

MOBILE BANKING AS A DIGITAL MARKETING CHANNEL: ROLE IN CUSTOMER ENGAGEMENT AND PRODUCT ACQUISITION IN INDONESIAN SOE KBMI 4 BANKS

Venessa Amanda Hardi

Institut Teknologi Bandung / Bandung

E-mail: venessamanda06@gmail.com

Received : 03 June 2026

Accepted : 30 June 2026

Revised : 08 June 2026

Published : 16 July 2026

Abstract

The increasing adoption of mobile banking has also changed the interaction of customers with financial institutions in Indonesia. The effect of marketing elements on product acquisition is still uncertain. This study is an analysis of the relationship between the variables of perceived usefulness, perceived ease of use, trust, customer engagement and product acquisition in the use of mobile banking at KBMI 4 Banks in Indonesia namely Bank Mandiri, Bank Negara Indonesia, and Bank Rakyat Indonesia, using the Technology Acceptance Model (TAM) and Customer Engagement Theory. A quantitative approach was adopted and hypotheses were tested by means of a survey of 200 active mobile banking users analyzed by using partial least squares structural equation modeling (PLS-SEM). The PLS-SEM was carried out using SmartPLS 4. The results indicate that mobile banking engagement has an indirect effect to product acquisition, with perceived usefulness and trust as significant mediators between engagement and acquisition behavior. Perceived ease of use, on the other hand, does not play a significant part in this process, pointing to the fact that the ease of use of the interface has become a standard expectation, and not a key consideration when deciding upon purchasing. The TAM model is expanded to capture the idea of digital banking innovation, optimizing mobile banking as an effective channel for product acquisition.

Keywords: *customer engagement, mobile banking, PLS-SEM, product acquisition, technology acceptance model*

INTRODUCTION

The banking sector in Indonesia has become one of the fastest-changing areas in the financial industry in Southeast Asia, with 91 commercial banks currently running in the country with more than 270 million inhabitants (Qomariyah & Priandoyo, 2023). This landscape has changed with the advent of digitalization, which has been accelerated by the COVID-19 pandemic, and has accelerated the adoption of digital payment (Sebayang et al., 2024). The innovation in payments including mobile banking has been seen as having the potential to offer banking and electronic transaction services to the unbanked customers, particularly in markets that are still maturing and developing (Ahlstrom et al., 2020). The transformation takes place in a regulatory framework that is managed by the Financial Services Authority (OJK) where it has issued POJK 12/POJK.03/2018 concerning Digital Banking Services and entering the digital banking era (OJK, 2018). Mobile banking is now used by banks to provide services like payment, transfer, bill payment, e-wallet top-up, investment, and balance inquiry.

The new-normal business environment has also allowed the unbanked to skip other traditional channels of banking, and move directly to mobile banking. Digital transformation has changed the way financial institutions interact with their customers, develop products, and implement marketing strategies (R. Ranjan, 2024). Over the past several years, this percentage grew significantly from 57% in 2017 to 78%, which has made it imperative for banks to continuously strive to improve their service delivery through digital channels while at the same time improving their cybersecurity infrastructure (Lydiana et al., 2025). It is a chance for banks to gain competitive advantage due to the changing consumer behaviour. However, as the banking and financial needs are varied in this digital era the banks need to have a marketing strategy to introduce their banking products to a potential customer. In the Indonesian banking industry, commercial banks are categorized under the BUKU System (Bank Umum Kelompok Usaha; English: Commercial Banks Based on Business Activities) based on their core capital. Bank classified as BUKU IV with core capital of at least IDR 30 trillion based on the regulation issued by Indonesia's Financial Services Authority (OJK). The banks are allowed to engage in a range of financial activities both locally and globally (Otoritas Jasa

