

Research Article

The Role of Pre-Usage Satisfaction in Mediating the Effects of Perceived Ease of Use and Perceived Usefulness on Mobile Banking Usage Intention at Bank BPD Bali

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Abstract: Mobile banking has become an important digital banking service, including at Bank BPD Bali, as customers increasingly expect convenient and useful financial services. However, customers' intention to use mobile banking may be influenced by their perceptions of ease of use, usefulness, and satisfaction before actual usage. This study aims to analyze the role of pre-usage satisfaction in mediating the effects of perceived ease of use and perceived usefulness on mobile banking usage intention at Bank BPD Bali. The study employed a quantitative approach involving 160 customers of Bank BPD Bali, Badung Branch, selected using Hair's formula. Data were collected through questionnaires, interviews, and documentation and analyzed using path analysis. The results indicate that perceived ease of use and perceived usefulness positively and significantly affect pre-usage satisfaction and mobile banking usage intention. Pre-usage satisfaction also has a positive and significant effect on usage intention. Furthermore, pre-usage satisfaction significantly mediates the effects of perceived ease of use and perceived usefulness on mobile banking usage intention. These findings indicate that ease of use, usefulness, and pre-usage satisfaction are important factors in encouraging customers to adopt mobile banking. Therefore, improving the usability, usefulness, and customer experience of mobile banking services can strengthen customers' intention to use the service.

Keywords: Intention to Use; Mobile Banking; Perceived Ease of Use; Perceived Usefulness; Pre-Usage Satisfaction.

1. Introduction

The rapid development of information technology has transformed the banking industry, particularly through the adoption of mobile banking. Mobile banking enables customers to perform financial transactions, such as checking balances, transferring funds, and paying bills through smartphones without visiting bank branches. Its convenience, efficiency, and flexibility make mobile banking an important digital banking service. Therefore, customers' intention to use mobile banking is an important indicator of successful technology adoption and continued service utilization.

This study focuses on Bank BPD Bali, particularly the Badung Branch. Although mobile banking has become an important part of the bank's digital service strategy, its utilization remains suboptimal. In 2025, Bank BPD Bali had 810,451 customers, while only 437,644 customers, or approximately 54%, used mobile banking. In addition, the Badung Branch recorded mobile banking transactions of IDR 37.69 billion, the lowest among all BPD Bali branches and considerably below the average transaction value of approximately IDR 127

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billion. This condition indicates a gap between the potential demand for digital banking services and their actual utilization at the Badung Branch.

Previous studies have commonly applied the Technology Acceptance Model (TAM) to explain technology adoption, particularly through perceived ease of use and perceived usefulness. Perceived ease of use refers to the extent to which a technology is perceived as easy to understand and operate, whereas perceived usefulness reflects the extent to which a technology is perceived to provide benefits to users. Previous research has generally found that perceived ease of use positively influences mobile banking usage intention (Hassan & Noor, 2024; Thompson & Miller, 2024). Similarly, perceived usefulness has been found to positively influence usage intention (Anderson & Peterson, 2024; Yoon & Kim, 2025). These findings indicate that TAM provides a useful framework for explaining customers' intention to adopt mobile banking.

However, the application of TAM alone may not fully explain customers' psychological evaluation before using mobile banking. Previous findings remain inconsistent, as (Martinez & Silva, 2024) found no significant effect of perceived ease of use on usage intention, while (Wilson & Carter, 2024) reported no significant effect of perceived usefulness. These inconsistencies suggest that the relationship between technology perceptions and usage intention may involve an additional mechanism. Therefore, examining only the direct effects of perceived ease of use and perceived usefulness may provide a limited explanation of customers' initial responses toward mobile banking.

The research problem is also reflected in the preliminary observations and interviews with 20 customers of Bank BPD Bali. Some customers reported difficulties in understanding application features, menu displays, and transaction procedures, while others expressed concerns about technical terms and system disruptions. Customers also perceived limitations in certain features, network problems, and data security concerns. These conditions indicate potential problems with perceived ease of use and perceived usefulness. In addition, some customers reported unclear information about mobile banking features and uncertainty regarding system reliability, suggesting that their initial satisfaction before actual use may not be optimal.

