating costs while improving oversight, risk management, and surveillance. This, in turn, allows them to provide their clients with more effective products and offerings (Alnemer, 2022). As a result, these banks are able to offer their clients higher-quality goods and services. Users of online banking have the potential to complete transactions with more ease and speed (Sardana & Singhania, 2018). Because of the pandemic, most individuals prefer to use their cellphones for everything. A quarter of all consumers started using online banking services during the height of the COVID-19 pandemic (Naeem et al., 2022).

TAM

Researchers employ TAM (Davis, 1989) to examine people's behavioral intentions when it comes to using technology (Davis, 1986), including online banking services. Akhter et al., (2020) note that TAM can be enhanced by analyzing a particular technical solution, and that it offers a framework for understanding customer desire to adopt Information Technology (IT). The model has been revised by certain researchers to include other variables that will improve the model when a technological system is used (Alzaidi & Qamar, 2018). Recently updated models show how customers' perceptions of external factors impact their decision to use online banking services (Windasari et al., 2022). The model takes into account the variables of perceived utility (usefulness) and ease of use as attitude determinants that impact the intention to use, which in turn predicts the used behavior of a particular technology (Davis, 1989, 1993).

In Indonesia, where researchers use TAM to predict the determinants of intention, the usage of digital banking products is abundant. These studies include an examination of the continued usage of mobile banking (Ashsifa, 2020; Juliani et al., 2021), e-wallet (Aji et al., 2020), internet based banking among Gen Z (Nurahmasari et al., 2023), government-owned bank's mobile banking (Kusumaningtyas & Wardani, 2022), islamic mobile banking (Riza & Hafizi, 2019), and mobile payment (Kristina & Harris, 2020). Hence, previous studies have yet to examine Rekening Ponsel, launched by CIMB Niaga Bank as an object of research under TAM, so this study tries to fill this gap.

Perceived Ease of Used (PEOU)

A person's perception of how easy it is to use a system is called its perceived ease of use (PEOU) (Davis, 1989). PEOU, as it pertains to online banking, is the degree to which a customer rates the simplicity of various banking features and processes (Alnemer, 2022). Since the widespread adoption of e-banking is a direct result of PEOU of technology, financial institutions are under pressure to provide user-friendly online banking platforms that even those with limited technical expertise will find simple to

navigate (Albort-Morant et al., 2022). PEOU was confirmed to positively affect the use of mobile banking (Alnemer, 2022; Guner & Acarturk, 2020; Kazi & Mannan, 2013; Rahmawati & Haq, 2019).

H1: PEOU is likely to increase the continued use of mobile phone accounts by CIMB.

Perceived Usefulness (PU)

The "waiting time" that customers experience while visiting a bank branch to check their accounts, inquire about services, or meet other financial needs is a thing of the past thanks to online banking. Online banking is available around the clock, seven days a week, allowing consumers to access their bank accounts whenever they want. Adopters of e-banking services are impacted by its convenience (Fawzy & Esawai, 2017). Hours of operation for the bank in Indonesia are 8:00 a.m. to 3:00 p.m. People find online banking more practical and convenient than going to a bank, primarily due to the lack of crowds and shorter wait times. A 'no queuing' service is its defining feature. Reduced information delay is another benefit. This study believes that the utilization of a mobile phone account will provide benefits for its users, which encourages them to frequently use the mobile account over conventional offline banking. Previous research also supports the idea that perceived usefulness (PU) increases the continued use of digital banking products (Alnemer, 2022; Guner & Acarturk, 2020; Juliani et al., 2021; Riza & Hafizi, 2019). The hypothesis is as follow.

H2: PU is likely to increase the continued use of mobile phone accounts by CIMB.

Perceived Risk (PR)

Online shoppers and merchants are geographically separated, which increases the potential for unpredictability in the shopping experience. In light of the prevalence of hacking attempts, consumers are less likely to feel comfortable disclosing sensitive information online (Kazi & Mannan, 2013). Consequently, consumers are less likely to use internet banking if they feel unsafe doing so. Customers are more inclined to use online banking if they feel less worried about behavioral and transactional risks, such as hacking (Alkhowaiter, 2020). The impact of perceived risk on the use of digital banking was highlighted by Kazi & Mannan, (2013) and (Fawzy & Esawai, 2017) which found the negative relationship. Hence, the study formulates the following hypothesis.