Keuangan, 2016). The banks identified by the Central Bank of Indonesia were transformed from their original categorization, namely BUKU III and BUKU IV, to the more recent classification developed by the Indonesia Financial Services Authority (OJK) named KBMI: KBMI 1 (core capital up to IDR 6 trillion), KBMI 2 (above IDR 6 trillion up to IDR 14 trillion), KBMI 3 (above IDR 14 trillion up to IDR 70 trillion), and KBMI 4 (above IDR 70 trillion) (Financial Services Authority 2021), broadly corresponding to former BUKU 1 through BUKU 4 tiers (Ischak et al., 2024). Indonesian state-owned banks such as Bank Mandiri, Bank Negara Indonesia (BNI), and Bank Rakyat Indonesia (BRI) are included in KBMI 4 category

Customer Engagement Theory states that the more customers are emotionally and behaviorally engaged with a system, the more likely a transaction will occur (Brodie et al., 2011). In the banking industry, customer engagement could be viewed as the level of engagement customers have in banking services such as mobile banking (Jamshidi et al., 2018). According to the Technology Acceptance Model (TAM), the ease of use strongly affects the digital action of individuals (Davis et al., 1989) and has been supported in the banking sector, in which customers assess online services based on their functional benefits and simplicity of use (Howcroft et al., 2002; Pikkarainen et al., 2004).

Previous studies on the adoption of mobile banking mostly centered on customer experience, technology adoption, service quality and customer loyalty (Shaikh & Karjaluoto, 2015). However, few studies have taken mobile banking as a digital marketing channel that impacts customers' engagement and product acquisition activities, especially in the context of a state-owned bank (Lemon & Verhoef, 2016; Otopah et al., 2024). The key disconnect between the customer engagement in mobile banking apps and product purchases remains. This study attempts to fill the gap by examining the role of mobile banking platforms as a digital marketing channel and how customers' interactions with push notifications, promotions, and gamification impact their product acquisition as mediated by Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Trust.

The rest of this paper is organized as follows. First, this study discusses the development of mobile banking and its role as a digital marketing channel in the banking industry. Second, the relevant literature in the field of mobile banking, customer engagement, and theories of technology acceptance are reviewed. Thirdly, there is the research methodology and data collection process. Fourth, the study presents the empirical results on the association of the mobile banking engagement and product acquisition behavior. Lastly, the paper brings theoretical contributions, managerial implications, limitations and recommendations for future research.

LITERATURE REVIEW

Mobile Banking

Since the rise of smartphone penetration, internet banking is gradually being changed by mobile banking which provides more advanced functionality with the help of apps. Users can log in and check their balance, make payments, transfer funds, update their financial details, apply for credit cards and loans and even deposit checks electronically. The key benefit is that these can be accessed anytime and anywhere (R. Ranjan, 2024). The mobile banking application allows customers to have more flexibility and easier access (Arif et al., 2016). They facilitate direct bank-to-customer communication and in some cases, even customer-to-customer communication, which enhances productivity and engagement for both banks and customers (Chawla & Joshi, 2019).

Technology Acceptance Model in Mobile Banking

The Technology Acceptance Model (TAM), developed by (Davis, 1989), is one of the basic models in understanding how people adopt and use technology. TAM adds two important constructs, Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) which affect the intention of a user in using a technological system (Chin & Ahmad, 2015). In the context of mobile banking, PU is the perceived usefulness of the mobile banking application when making effective financial decision and PEOU represents how easy it is to use the mobile banking application.

Customer Engagement in Mobile Banking

Customer engagement theory is about the emotions, thoughts and actions that customers put into their relationship with a brand, service or digital platform. In this paper, engagement is conceptualized as a multi-dimensional phenomenon, as per (Brodie et al., 2011), and includes usage frequency, interactive behaviors, attention and feedback loops. Engagement marketing strategies can support organizations to reduce operating expenses, stimulate product development that is focused on the customer, and enhance the quality of post-purchase services (Malthouse et al., 2013).

