

The Effect of Social Influence Mediated Intention to Use on Actual Usage of Mobile Banking

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Abstract.

The increasing use of mobile banking indicates a change in people's behaviour in accessing financial services. However, not all users feel confident or comfortable continuing to use this service due to various personal and environmental considerations. This study aims to analyse the influence of Perceived Ease of Use, Perceived Usefulness, and Social Influence on Intention to Use, as well as the influence of Intention to Use on Actual Usage in the context of using mobile banking applications. This study uses a quantitative approach through a survey method by distributing questionnaires to 192 respondents, namely active users of BNI mobile banking services in the DKI Jakarta area. The analysis in this study was carried out using the SEM-PLS (Structural Equation Modelling - Partial Least Square) approach. From the data analysis, it was found that Perceived Ease of Use had a significant positive effect on Intention to Use, Social Influence had a significant positive effect on Intention to Use, while Perceived Usefulness had no significant effect on Intention to Use. In addition, Intention to Use had a significant positive effect on Actual Usage. This study provides very important implications for the development of bank digital service strategies, especially to increase the adoption of mobile banking among the younger generation.

Keywords: Actual usage, intention to use, perceived ease of use, perceived usefulness, social influence.

I. INTRODUCTION

The Indonesian banking industry is undergoing significant transformation with the adoption of digital payment services, particularly through mobile banking. This innovation has revolutionized the way customers conduct transactions and access financial information, offering unprecedented convenience and efficiency. Implementing this strategy is crucial for creating innovative products or services and winning market competition[1].

Banks are required to continuously innovate, both in improving the quality of conventional services and integrating new technologies that can enhance customer experience[2]. Adapting to market demands and diverse customer needs is essential for maintaining loyalty and attracting a new user base, particularly among the younger generation who are familiar with digital technology [3]. In the context of digital banking services, customer satisfaction plays a vital role in building and maintaining loyalty, as satisfied customers are more likely to continue using the service and recommend it to others[4].

Factors influencing this satisfaction include not only service quality and promotions, but also the bank's image and the ease of use of the mobile banking application. Furthermore, social influence has been identified as a crucial aspect that drives customers' intention to use before ultimately moving on to actual usage [5].

Meanwhile, this study took the DKI Jakarta area as its object, with data obtained from the distribution of questionnaires filled out by respondents who actively use mobile banking applications in their daily transaction activities. Given the importance of these factors, this study aims to analyze the influence of Perceived Ease of Use, Perceived Usefulness, and Social Influence on Intention to Use, as well as their impact on Actual Usage in the context of BNI banking services[6].

Social influence also plays a significant role in increasing customer trust in digital banking services, as customers tend to trust recommendations from friends, family, or social media influencers more[7]. Therefore, banks must carefully ensure that their services not only meet customer needs but also maintain the security and privacy of customer data.

By leveraging advanced technology and prioritizing performance improvement, companies can create comfortable user experience, foster trust, and position themselves as industry leaders in the digital realm. Extensive research on mobile banking usage has been conducted previously, as seen in the study[8]. However, there are several important differences that distinguish this research from previous studies.

One of the main differences lies in the addition of a new independent variable, namely social influence, which has not been included in previous research models. Furthermore, another difference lies in the research object. Most previous studies were conducted outside Indonesia, thus not fully representing the characteristics of local users[9]. Meanwhile, this study specifically targeted customers from a bank in Indonesia. Data was obtained from questionnaires completed by respondents who actively used mobile banking applications for their daily transactions[10].

The purpose of this study was to determine whether Perceived Ease of Use, Perceived Usefulness, and Social Influence the formation of intention to use in mobile banking. This study also focused on measuring the extent to which Intention to Use influences Actual Usage, namely the actual use of the application in daily routine[11]

This research is expected to provide a beneficial contribution to mobile banking service users, especially providing a better understanding of the benefits and risks of using the application, so they can make wiser and more informed decisions when using this banking technology service. This research has several important differences compared to previous studies. One of the main differences lies in the addition of a new independent variable, namely social influence, which has not been comprehensively included in previous research models. Furthermore, another difference lies in the different geographical context, such as Greater Chennai, India[12].

II. METHODS

This study employed an associative research design, explaining causal relationships in the form of cause and effect. The independent variables in the study were Perceived Ease of Use, Perceived Usefulness, and Social Influence. The mediating variable used was Intention to Use, while the dependent variable was Actual Usage. This study employed a quantitative approach with a survey method[13].

Data collection was conducted online via a Google Form questionnaire, measured using a Likert scale of 1–5, where 1 means Strongly Disagree (STS) and 5 means Strongly Agree (SS) [7]. The research instrument was adapted from relevant previous research, so each variable was measured using several statement indicators that had been tested in previous research.

The population in this study were BNI Bank customers who use mobile banking services in the DKI Jakarta area. The sampling technique used a non-probability sampling method with a purposive sampling technique according to the established criteria: respondents aged 17–55 years and domiciled in DKI Jakarta. The sample size was 192 respondents, calculated by multiplying the number of indicators by 8 according to the guidelines of Hair et al. (2020)[13].