H3: PR is likely to decrease the continued use of mobile phone accounts by CIMB.

Perceived Trust (PT)

An individual can trust another when they have faith in their prediction of the other's conduct based on their past interactions, even though they can't be sure that the other would behave as expected (Alnemer, 2022). Suh & Han (2002) were the first to mention trust as an additional component impacting the adoption of online banking. They hypothesised that, in the dynamic world of online banking, consumers' perceptions of the system's usefulness and convenience of use may fall short of offering a complete explanation for their actions. In light of the fact that online banking poses security risks, they emphasized how crucial trust is in the digital banking sector. Some studies found that trust is likely to improve the usage of digital payment in terms of attitude

(Kusumaningtyas & Wardani, 2022), intention behavior (Almarashdeh, 2018), and continuity (Rahmawati & Haq, 2019). However, a study found that trust negatively influences adoption of digital banking (Alnemer, 2022). The hypothesis of the current research is as follow.

H4: PT is likely to increase the continued use of mobile phone accounts by CIMB.

Perceived Satisfaction (PS)

Kelly & Palaniappan (2019) assert that customer happiness is the most important aspect of mobile banking, and customers are extremely satisfied with mobile banking transactions. Hence a measure to satisfaction is the happiness of mobile banking user. Willingness to continue using online banking facilities is strongly correlated with satisfaction level, which in turn influences retention (Aria & Sacco, 2023). Hence the hypothesis is stated as follow.

H4: PS is likely to increase the continued use of mobile phone accounts by CIMB.

METHODS

The research population consists of users of mobile phone account at CIMB Niaga Bank Yogyakarta, the number of whom cannot be known by researchers due to bank confidentiality. Therefore, sampling uses convenience sampling. Because one of the research members was an employee at one of the branches, the person concerned directly asked customers who came to the bank as respondents. Respondent data collection is planned for 10 working days starting in the second week of November 2022, and during this period, 70 respondents were obtained. The research instrument is a questionnaire with a Likert scale of 1 to 5. The number of question items in the PU variable is 6, PEUO is 10, PR is 9, PT is 7, and PS is 8. Meanwhile, the variable intensity, or continuity, of cellphone account use is 2. Details of the questionnaires are available in the appendix. The research data was tested using multiple linear regression tests.

RESULTS AND DISCUSSION

Respondents

To save space, this study does not present a table for the demographic characteristics of the respondents; instead, it is discussed in paragraph. There were 43 female respondents (61.4%) and 27 male respondents (38.6%). The highest age of respondents was classified as young: 18–25 years, 49 (70%); the remaining 26–35 years, 21 (30%). This means that mobile phone account users are in the young category, or those who are willing to be research respondents are in that year number range. The highest level of education among respondents was at the bachelor level, with 41 people (58.6%). The majority of respondents' jobs were private, namely 44 people (63%). Meanwhile, when asked where to get information about mobile phone account banking products, 32 people (45.7%) answered from friends and 29 people (41.4%) from advertisements.



Validity and Reliability Test

The validity and reliability of the questionnaires as research instruments were tested using the correlation test and the value of Cronbach's alpha, respectively. While Table 1 presents the results of the Cronbach Alpha to test the reliability of the research instruments, Table 2 shows the results of the bivariate Pearson correlation to test the validity of the questionnaires.

Table 1. The Results of Reliability Test

Variable	Cronbach's Alpha	Intepretation
PEOU	0.974	Reliable
PU	0.975	Reliable
PR	0.974	Reliable
PT	0.981	Reliable
PS	0.942	Reliable
Continued use mobile account	0.859	Reliable

Source: Data Test Output

Based on Table 1, the value of the Cronbach alpha in all variables is above 0.7. These indicate that the questionnaires are reliable as research instruments. A questionnaire is said to be reliable if a person's answers to statements are consistent or stable over time (Blumberg et al., 2014).