METHOD

The formulated hypotheses were analyzed by a quantitative approach. The first step was to determine the gap of the study, which in this study was the problem of inconsistency of the use of mobile banking applications with customer purchasing of banking products in SOE KBMI 4 Banks. While many customers are frequent users of the applications, it is uncertain whether those features like gamification, push notifications or promotions actually motivate customers to buy banking products. This mismatch will be the foundation for the research goals.

In this study two theories have been used, namely Customer Engagement Theory and the Technology Acceptance Model (TAM). These theories provide conceptual frameworks for understanding the factors that influence consumers' purchase intentions of financial products through mobile banking: attention, interest, trust, perceived usefulness and ease of use (Davis, 1989). The literature review (Sekaran & Bougie, 2019) further supports the identification of the important constructs and indicators which are in turn operationalized in the survey instrument.

Next, variables to be studied had to be identified. The main independent variables are mobile banking engagement, defined as interactions with promotion, push notifications and gamification. The dependent construct is product acquisition (investment products, loans and savings). Three mediating constructs (derived from TAM and trust theory) are thought to strengthen or explain the connection between engagement and acquisition: perceived usefulness (PU), perceived ease of use (PEOU), and trust. The surveys were conducted in the main cities in Indonesia and online.

Once the variables have been determined, the study moves on to the development of the hypothesis. Both direct and indirect hypotheses are formed to explore the relationships between the constructs. For example, it is assumed that mobile banking engagement has positive influence on product acquisition and that this impact is mediated by PU, PEOU and trust. A combined mediation influence is also proposed, where the three mediators interactively reinforce the relationship (Venkatesh & Davis, 2000). The Hypotheses development is as follows:

H1: Mobile Banking Engagement (push notifications, promotions, gamification) positively influences customer product acquisition.

H2: Perceived Usefulness (PU) mediates the relationship between mobile banking engagement and customer product acquisition.

H3: Perceived Ease of Use (PEOU) mediates the relationship between mobile banking engagement and customer product acquisition.

H4: Trust mediates the relationship between mobile banking engagement and customer product acquisition.

H5: The combined mediators (PU, PEOU, and Trust) strengthen the relationship between mobile banking engagement and customer product acquisition

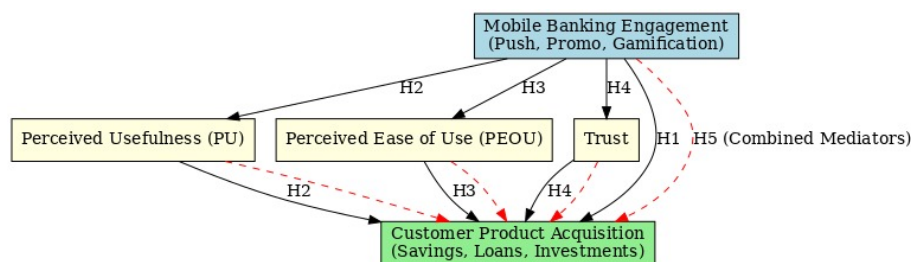


Figure 1. Conceptual Framework of Mobile Banking Engagement and Customer Product Acquisition

Data Collection and Analysis

The primary data was obtained from a structured survey which was carried out to 200 respondents who are active mobile banking users of SOE KBMI 4 Banks (Bank Mandiri, BNI, and BRI). Among the 200 respondents, 99 were male (49.5%), and 101 were female (50.5%). In total, the respondents are mostly focused on the 25-44 age group (82.5%). The second largest group are aged between 35 and 44 (22%) with the 45-54 age band coming in next with 20 (10%). In the meantime, 14 respondents (7%) are in the age group 18-24 years and 1 respondent (0.5%) is 55 years and above.

The questionnaire asked the participants to use a Likert scale from 1 to 7, with 1 being the least agreeable and 7 being the most agreeable (Lionello et al., 2021). The questionnaire items were adapted from perceived ease of use (Davis, 1989), perceived usefulness (Venkatesh & Davis, 2000), trust (Niklas Johannes et al., 2018), mobile banking engagement (Jasperson et al., 2005), and customer product acquisition (Lemon & Verhoef, 2016).