To address these problems, this study proposes pre-usage satisfaction as a mediating variable between perceived ease of use, perceived usefulness, and mobile banking usage intention. Pre-usage satisfaction represents customers' initial evaluation based on expectations, information, and perceptions before actual use of the service. A mobile banking service that is perceived as easy to use and useful may generate more positive initial evaluations, thereby strengthening customers' intention to use it. This approach provides a broader explanation of technology adoption by incorporating customers' affective responses before actual usage.

Previous studies support the proposed relationships. Perceived ease of use has been found to positively influence pre-usage satisfaction (Al-Harbi & Al-Debei, 2022; Park & Kim, 2024), while perceived usefulness has also been reported to positively affect pre-usage satisfaction (C.-J. Chen & Huang, 2009; Li & Huang, 2024). Furthermore, previous research has indicated that pre-usage satisfaction can mediate the effects of perceived ease of use and perceived usefulness on usage intention (Al-Harbi & Al-Debei, 2022). Nevertheless, empirical evidence regarding this mediation mechanism in the context of mobile banking at Bank BPD Bali, particularly the Badung Branch, remains limited.

Accordingly, this study aims to examine the role of pre-usage satisfaction in mediating the effects of perceived ease of use and perceived usefulness on mobile banking usage intention at Bank BPD Bali. The contributions of this study are threefold: first, it extends the application of TAM by incorporating pre-usage satisfaction as a mediating mechanism; second, it provides empirical evidence regarding the factors influencing mobile banking usage intention in the context of Bank BPD Bali Badung Branch; and third, it provides practical insights for bank management to improve the ease of use, usefulness, and initial customer evaluation of mobile banking services..

2. Preliminaries or Related Work or Literature Review

Perceived Ease of Use

Perceived ease of use refers to the extent to which an individual perceives that a technology is easy to understand, learn, access, and use. In the context of mobile banking, this perception reflects customers' confidence that the application can be operated without excessive effort and can assist them in carrying out banking activities. A technology that is

simple, clear, and easy to operate is more likely to be accepted and used by customers. Therefore, perceived ease of use is an important factor in explaining customers' acceptance and intention to use mobile banking (Japariato & Anggono, 2022).

Perceived Usefulness

Perceived usefulness refers to an individual's belief that using a particular technology can improve the effectiveness and performance of their activities. In mobile banking, usefulness can be reflected through the ability of the service to facilitate transactions, save time, provide financial information, and support various banking activities. When customers perceive that mobile banking provides tangible benefits and improves the efficiency of their financial activities, they are more likely to develop a positive attitude toward the technology and consider using it. Thus, perceived usefulness is an important determinant of technology adoption (Atchariyachanvanich et al., 2022).

Pre-Usage Satisfaction

Pre-usage satisfaction refers to the initial satisfaction or evaluation formed by consumers toward a product or service before actual use. This satisfaction is influenced by initial expectations, information received, service reputation, and previous relevant experiences. Unlike post-usage satisfaction, pre-usage satisfaction focuses on consumers' perceptions and expectations before direct interaction with the service. In the context of mobile banking, it reflects customers' initial evaluation of whether the service is expected to meet their needs and preferences (Liu & Zhang, 2022).

Usage Intention

Usage intention refers to an individual's desire or tendency to use a particular product or service. It represents an initial behavioral response that reflects a consumer's willingness to try, choose, and eventually use a service according to their needs. In mobile banking, high usage intention indicates that customers are interested and willing to utilize the service for their banking activities. Therefore, usage intention is an important indicator of consumers' potential behavioral adoption of a service (Tjiptono, 2021).

3. Materials and Method

Research Design

This study employed a quantitative explanatory research design to examine the effects of perceived ease of use and perceived usefulness on mobile banking usage intention, with pre-usage satisfaction as a mediating variable. The study focused on customers of Bank BPD Bali, Badung Branch, and adopted a cross-sectional survey design. The research model consisted of two exogenous variables, namely perceived ease of use (X1) and perceived usefulness (X2), one mediating variable, namely pre-usage satisfaction (M), and one endogenous variable, namely mobile banking usage intention (Y). The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the direct and indirect relationships among the variables.