Validity is a quantitative assessment that confirms the variable being measured accurately represents the specific variable of interest to the researcher (Blumberg et al., 2014). As displayed in Table 2, the r value of the correlation is compared with the value of the r table. All the r values of the questionnaires are above the r table, i.e., 0.234. The finding suggests that the questionnaires whose scores are above 0.234 are valid for measuring the respective variables. Hence, the questionnaires are valid as research instruments.

Hypotheses Testing

To test whether PEOU, PU, PR, PT, and PS have an association with the continued use of mobile bank accounts, this study utilizes a multivariate linear regression test. A classical assumption test was also performed to ensure the regression model was not biased.

Table 3 shows the results of hypothesis testing using regression. The table also summarizes the results of the multicollinearity test using the threshold values of VIF and TOL. As shown in the table, the sig value of all variables is below the p value of 0.05. Hence, all variables are significant in influencing the continued use of mobile phone accounts. PEOU positively affects the continued use of mobile accounts, as do PU, PT, and PS. The results suggest that perceived ease of use, perceived usefulness, perceived trust, and perceived satisfaction are likely to enhance the frequency of using the mobile

phone account. In other words, the success of the adoption of mobile banking products depends on how useful, easy, risky, trustworthy, and satisfying they are to the user.

Table 2. Results of Bivariate Pearson Correlation.

Variables	Question	r value	r table	Interpretation
PEOU	X1.1	0.927	0,235	Valid
	X1.2	0.922	0,235	Valid
	X1.3	0.892	0,235	Valid
	X1.4	0.926	0,235	Valid
	X1.5	0.921	0,235	Valid
	X1.6	0.928	0,235	Valid
	X1.7	0.859	0,235	Valid
	X1.8	0.948	0,235	Valid
	X1.9	0.921	0,235	Valid
	X1.10	0.764	0,235	Valid
PU	X2.1	0.952	0,235	Valid
	X2.2	0.962	0,235	Valid
	X2.3	0.94	0,235	Valid
	X2.4	0.96	0,235	Valid
	X2.5	0.943	0,235	Valid
	X2.6	0.905	0,235	Valid
PR	X3.1	0.926	0,235	Valid
	X3.2	0.93	0,235	Valid
	X3.3	0.836	0,235	Valid
	X3.4	0.922	0,235	Valid
	X3.5	0.857	0,235	Valid
	X3.6	0.907	0,235	Valid
	X3.7	0.939	0,235	Valid
	X3.8	0.938	0,235	Valid
	X3.9	0.939	0,235	Valid
PT	X4.1	0.938	0,235	Valid
	X4.2	0.953	0,235	Valid
	X4.3	0.947	0,235	Valid
	X4.4	0.935	0,235	Valid
	X4.5	0.948	0,235	Valid
	X4.6	0.952	0,235	Valid
	X4.7	0.965	0,235	Valid
PS	X5.1	0.91	0,235	Valid
	X5.2	0.923	0,235	Valid
	X5.3	0.52	0,235	Valid
	X5.4	0.903	0,235	Valid
	X5.5	0.857	0,235	Valid
	X5.6	0.867	0,235	Valid
	X5.7	0.83	0,235	Valid
	X5.8	0.944	0,235	Valid
Continued use of mobile account	Y.1	0.931	0,235	Valid
	Y.2	0.943	0,235	Valid

Source: Compilation of data test output

PR has a negative association with the continued use of mobile banking accounts. The results suggest that the higher the risk, the more reluctant the customer is to use the

mobile account. The result also implies that, aside from considering how useful, easy, trustworthy, and satisfying a digital banking product is, the bank, as the owner of the technology, must also consider the embedded risk that may expose the user or bank's customer. Since the findings are all in line with the hypothesis, the results of the current research support previous studies that have been discussed in the hypothesis development section.