RESULTS AND DISCUSSION

Validity and Reliability

Before testing the hypotheses, validity and reliability tests were conducted to ensure the accuracy and consistency of the measurement model. The validity test was performed using convergent validity and discriminant validity. Convergent validity was assessed using the Average Variance Extracted (AVE), which should exceed 0.50. An AVE above 0.50 indicates that the construct explains more than half of the variance of its indicators (Hair et al., 2019). In this study, three criteria were implemented to evaluate discriminant validity, namely cross loadings, the Fornell–Larcker criterion, and the Heterotrait–Monotrait ratio (HTMT), with HTMT considered a more robust criterion (Hair et al., 2017). According to the Fornell-Larcker procedure (Fornell & Larcker, 1981), the lowest value for the AVE was for the latent variable Mobile Banking Engagement (0.628), this value was higher than the minimum threshold of 0.5 (Chin, 2009). The AVE values were higher than the correlation coefficient between the given variables and all other variables. Therefore, the reflective model met the criteria for discriminant validity (Table 4). These values confirmed the model’s robustness and showed that it met all necessary conditions for successful evaluation (Hair et al., 2011).

The discriminant validity was assessed using the cross-loadings criterion, where each indicator is expected to have a higher loading value on its intended construct compared to all other constructs in the model. Based on the cross loadings results presented in Table , all indicators in this study demonstrated loading values that were consistently higher on their respective construct in the model. These findings confirm that all indicators have successfully met the cross-loading criterion, indicating that discriminant validity has been sufficiently established across all constructs (Hair et al., 2017) . As an alternative to the Fornell-Larcker criterion, the HTMT (Heterotrait-Monotrait Ratio) method was proposed in 2015, offering a more robust approach (Henseler et al., 2015) . A maximum threshold of 0.85 (or equal to 0.90) is recommended (Henseler et al., 2015; Sarstedt et al., 2019). A value of less than 0.90 is considered an indication of acceptable discriminant validity (Henseler et al., 2016). The results for this method are shown in Figure 2.

Internal consistency reliability was evaluated using Cronbach’s Alpha and Composite Reliability (CR). Although Cronbach’s Alpha is widely used, Composite Reliability is preferred in PLS-SEM because it is calculated across different indicator loadings. Values above 0.70 indicate satisfactory reliability (Hair et al., 2017). The remaining 17 indicators were then re-estimated using SmartPLS 4 to ensure that all retained indicators met the minimum outer loading threshold of 0.70. The second running results are presented in Figure IV-10. It appears that all outer loading indicators have been > 0.70, so the outer loading has been sufficient. The results of the analysis confirmed that all evaluated constructs were valid and reliable, providing a strong foundation for testing the research hypotheses.

Table 1. Validity and Reliability Test Results

Variables	Composite Reliability	Reliability	Average Variance Extracted (AVE)	Validity
MBE	0.705	Reliable	0.628	Valid
PU	0.794	Reliable	0.710	Valid
PEOU	0.781	Reliable	0.695	Valid
Trust	0.810	Reliable	0.724	Valid
CPA	0.891	Reliable	0.699	Valid

Note: MBE = Mobile Banking Engagement; PU = Perceived Usefulness; PEOU = Perceived Ease of Use; CPA = Customer Product Acquisition. Abbreviations apply to Tables 1–4.

Furthermore, discriminant validity was assessed through the Fornell–Larcker criterion, cross-loadings and the Heterotrait–Monotrait ratio (HTMT) to confirm that each construct demonstrated adequate differentiation from the other constructs in the model. The corresponding results are shown in Tables 5, 6 and Figure 2.