Data was analyzed using Structural Equation Model-Partial Least Square (SEM-PLS) using Smart PLS. The analysis was conducted through an outer model (validity and reliability with indicators such as loading factor > 0.7 , AVE > 0.5 , and composite reliability > 0.7) [9]. As well as an inner model (path coefficient test, R^2 , Q^2 , and f^2). Hypothesis testing was conducted using bootstrapping and t-test, with the criteria $t > 1.96$ and p-value < 0.05 as the basis for accepting the hypothesis.

III. RESULT AND DISCUSSION

This study involved 192 BNI mobile banking users in DKI Jakarta, obtained through WhatsApp, Instagram, and face-to-face interviews. Most respondents were aged 27–36 years (39%), followed by 17–26 years (35%), 37–46 years (19%), and 47–55 years (7%). Based on domicile, most respondents came from West Jakarta (54%), then South Jakarta (16%), East Jakarta (15%), North Jakarta (10%), Central Jakarta (4%), and the Seribu Islands (2%).

In terms of duration of use, most respondents had used the service for more than 3–4 years (45%) and 2–3 years (38%), while the rest had used the service for more than 4 years (9%) and 1–2 years (8%). Based on occupation, the majority were employees (59%), followed by self-employed (23%), students (17%), and others (1%). This profile indicates that respondents are active users with considerable experience in using BNI mobile banking, making it relevant to the research objectives.

Based on the results of the outer model analysis, all 24 research indicators had loading factor values above 0.7, indicating strong validity. Furthermore, Cronbach's Alpha and Composite Reliability values for the five research variables were above 0.7, indicating reliability.

The Average Variance Extracted (AVE) value for each variable also exceeded 0.5, thus meeting the convergent validity criteria. Discriminant validity testing can be conducted by analyzing cross-loading values and using the Fornell-Larcker approach. This test examines whether a construct meets the minimum requirements for discriminant validity, namely by comparing whether the indicator items have a high correlation with the main construct when tested against other constructs.

If the criteria are met, the construct is said to show strong discriminant validity according to Fornell & Larcker, (1981). Furthermore, discriminant validity can also be evaluated using the HTMT (Heterotrait-Monotrait Ratio) number which must be below 0.9 according to Henseler et al., (2015).

The results of the study in the table above show that all HTMT values are below 0.90, which means that each variable can be clearly distinguished from other variables. This means that each construct has met the discriminant validity criteria according to the HTMT analysis.

Based on the inner model analysis, the Adjusted R^2 value obtained for the dependent variable Intention to Use is 0.540. This means that the variables Perceived Ease of Use, Perceived Usefulness, and Social Influence can explain 54% of the variation in usage intention, while the remaining 46% is explained by other factors outside this study.

Meanwhile, the Actual Usage variable has an Adjusted R^2 value of 0.553, which means Intention to Use can explain actual usage behavior by 55.3%, while the remaining 44.7% is explained by other factors not studied. These results indicate that the research model has quite good predictive ability and is relevant to explain the relationship between the variables used.

Variables	Indicators	Loading Factor	α	CR	AVE
<i>Perceived Ease of Use</i>	PEOU1	0.727	0.805	0.865	0.561
	PEOU2	0.719			
	PEOU3	0.729			
	PEOU4	0.770			
	PEOU5	0.798			
<i>Perceived Usefulness</i>	PU1	0.740	0.784	0.851	0.533
	PU2	0.723			
	PU3	0.703			
	PU4	0.764			
	PU5	0.720			
<i>Social Influence</i>	SI1	0.813	0.891	0.920	0.696
	SI2	0.859			
	SI3	0.824			
	SI4	0.830			
	SI5	0.844			
<i>Intention to Use</i>	ITU1	0.886	0.871	0.912	0.721
	ITU2	0.822			
	ITU3	0.880			
	ITU4	0.806			
<i>Actual Usage</i>	AU1	0.772	0.848	0.891	0.621
	AU2	0.796			
	AU3	0.800			
	AU4	0.825			
	AU5	0.744			

Fig. 1. Loading Factor, Cronbach's Alpha, composite reliability and AVE

	<i>Perceived Ease of Use</i>	<i>Perceived Usefulness</i>	<i>Social Influence</i>	<i>Intention to Use</i>	<i>Actual Usage</i>
<i>Perceived Ease of Use</i>				0.723	0.860
<i>Perceived Usefulness</i>	0.678			0.656	0.686
<i>Social Influence</i>	0.729	0.779		0.804	0.856
<i>Intention to Use</i>					0.842
<i>Actual Usage</i>					

Fig. 2. Heterotrait Monotrait Ratio (HTMT)

	<i>R-square</i>	<i>Adjusted R-square</i>
Intention to use	0.542	0.540
Actual usage	0.560	0.553

Fig. 3. R-Square Result

The results of the hypothesis testing revealed that of the four hypotheses tested, one was rejected and the other three were accepted. The H1 hypothesis test showed that Perceived Ease of Use has a positive and significant effect on Intention to Use. This is evidenced by a T-statistic of $2.258 \geq 1.96$ and a p-value of $0.024 \leq 0.05$. Therefore, it can be concluded that higher Perceived Ease of Use significantly increases Intention to Use. The H2 hypothesis test, which examined the effect of Perceived Usefulness on Intention to Use, showed insignificant results, with a T-statistic of $0.089 \leq 1.96$ and a p-value of $0.409 \geq 0.05$.