Table 3. The Results of Hypothesis Testing

Variables	B	t	Sig	Tolerance	VIF
(Constant)	-1.931				
PEOU	0.058	2.992	0.004	0.257	3.885
PU	0.077	2.475	0.016	0.268	3.738
PR	0.034	2.020	0.048	0.395	2.534
PT	0.062	2.789	0.007	0.295	3.395
PS	0.091	3.076	0.003	0.240	4.169
F	99.120				
Sig F	0.000				
R Square	0.941				

Source: Compilation of data test output.

Table 3 also shows the significance value of F, which is far below 0.05. The result suggests that PEOU, PU, PR, PT, and PS simultaneously affect the continued use of mobile phone accounts. The F test also suggests that the regression model is suitable for the data. The R square suggests that PEOU, PU, PR, PT, and PS predict 94.1% of the determinants of the continued use of mobile phone accounts. The number is very high, so only 5.9% of factors that may influence the usage intensity are captured in the regression model.

Testing The Classical Assumptions

Classical assumption tests are performed in this study as an essential requirement for conducting a regression analysis. This study uses the Kolomogorov-Smirnov test to assess normality. Table 4 presents the results of the test, which indicate the data in the regression model is normal, as shown by the sig. 0.139 value, which is above 0.05.

For the multicollinearity test, this study uses the threshold numbers of tolerance and FIV. Table 3 shows that the value of tolerance for all variables is higher than 0.1 and the value of VIF for all variables is less than 10. Hence, the regression model does not engage with multicollinearity, i.e., a high correlation among independent variables.

Tabel 4. The Results of Kolmogorov-Smirnov Test

Variable	Kol-Smirnov Z	Sig (2tailed)
Unstandardized Residual	1.155	0.139

Source: Compilation of data test output

Table 5 presents the results of the heteroscedasticity test using the Glejser test. A decent regression model is either homoscedastic or lacks heteroscedasticity.



Heteroscedasticity occurs when the variances are different. The heteroscedasticity test is performed on the regression model to determine whether there is a variance inequality between residuals from one observation to the next (Blumberg et al., 2014). As portrayed in Table 5, the sig value of all variables are above 0.05. It indicates that the regression model is homoscedastic.

Table 5. The Results of Glejser Test

Variables	B	t	Sig
(Constant)	0.885	2.753	0.008
PEOU	0.009	0.627	0.533
PU	-0.003	-0.154	0.878
PR	-0.008	-0.632	0.529
PT	-0.017	-1.095	0.278
PS	-0.001	-0.051	0.959

Dependent variable: ABS_RES

Source: Compilation of data test output

CONCLUSIONS

This research aims to investigate the determinants of the continued use of mobile phone account of CIMB using the extended TAM. The results of a regression analysis utilizing 70 respondents who have a mobile phone account indicate that, with the exception of perceived risk, all variables comprising the TAM variables have a positive impact on the continued usage of mobile phones. The results suggest that perceived ease of use, perceived usefulness, perceived trust, and perceived satisfaction are likely to enhance the frequency of using the mobile phone account. Perceived risk has an adverse effect on the maintenance and utilization of mobile phone accounts. This research study furnishes CIMB bank management with empirical evidence pertaining to the determinants that potentially promote increased utilization of digital banking products.

A relatively small sample size is the limitation of the present study. Future research may enhance the sample size or compare the results if the object is not a mobile phone account but Octo Mobile of CIMB Niaga.

Appendix

Table 6. Distributed Questionnaires

Variables	Code	Question
PEOU	X1.1	Mobile phone account easy to use
	X1.2	Mobile phone account easy to understand
	X1.3	The account number is easy to remember because it is the same as the cellphone number
	X1.4	Reduce cash carried
	X1.5	Mobile accounts can be used without an ATM machine
	X1.6	The system is fast