MOBILE BANKING AS A DIGITAL MARKETING CHANNEL: ROLE IN CUSTOMER ENGAGEMENT AND PRODUCT ACQUISITION IN INDONESIAN SOE KBMI 4 BANKS

Venessa Amanda Hardi

Table 2. Fornell–Larcker Criterion Results

Variables	CPA	MBE	PEOU	PU	Trust
CPA	0.836				
MBE	0.458	0.792			
PEOU	0.540	0.426	0.834		
PU	0.594	0.429	0.617	0.842	
Trust	0.648	0.536	0.607	0.520	0.851

Table 3 Cross-Loadings Results

Variables	Customer Product Acquisition	Mobile Banking Engagement	Perceived Ease of Use	Perceived Usefulness	Trust
CPA1	0.725	0.302	0.385	0.338	0.518
CPA2	0.879	0.397	0.514	0.491	0.604
CPA3	0.841	0.447	0.443	0.539	0.558
CPA4	0.882	0.450	0.438	0.578	0.555
CPA5	0.844	0.295	0.473	0.510	0.468
MBE1	0.330	0.773	0.304	0.323	0.379
MBE2	0.267	0.731	0.336	0.230	0.378
MBE3	0.462	0.867	0.371	0.436	0.501
PEOU1	0.463	0.345	0.836	0.506	0.492
PEOU2	0.426	0.325	0.834	0.583	0.485
PEOU3	0.460	0.390	0.831	0.460	0.540
PU1	0.462	0.327	0.518	0.771	0.460
PU2	0.494	0.437	0.509	0.889	0.423
PU3	0.543	0.315	0.534	0.862	0.436
T1	0.448	0.478	0.419	0.412	0.836
T2	0.523	0.461	0.630	0.530	0.870
T3	0.662	0.434	0.497	0.391	0.846

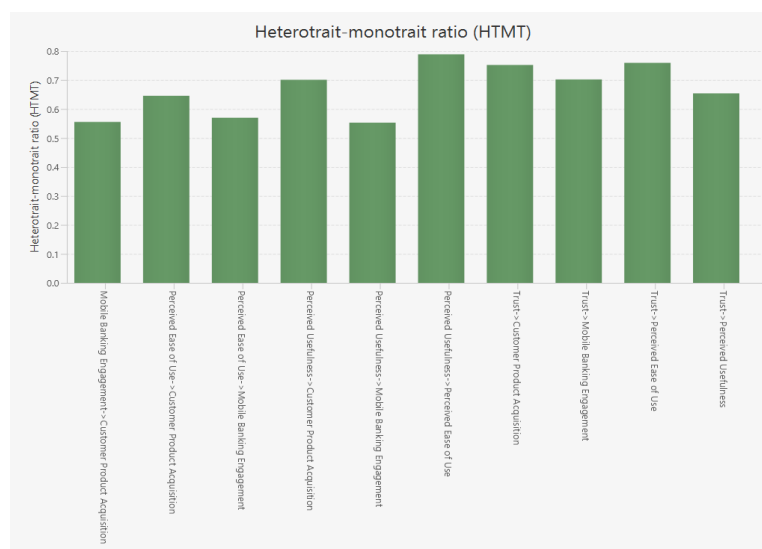


Figure 2 Heterotrait Monotrait Ratio Result

Hypothesis Result

The hypothesis-testing results provide important insights into the relationships among mobile banking engagement, user perceptions, and customer product acquisition. Based on the structural model estimation as seen on Table 7.

Table 4. Hypothesis Testing Results

Hypothesis	Structural Path	β	T-values	P-values	Result
H1	MBE $\rightarrow$ CPA	0.080	1.105	0.269	Rejected
H2	MBE $\rightarrow$ PU $\rightarrow$ CPA	0.131	3.619	0.000	Accepted
H3	MBE $\rightarrow$ PEOU $\rightarrow$ CPA	0.032	0.751	0.452	Rejected
H4	MBE $\rightarrow$ Trust $\rightarrow$ CPA	0.215	4.125	0.000	Accepted
H5	MBE $\rightarrow$ PU+PEOU+Trust $\rightarrow$ CPA	0.378	6.576	0.000	Partially Supported

There is no direct relationship between mobile banking engagement and customer product acquisition which is statistically significant ($\beta = 0.080$, $t = 1.105$; $p = 0.269$). This results indicates that customers are interested in using mobile banking functionality, but it is not enough to directly bring about product adoption. This finding is supported by Brodie et al., (2011), who suggested that customer engagement is multi-dimensional and that it is not always possible to measure the consequences of engagement with a brand on the level of transaction, but it can stay on the emotional level without necessarily reaching the level of “behavioural intentions”.