Research Location and Scope

The research was conducted at Bank BPD Bali, Badung Branch, which was selected based on the existence of phenomena relevant to the variables examined in this study. The study falls within the field of marketing management, with a specific focus on the mechanisms through which perceived ease of use, perceived usefulness, and pre-usage satisfaction influence customers' intention to use mobile banking.

Population and Sample

The population consisted of all customers of Bank BPD Bali, Badung Branch, totaling 17,181 customers. The sample size was determined using Hair's guideline, which recommends a minimum sample of 5–10 times the number of indicators. With 16 indicators, the sample size was calculated as 16×10 , resulting in 160 respondents. The study employed purposive sampling, with respondents required to be customers of Bank BPD Bali, Badung Branch, aged 17–55 years.

Measurement of Variables

The study examined four variables: perceived ease of use, perceived usefulness, pre-usage satisfaction, and mobile banking usage intention. Perceived ease of use was measured using three indicators adapted from Pambudi (2022): ease to learn, ease to use, and clear and understandable. Perceived usefulness was measured using four indicators based on Davis (2023): improving performance, improving effectiveness, supporting decision-making, and improving work outcomes. Pre-usage satisfaction was measured using five indicators based on Liu and Zhang (2022): perceived service quality, initial customer expectations, trust in the service, information consistency, and conceptual satisfaction. Usage intention was measured using four indicators based on Ferdinand (2021): usage intention, referential intention, preferential intention, and exploratory intention.

Table 1. Operationalization of Variables.

Variable	Operational Definition	Indicators	Scale
<i>Perceived Ease of Use (X1)</i>	The extent to which mobile banking is perceived as easy to learn, understand, and use.	Ease to learn; Ease to use; Clear and understandable	5-point Likert
<i>Perceived Usefulness (X2)</i>	The extent to which mobile banking is perceived to provide benefits and improve the effectiveness of customers' activities.	Improving performance; Improving effectiveness; Supporting decision-making; Improving work outcomes	5-point Likert
<i>Pre-Usage Satisfaction (M)</i>	Customers' initial satisfaction with mobile banking based on expectations, information, and previous experience before actual use.	Perceived service quality; Initial customer expectations; Trust in the service; Information consistency; Conceptual satisfaction	5-point Likert
<i>Usage Intention (Y)</i>	Customers' willingness and intention to use Bank BPD Bali mobile banking.	Usage intention; Referential intention; Preferential intention; Exploratory intention	5-point Likert

The operationalization of the variables and indicators was based on the measurement sources specified in the research instrument.

Data Collection Procedure

Data were collected using questionnaires, interviews, and documentation. The questionnaire was developed based on theoretical and empirical reviews and preliminary research findings. Before distribution, the questionnaire was reviewed for face validity and content validity, including the clarity and structure of the items, and was subsequently tested to assess the validity and reliability of the research instrument. The final questionnaire was distributed to the target respondents, after which the collected data were checked, tabulated, screened, and prepared for analysis. Interviews were conducted to identify and strengthen understanding of the research problem, while documentation was used to obtain relevant information from Bank BPD Bali.

Data Analysis

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This method was selected because it can examine complex relationships among latent variables, including both direct and indirect effects, and simultaneously evaluate the measurement and structural models. The measurement model (outer model) was assessed through convergent validity, discriminant validity, and reliability. Convergent validity was evaluated using standardized outer loadings, with values above 0.70 considered acceptable. Discriminant validity was assessed using cross-loadings and the Fornell–Larcker criterion, while reliability was evaluated using Composite Reliability and Cronbach's Alpha.

4. Results and Discussion

Because the indicators forming the latent variables in this study are reflective, the measurement model (outer model) was evaluated based on three criteria: (a) convergent validity, (b) discriminant validity, and (c) reliability.

Convergent Validity

Convergent validity is used to assess the validity of reflective indicators. An indicator is considered valid if its outer loading value exceeds 0.70. The results of the outer model assessment are presented in Table 2.