	X1.7	Mobile phone accounts can be used for all types of cell phones
	X1.8	Mobile phone accounts can be used on all simcards
	X1.9	Mobile accounts can be used 24 hours
	X1.10	Registering as a mobile account customer is easy, without coming to branch office
PU	X2.1	Mobile phone account increases my performance
	X2.2	A mobile phone account can speed up work
	X2.3	Mobile account is very useful in my transaction activities
	X2.4	Mobile account increases my effectiveness in transactions
	X2.5	Mobile account can develop my work performance
	X2.6	Mobile phone account can be used for shopping
PR	X3.1	I am not worried about experiencing losses in transactions using mobile account
	X3.2	I am not worried about the quality of mobile account's service in every transaction
	X3.3	I don't have to sacrifice a lot of time to get mobile account services
	X3.4	I am not worried about the safety of sending proof of my Mobile Account transactions
	X3.5	I did not experience rejection from other people when I used mobile account
	X3.6	I feel that the cellphone account provided by the bank is low risk
	X3.7	I feel that bank-provided mobile phone accounts are low risk
	X3.8	Mobile accounts provided by banks, work accurately or error-free
	X3.9	The mobile phone account provided by the bank, never fails
PT	X4.1	I believe in using mobile account based on past experience
	X4.2	I believe mobile account is reliable
	X4.3	I believe mobile account can minimize risks
	X4.4	I believe in the security of using mobile accpunt
	X4.5	I feel more confident to use mobile account rather than interacting with bank employees
	X4.6	I feel confident and safe with the mobile account product
	X4.7	Data confidentiality in the mobile account service is guranted
PS	X5.1	I am willing to use my Mobile Account again
	X5.2	I am willing to recommend Rekening Ponsel to others
	X5.3	I am not interested in using other applications besides mobile account
	X5.4	I am willing to provide advice to CIMB Niaga on mobile accounts if requested
	X5.5	The mobile phone account can be accessed outside working hours
	X5.6	The cell phone account saves me a lot of time, especially when I have limited time
	X5.7	I am satisfied with the SMS rates charged
	X5.8	I am satisfied with the fact that there is no minimum balance on my cellphone account
Continued use of mobile account	Y.1	CIMB Niaga Bank provides the best service so I use its products repeatedly
	Y.2	I would recommend to other people for using mobile account of CIMB Niaga



REFERENCES

- Afshan, S., Sharif, A., Waseem, N., & Farooqhi, R. (2018). Internet banking in Pakistan: An extended technology acceptance perspective. *International Journal of Business Information Systems*, 27(3), 383–410. <https://doi.org/10.1504/IJBIS.2018.089863>
- Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business and Management*, 7(1). <https://doi.org/10.1080/23311975.2020.1804181>
- Akhter, A., Asheq, A. Al, Hossain, M. U., & Karim, M. M. (2020). Exploring customer intentions to adopt mobile banking services: Evidence from a developing country. *Banks and Bank Systems*, 15(2), 105–116. [https://doi.org/10.21511/bbs.15\(2\).2020.10](https://doi.org/10.21511/bbs.15(2).2020.10)
- Albort-Morant, G., Sanchís-Pedregosa, C., & Paredes Paredes, J. R. (2022). Online banking adoption in Spanish cities and towns. Finding differences through TAM application. *Economic Research-Ekonomska Istrazivanja*, 35(1), 854–872. <https://doi.org/10.1080/1331677X.2021.1945477>
- Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic literature review. *International Journal of Information Management*, 53(February), 102102. <https://doi.org/10.1016/j.ijinfomgt.2020.102102>
- Almarashdeh, I. (2018). An overview of technology evolution: Investigating the factors influencing non-bitcoins users to adopt bitcoins as online payment transaction method. *Journal of Theoretical and Applied Information Technology*, 96(13), 3984–3993.
- Alnemer, H. A. (2022). Determinants of digital banking adoption in the Kingdom of Saudi Arabia: A technology acceptance model approach. *Digital Business*, 2(2), 100037. <https://doi.org/10.1016/j.digbus.2022.100037>
- Alzaidi, A., & Qamar, S. (2018). Factors affecting the adoption of internet banking: a systematic literature review. *International Journal of Business Information Systems*, 28(1), 95–124. <https://doi.org/10.1504/IJBIS.2018.091165>
- Aria, M., & Sacco, D. (2023). Determinants of using digital banking services: an analysis of user satisfaction through TAM and UTAUT models with PLS-SEM. *Electronic Journal of Applied Statistical Analysis*, 16(1), 97–121. <https://doi.org/10.1285/i20705948v16n1p97>
- Ashsifa, I. (2020). Pengaruh Technology Acceptance Model (Tam) Terhadap Kepuasan Pelanggan Dan Niat Penggunaan Mobile Banking Secara Berkelanjutan (Privasi Dan Personalisasi Sebagai Variabel Moderasi). *TECHNOBIZ: International Journal of Business*, 3(1), 25. <https://doi.org/10.33365/tb.v3i1.644>
- Blumberg, B., Cooper, D., & Schindler, P. (2014). *EBOOK: Business research methods*. McGraw Hill.
- Choi, S. (2018). What promotes smartphone-based mobile commerce? Mobile-specific and self-service characteristics. *Internet Research*, 28(1), 105–122. <https://doi.org/10.1108/IntR-10-2016-0287>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–339. <https://doi.org/10.2307/249008>



- Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. In *International Journal of Man-Machine Studies* (Vol. 38, Issue 3, pp. 475–487). <https://doi.org/10.1006/imms.1993.1022>
- Fawzy, S. F., & Esawai, N. (2017). Internet banking adoption in Egypt: Extending technology acceptance model. *Journal of Business and Retail Management Research*, 12(1), 109–118. <https://doi.org/10.24052/jbrmr/v12is01/ibaieetam>
- Gbongli, K., Xu, Y., & Amedjonekou, K. M. (2019). Extended technology acceptance model to predict mobile-based money acceptance and sustainability: A multi-analytical structural equation modeling and neural network approach. *Sustainability (Switzerland)*, 11(13), 1–33. <https://doi.org/10.3390/su11133639>
- Guner, H., & Acarturk, C. (2020). The use and acceptance of ICT by senior citizens: a comparison of technology acceptance model (TAM) for elderly and young adults. *Universal Access in the Information Society*, 19(2), 311–330. <https://doi.org/10.1007/s10209-018-0642-4>
- Iqbal, Z., Hassan, M. U., & Iqbal, A. (2018). Factors affecting the adoption of internet banking in Pakistan: an integration of technology acceptance model and theory of planned behaviour. *International Journal of Business Information Systems*, 28(3), 342. <https://doi.org/10.1504/ijbis.2018.10013684>
- Juliani, G., Taruna, N., Sibarani, M. A., & Yenny, Y. (2021). Case Study: The Acceptance of XYZ Bank's Mobile Banking Application Using Technology Acceptance Model (TAM). *Journal of Business and Management Review*, 2(10), 733–746. <https://doi.org/10.47153/jbmr210.2582021>
- Kazi, A. K., & Mannan, M. A. (2013). Factors affecting adoption of mobile banking in Pakistan. *International Journal of Research in Business and Social Science* (2147-4478), 2(3), 54–61. <https://doi.org/10.20525/ijrbs.v2i3.73>
- Kelly, A. E., & Palaniappan, S. (2019). Survey on Customer Satisfaction, Adoption, Perception, Behaviour, and Security on Mobile Banking. *Journal of Information Technology & Software Engineering*, 9(2), 1–15. <https://doi.org/10.35248/2165-7866.19.9.259>
- Kristina, N., & Harris, I. (2020). The Technology Acceptance Model of Mobile Payment Usage on Generation Z. *Binus Business Review*, 11(3), 149–156. <https://doi.org/10.21512/bbr.v11i3.6394>
- Kusumaningtyas, N. K., & Wardani, D. (2022). Analisis Faktor-faktor yang Mempengaruhi Sikap Penggunaan Mobile Banking (Studi Penelitian pada Nasabah Bank BUMN). *Jurnal Ekonomi, Manajemen Dan Perbankan (Journal of Economics, Management and Banking)*, 5(2), 64. <https://doi.org/10.35384/jemp.v5i2.245>
- Lule, I.; Omwansa tonny K., & Mwololo Waema, T. (2012). Application of Technology Acceptance Model (TAM) in M-Banking Adoption in Kenya. *International Journal of Computing and ICT Research*, 6(1), 31–43.
- Luna, R. De, Gil, J., Montoro-ríos, F., & Liébana-cabanillas, F. (2017). technology acceptance for mobile payments: A Brazilian Perspective. *Review of Business Management NFC*. <https://doi.org/10.7819/rbgn>
- Mutahar, A. M., Daud, N. M., Ramayah, T., Isaac, O., & Aldholay, A. H. (2018). The effect of awareness and perceived risk on the technology acceptance model (TAM): mobile banking in Yemen. *International Journal of Services and Standards*, 12(2), 180–204. <https://doi.org/10.1504/IJSS.2018.091840>
- Naeem, M., Ozuem, W., & Ward, P. (2022). Understanding the accessibility of retail