It is found that perceived usefulness has a significant positive influence on acquisition of the product by customers ($\beta = 0.131$, $t = 3.619$, $p = 0.000$). This finding suggests that if customers believe the financial products offered via mobile banking are of functional benefit to them, they are more likely to adopt them, as they are able to see the benefits, such as efficiency, convenience, and better financial decision making. This is similar to the Technology Acceptance Model 3 (TAM 3) (Venkatesh & Bala, 2008), where perceived usefulness is an important factor that affects a person's behavioral intention to use a system if the system increases their performance and productivity.

These results show that perceived ease of use did not significantly impact customers' product acquisition ($\beta = 0.032$, $t = 0.751$, $p = 0.452$). This means that although ease of use can encourage users to interact with the application, it doesn't necessarily mean that users will make decisions to use banking products. That is, usability is seen as a requirement, not a make-or-break criteria for product adoption. This finding is supported by the results from Nurmalia and Wijayanti (2018), who found that ease of use does not directly affect purchase intention, especially when the customers have already been familiar with the technology of the digital service. In the initial stages of adoption, when users are trying to learn how to work with an unfamiliar system, ease of use is an important factor to consider (Venkatesh & Bala, 2008). But, the more proficient a user becomes with the technology, the less important the expectancy of effort.

The result shows that trust positively affects on customer product acquisition ($\beta = 0.215$, $t = 4.125$, $p = 0.000$). This discovery highlights the importance of trust in the digital banking environment, especially when consumers need to make financial decisions on mobile devices. This finding is in line with (Gefen, 2000), who argues that trust is far more effective in predicting actual purchase/acquisition. When it comes to mobile banking, where consumers have no direct contact with the service provider, trust is a major consideration, enabling them to put aside worries about the possible bad outcomes and engage in a transaction with assurance. The difference is important in the world of mobile banking as there is a difference between a customer who uses an application to make sure they can do a particular transaction and one who will commit to getting a product. The latter calls for a far greater degree of confidence and that confidence is derived from trust.

The total indirect effect of the three mediators was found to be $\beta = 0.378$, and combined with the non-significant direct effect ($\beta = 0.080$, $p = 0.269$), yielded a total effect of $\beta = 0.458$ ($t = 6.576$, $p = 0.000$), indicating full mediation of the MBE-CPA relationship. This combined mechanism, however, was not equally distributed across three mediators: the indirect effects of Trust and Perceived Usefulness were significant while the indirect effect of Perceived Ease of Use was not significant. Thus H5 is proposed as a combined mechanism with the proviso that not all three mediators are of equal importance.

Overall, these findings suggest that the connection between mobile banking use and acquisition of products is mostly indirect. Engagement is one of the basic factors that influence users' perceptions, which in turn influence product adoption, especially perceived usefulness and trust. This indicates that banks shouldn't just pursue user engagement, but also ensure that user engagement is meaningful and builds customer trust in order to effectively turn users into product adopters.