Table 2. Outer Loading Results.

Variable	Indicator	Item	Outer Loading
<i>Perceived Ease of Use</i>	Ease to learn	X1.1	0.970
	Ease to use	X1.2	0.896
	Clear and understandable	X1.3	0.972
<i>Perceived Usefulness</i>	Improving performance	X2.1	0.936
	Improving effectiveness	X2.2	0.973
	Supporting decision-making	X2.3	0.954
	Improving work outcomes	X2.4	0.924
<i>Pre-Usage Satisfaction</i>	Perceived service quality	M1	0.930
	Initial customer expectations	M2	0.774
	Trust in the service	M3	0.907
	Information consistency	M4	0.842
	Conceptual satisfaction	M5	0.929
Usage Intention	Usage intention	Y1	0.878
	Referential intention	Y2	0.883
	Preferential intention	Y3	0.816
	Exploratory intention	Y4	0.892

Based on Table 2, all indicators of Perceived Ease of Use, Perceived Usefulness, Pre-Usage Satisfaction, and Usage Intention have outer loading values above 0.70. Therefore, all indicators meet the criteria for convergent validity and are considered valid.

Discriminant Validity

Reflective indicators were also assessed for discriminant validity using cross-loadings. An indicator is considered valid if its highest factor loading is on its intended construct compared with its loadings on other constructs. The results are presented in Table 3.

Table 3. Discriminant Validity Results.

Construct	Usage Intention	Perceived Ease of Use	Perceived Usefulness	Pre-Usage Satisfaction
Usage Intention	0.868			
Perceived Ease of Use	0.727	0.947		
Perceived Usefulness	0.701	0.668	0.947	
Pre-Usage Satisfaction	0.707	0.669	0.664	0.878

Based on Table 3, each construct has the highest factor loading on its respective construct compared with the other constructs. Therefore, all indicators meet the criteria for discriminant validity and are considered valid.

Reliability

A measurement is considered reliable when the Composite Reliability and Cronbach's Alpha values exceed 0.70. These measures assess the internal consistency of the indicators within each construct. The results obtained using SmartPLS 3.0 are presented in Table 5.16.

Table 4. Reliability Test Results.

Construct	Cronbach's Alpha	Composite Reliability	Remark
<i>Perceived Ease of Use</i> (X1)	0.942	0.945	Reliable
<i>Perceived Usefulness</i> (X2)	0.961	0.965	Reliable
<i>Pre-Usage Satisfaction</i> (M)	0.925	0.941	Reliable
Usage Intention (Y)	0.891	0.901	Reliable

Based on Table 4, all constructs have Cronbach's Alpha and Composite Reliability values above 0.70. Therefore, Perceived Ease of Use, Perceived Usefulness, Pre-Usage Satisfaction, and Usage Intention meet the reliability criteria.

Structural Model Evaluation Using R-Square (R²)

R-Square (R²) indicates the strength of the effect of independent variables on dependent variables and the explanatory power of the research model. According to Chin (Lathan & Ghozali, 2022:80), R² values of 0.67, 0.33, and 0.19 indicate strong, moderate, and weak models, respectively. The results are presented in Table 5.

Table 5. R-Square (R²) Calculation Results.

Construct	R-Square	R-Square Adjusted
<i>Pre-Usage Satisfaction</i>	0.533	0.527
Usage Intention	0.652	0.645

Based on Table 5, Pre-Usage Satisfaction has an R² value of 0.533, indicating that 53.3% of its variance is explained by Perceived Ease of Use and Perceived Usefulness, while the remaining 46.7% is explained by other factors outside the research model. This value indicates a moderate model. Meanwhile, Usage Intention has an R² value of 0.652, indicating that 65.2% of its variance is explained by Perceived Ease of Use, Perceived Usefulness, and Pre-Usage Satisfaction, while the remaining 34.8% is explained by other factors outside the model. Based on Chin (Lathan & Ghozali, 2022:80), this value indicates a moderate model.