- mobile banking during the COVID-19 pandemic. *International Journal of Retail & Distribution Management*, 50(7), 860–879. <https://doi.org/10.1108/IJRDM-02-2021-0064>
- Nurahmasari, M., Nur Silfiyah, S., & Haposan Pangaribuan, C. (2023). The Intention to Use Digital Banking Services among Gen Z in Indonesia Based on Technology Acceptance Model (TAM). *Jurnal Manajemen Dan Bisnis Madani*, 5(1), 15–31. <https://doi.org/10.51353/jmbm.v5i1.692>
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Pradana, M. (2022). *Review Rekening Ponsel CIMB Niaga: Kelebihan dan Kekurangan*. Investbro.Id. <https://investbro.id/review-rekening-ponsel-cimb-niaga/>
- Rahi, S., Ghani, M. A., & Alnaser, F. M. I. (2017). Predicting customer's intentions to use internet banking: The role of technology acceptance model (TAM) in e-banking. *Management Science Letters*, 7(11), 513–524. <https://doi.org/10.5267/j.msl.2017.8.004>
- Rahmawati, R., & Haq, D. S. (2019). Mobile Banking: Analisa Penggunaan Pada Nasabah Pt. Bank Aceh Syariah Cabang Lhokseumawe: Pendekatan Technology Acceptance Model (Tam). *Ihtiyath : Jurnal Manajemen Keuangan Syariah*, 3(1), 35–52. <https://doi.org/10.32505/ihtiyath.v3i1.1296>
- Riza, A. F., & Hafizi, M. R. (2019). Customers attitude toward Islamic mobile banking in Indonesia: Implementation of TAM. *Asian Journal of Islamic Management (AJIM)*, 1(2), 75–84. <https://doi.org/10.20885/ajim.vol1.iss2.art1>
- Sadya, S. (2023). *Sebanyak 67,88% Penduduk RI Gunakan Telepon Genggam pada 2022*. DataIndonesia.Id. <https://dataindonesia.id/telekomunikasi/detail/sebanyak-6788-penduduk-ri-gunakan-telepon-genggam-pada-2022>
- Sardana, V., & Singhanian, S. (2018). Digital technology in the realm of banking: A review of literature. *International Journal of Research in Finance and Management*, 1(2), 28–32. <https://doi.org/10.33545/26175754.2018.v1.i2a.12>
- Suh, B., & Han, I. (2002). Effect of trust on customer acceptance of Internet banking. *Electronic Commerce Research and Applications*, 1(3–4), 247–263. [https://doi.org/10.1016/S1567-4223\(02\)00017-0](https://doi.org/10.1016/S1567-4223(02)00017-0)
- Windasari, N. A., Kusumawati, N., Larasati, N., & Amelia, R. P. (2022). Digital-only banking experience: Insights from gen Y and gen Z. *Journal of Innovation and Knowledge*, 7(2), 100170. <https://doi.org/10.1016/j.jik.2022.100170>
- Wismantoro, Y., Himawan, H., & Widiyatmoko, K. (2020). Measuring the interest of smartphone usage by using technology acceptance model approach. *Journal of Asian Finance, Economics and Business*, 7(9), 613–620. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.613>
- Zhang, T., Lu, C., & Kizildag, M. (2018). Banking “on-the-go”: examining consumers’ adoption of mobile banking services. *International Journal of Quality and Service Sciences*, 10(3), 279–295. <https://doi.org/10.1108/IJQSS-07-2017-0067>