CONCLUSION

Theoretical Implications

This study makes two main contributions to the literature on digital banking and technology adoption. First, it expands the Technology Acceptance Model (TAM) beyond merely as a platform for transactional banking to more as a digital marketing channel that can affect customer acquisition behavior with products which makes TAM a model applicable to the outcome of product acquisition, and not just initial adoption (Davis, 1989; Venkatesh & Davis, 2000). Second, the results of this study expand the Customer Engagement Theory (Brodie et al., 2011; Lemon & Verhoef, 2016) by demonstrating that engagement experiences with features of mobile banking do not always lead to product acquisition ($\beta = 0.080$, $p = 0.269$); rather, there is a positive relationship between engagement and perceived usefulness ($\beta = 0.131$, $p = 0.000$) and trust ($\beta = 0.215$, $p = 0.000$), which means that digital engagement is a factor that primarily influences perceptions of the product.

Second, this study adds to the literature on digital banking innovation in emerging countries by offering empirical data from KBMI IV banks, which are state-owned banks, most of the previous studies were carried out in developed countries or KBMI private banks. This result indicates that Trust has the most significant impact on the acquisition of the product as compared to PU ($\beta = 0.402$, $p < 0.001$) which shows the special role of institutional credibility in the markets where customers have strong reliance on governmental support as a sign of confidence (Gefen, 2000; Zhou, 2012). Hence, the study contributes to the contextualization of the phenomenon of the adoption of digital banking and the behavior of the customer in the context of emerging markets.

Practical and Managerial Implications

The findings in this study provide several implications for executives and practitioners in the digital banking field, especially in SOE KBMI 4 Bank to make the use of mobile banking as a strategic channel to acquire customers more optimal. For one, banks should think of mobile banking apps as more than just transactional apps, they should be a digital marketing platform as well, using customisable promotions, push notifications, and gamification to help cross sell and up sell and to encourage users to look into other financial products.

Second, because trust and perceived usefulness are the most powerful motivators for product acquisition, banks should focus on measures to build trust and to provide value to customers by continually enhancing cybersecurity, transaction reliability and privacy protection, as well as providing personalized financial solutions and relevant product recommendations, including transparent data protection disclosures, real-time security alerts and visible regulatory compliance information at key product consideration touchpoints within the application.

Thirdly, since ease of use is no longer a key differentiator, or a "must-have" feature, banks need to move away from ease of use and toward a more robust, value-added digital experience, including integrated product information, spending analysis and behavior-based personalization, that make it easier for customers to make financial decisions and drive greater product conversion.

Fourth, the data shows a huge gap between the conversion of savings accounts (79.5%) vs. loans (28.5%) and credit cards (48.5%). It is therefore advisable for managers to create distinct in-app marketing sequences for each category, for credit and investment products, that means providing an increasing number of touchpoints that strengthen the familiarity of a brand and reduce the risk, while also being clear about the risks, and only then push a conversion call to action.

Fifth, banks need to leverage the engagement mechanisms with their customers by implementing gamification features, reward systems, behavioral personalization and AI-based interaction with customers, to keep their attention and to foster a long-term digital relationship.

Limitations and Recommendations for Future Research

Several limitations to this study should be taken into account when interpreting the results. The research is only based on the banks in the SOE, namely the banks of kbmi IV, which can be limited to private banks, regional banks and fully digital banks, and there is an imbalance in the distribution of the sample between banks (Wondr by BNI 54%, $n = 109$; Livin' by Mandiri 36%, $n = 72$; BRImo 10%, $n = 20$), so that the comparison of banks can be limited and there is a possibility of sampling bias. The study also employs a cross-sectional design that does not measure perceptions over an extended period of time, uses self-reported survey data which can lead to response bias, and only accounts for perceived usefulness, perceived ease of use, trust, and engagement as explanatory factors while disregarding additional factors like perceived risk, digital financial literacy, personalization, artificial intelligence, and social influence. Future research should use stratified sampling design for more robust inter-bank comparisons, use longitudinal sampling design to investigate behavioral change over time, include behavioral or transactional-

based research approaches in addition to survey-based approaches, and expand the model to include other explanatory variables to create a more comprehensive understanding of customer product acquisition behavior in digital banking.