Based on these results, it can be concluded that Perceived Usefulness does not significantly influence Intention to Use, therefore, the H2 hypothesis is rejected. Testing H3 for the effect of Social Influence on Intention to Use yielded a T-statistic of $4.622 \geq 1.96$ with a p-value of $0.000 \leq 0.05$. Therefore, it can be concluded that Social Influence has a significant positive effect on Intention to Use.

Testing H4 hypothesis indicates that Intention to Use has a positive and significant effect on Actual Usage. This is evidenced by a T-statistic of $15.921 \geq 1.96$ and a p-value of $0.000 \leq 0.05$. Therefore, it can be concluded that higher Intention to Use leads to a significant positive increase in Actual Usage.

Hypothesis Statement	Original sample (O)	T statistics (O/STDEV)	P values	Information
H1. Perceived Ease of Use -> Intention to Use	0.261	2.258	0.024	Accepted
H2. Perceived Usefulness -> Intention to Use	0.074	0.827	0.409	Not Accepted
H3. Social Influence -> Intention to Use	0.502	4.622	0.000	Accepted
H4. Intention to Use -> Actual Usage	0.736	15.921	0.000	Accepted

Fig. 4. Direct Impact Table

Perceived Ease of Use has a positive and significant effect on Actual Usage through Intention to Use, with a T-statistic of $2.141 \geq 1.96$ and a p-value of $0.032 \leq 0.05$. This indicates that perceived ease of use drives Intention to Use, which ultimately increases Actual Usage.

Perceived Usefulness does not have a significant effect on Actual Usage through Intention to Use. The T-statistic of $0.820 \leq 1.96$ and the p-value of $0.412 \geq 0.05$ indicate that although the system is perceived as useful, it does not significantly influence Actual Usage if Intention to Use is not formed.

Social Influence has a positive and significant effect on Actual Usage through Intention to Use, with a T-statistic of $4.419 \geq 1.96$ and a p-value of $0.000 \leq 0.05$. This means that encouragement or influence from the social environment can form Intention to Use, which then encourages Actual Usage.

Hypothesis Statement	Original Sample (O)	T-statistics	P-values	Information
X1(PEOU)->Z (ITU) -> Y (AU)	0.192	2.141	0.032	Accepted
X2 (PU) -> Z (ITU) -> Y (AU)	0.054	0.820	0.412	Not Accepted
X1 (SI) -> Z (ITU) -> Y (AU)	0.369	4.419	0.000	Accepted

Fig. 5. Indirect Effects

IV. CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that Perceived Ease of Use has a positive and significant influence on Intention to Use of mobile banking, which shows that applications that are easy to operate encourage convenience and strengthen the intention to continue using it[14]. In contrast, Perceived Usefulness does not have a significant influence on Intention to Use, which is likely caused by the view that the benefits of the application are already considered standard and are no longer a determining factor in usage decisions[15].

Furthermore, Social Influence is proven to have a positive and significant influence on Intention to Use, where encouragement from the social environment such as friends, family, or influencers is able to form an intention to use the service[16]. On the other hand, Intention to Use has a positive and significant influence on Actual Usage, indicating that intentions formed from ease and social influence will encourage actual use in daily financial activities. [17]

Hypothesis testing of the indirect relationship also shows that Perceived Ease of Use has a positive and significant influence on Actual Usage through Intention to Use, which means that the perception of ease of use can form intentions and ultimately increase actual use [14]. However, Perceived Usefulness did not significantly influence Actual Usage through Intention to Use.

Therefore, even if a system is perceived as useful, it may not be sufficient to encourage actual use if the intention to use is not formed. Meanwhile, Social Influence was shown to have a positive and significant effect on Actual Usage through Intention to Use, indicating that encouragement or influence from the social environment can shape usage intentions and impact actual usage[18].

This study has several limitations, including coverage limited to DKI Jakarta, the dominance of Millennial respondents, and limited primary variables. Therefore, further studies are recommended to expand the geographic scope and focus on specific generations such as Generation Z for more in-depth analysis. The addition of variables such as trust, security, and user experience could provide a more comprehensive understanding of mobile banking user behavior[19].

The importance of Bank BNI ensuring the application is easy to use, optimizing social influence through community promotion, and regularly updating the application's appearance and performance

to remain competitive and responsive to customer needs. Furthermore, banks need to improve security and build customer trust through reliable systems and professional service to encourage loyalty[20].

Developing relevant and efficient features is also crucial for users to experience real benefits from the service. Banks are advised to segment their markets based on generational characteristics to tailor marketing strategies and product development.

Finally, collaboration with influencers and digital communities can strengthen social influence, positively impacting mobile banking adoption.

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