REFERENCES

- Ahlstrom, D., Arregle, J.-L., Hitt, M. A., Qian, G., Ma, X., & Faems, D. (2020). Managing Technological, Sociopolitical, and Institutional Change in the New Normal. *Journal of Management Studies*, 57(3), 411–437.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research*, 14(3), 252–271. <https://doi.org/10.1177/1094670511411703>
- Chawla, D., & Joshi, H. (2019). Consumer Perspectives about Mobile Banking Adoption in India: A Cluster Analysis. *International Journal of Bank Marketing*, 35(4), 616–636. <https://doi.org/10.1108/IJBM-03-2016-0037>
- Chin, J. M., & Ahmad, M. F. (2015). A Study on the User Acceptance of E-Banking in Malaysia. *Journal of Business and Economics*, 6(3), 546–553.
- Chin, W. W. (2009). How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications* (pp. 655–690). Springer. https://doi.org/10.1007/978-3-540-32827-8_29
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003. <https://doi.org/10.1287/mnsc.35.8.982>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. *Omega*, 28(6), 725–737. [https://doi.org/10.1016/S0305-0483\(00\)00021-9](https://doi.org/10.1016/S0305-0483(00)00021-9)
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, Mirror on the Wall: A Comparative Evaluation of Composite-Based Structural Equation Modeling Methods. *Journal of the Academy of Marketing Science*, 45(5), 616–632. <https://doi.org/10.1007/s11747-017-0517-x>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Jasperson, J., Carter, P. E., & Zmud, R. W. (2005). A Comprehensive Conceptualization of Post-Adoptive Behaviors Associated with Information Technology Enabled Work Systems. *MIS Quarterly*, 29(3), 525–557. <https://doi.org/10.2307/25148694>
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Lionello, M., Aletta, F., Mitchell, A., & Kang, J. (2021). Use of Negative Sentences in Questionnaires: A Pitfall for the Soundscape Researcher? *Proceedings of the 24th International Congress on Acoustics*.
- Lydiana, Y. F., Gustomo, A., & Bangun, Y. R. (2025). Organization Accelerator for Future-Ready Workforce: A Qualitative Exploration of Banking Sector Transformation. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-026-03249-3>
- Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing Customer Relationships in the Social Media Era: Introducing the Social CRM House. *Journal of Interactive Marketing*, 27(4), 270–280. <https://doi.org/10.1016/j.intmar.2013.09.008>
- Otoritas Jasa Keuangan. (2016). Peraturan Otoritas Jasa Keuangan Nomor 6/POJK.03/2016 Tentang Kegiatan Usaha dan Jaringan Kantor Berdasarkan Modal Inti Bank. OJK.

- Otoritas Jasa Keuangan. (2018). Peraturan Otoritas Jasa Keuangan Nomor 12/POJK.03/2018 Tentang Penyelenggaraan Layanan Perbankan Digital oleh Bank Umum. OJK.
- Otoritas Jasa Keuangan. (2021). Peraturan Otoritas Jasa Keuangan Nomor 12/POJK.03/2021 Tentang Bank Umum. OJK.
- Qomariyah, N. N., & Priandoyo, A. (2023). A Maturity Model for Assessing the Indonesian Payment Systems Blueprint 2025 Readiness. *AIP Conference Proceedings*, 2594. <https://doi.org/10.1063/5.0109539>
- Sebayang, T. E., Hakim, D. B., Bakhtiar, T., & Indrawan, D. (2024). What Accelerates the Choice of Mobile Banking for Digital Banks in Indonesia? *Journal of Risk and Financial Management*, 17(1), 6. <https://doi.org/10.3390/jrfm17010006>
- Sekaran, U., & Bougie, R. (2019). *Research Methods for Business: A Skill-Building Approach* (8th ed.). Wiley.
- Shaikh, A. A., & Karjaluoto, H. (2015). Mobile Banking Adoption: A Literature Review. *Telematics and Informatics*, 32(1), 129–142. <https://doi.org/10.1016/j.tele.2014.05.003>
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>