Structural Model Evaluation Using Q-Square Predictive Relevance (Q²)

Q-Square Predictive Relevance (Q²) measures the predictive relevance of a research model, with values ranging from 0 to 1. A value closer to 1 indicates greater predictive relevance. According to Latan and Ghozali (2022:80), Q² values of 0.35, 0.15, and 0.02 indicate strong, moderate, and weak models, respectively. The Q² calculation is presented in Table 6.

Table 6. Q-Square Test Results

Construct	R-Square	R-Square Adjusted
<i>Pre-Usage Satisfaction</i>	0.533	0.527
Usage Intention	0.652	0.645

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_1^2)(1 - R_2^2) \\
 &= 1 - (1 - 0.533)(1 - 0.652) \\
 &= 1 - (0.467)(0.348) \\
 &= 1 - 0.162516 \\
 &= 0.837484 \approx 0.838
 \end{aligned}$$

The Q² value of 0.838 indicates that 83.8% of the model's predictive relevance is explained by the relationships among Perceived Ease of Use, Perceived Usefulness, Pre-Usage Satisfaction, and Usage Intention, while the remaining 16.2% is explained by other factors outside the research model. Based on the criteria proposed by Latan and Ghozali (2022:80), the model demonstrates strong predictive relevance.

Hypothesis Testing

Hypothesis testing in this study examines both direct and indirect effects. Based on the data processing results obtained using SmartPLS 3.0, the relationships among Perceived Ease of Use, Perceived Usefulness, Pre-Usage Satisfaction, and Usage Intention are presented in Table 7.

Table 7. Relationships among Perceived Ease of Use, Perceived Usefulness, Pre-Usage Satisfaction, and Usage Intention.

Effect	Relationship	Original Sample (O)	T-Statistics	P-Values	Decision
Direct Effect	<i>Perceived Ease of Use</i> → <i>Pre-Usage Satisfaction</i>	0.407	5.306	0.000	Accepted
	<i>Perceived Usefulness</i> → <i>Pre-Usage Satisfaction</i>	0.393	5.295	0.000	Accepted
	<i>Perceived Ease of Use</i> → Usage Intention	0.348	5.594	0.000	Accepted
	<i>Perceived Usefulness</i> → Usage Intention	0.275	4.258	0.000	Accepted
	<i>Pre-Usage Satisfaction</i> → Usage Intention	0.291	4.494	0.000	Accepted
Indirect Effect	<i>Perceived Ease of Use</i> → <i>Pre-Usage Satisfaction</i> → Usage Intention	0.118	3.394	0.001	Accepted
	<i>Perceived Usefulness</i> → <i>Pre-Usage Satisfaction</i> → Usage Intention	0.114	3.289	0.001	Accepted

- Perceived Ease of Use → Pre-Usage Satisfaction: $\beta = 0.407$; $t = 5.306$; $p < 0.001$. H1 accepted.
- Perceived Usefulness → Pre-Usage Satisfaction: $\beta = 0.393$; $t = 5.295$; $p < 0.001$. H2 accepted.
- Perceived Ease of Use → Usage Intention: $\beta = 0.348$; $t = 5.594$; $p < 0.001$. H3 accepted.
- Perceived Usefulness → Usage Intention: $\beta = 0.275$; $t = 4.258$; $p < 0.001$. H4 accepted.
- Pre-Usage Satisfaction → Usage Intention: $\beta = 0.291$; $t = 4.494$; $p < 0.001$. H5 accepted.
- Perceived Ease of Use → Pre-Usage Satisfaction → Usage Intention: $\beta = 0.118$; $t = 3.394$; $p = 0.001$. H6 accepted; partial mediation.
- Perceived Usefulness → Pre-Usage Satisfaction → Usage Intention: $\beta = 0.114$; $t = 3.289$; $p = 0.001$. H7 accepted; partial mediation.

The Effect of Perceived Ease of Use on Pre-Usage Satisfaction

The results show that perceived ease of use has a positive and significant effect on pre-usage satisfaction at Bank BPD Bali. This finding indicates that the easier mobile banking is perceived to be learned, understood, and operated, the more positive customers' initial satisfaction will be. When customers perceive that the application does not require considerable effort to understand its features or perform transactions, they are more likely to develop comfort, confidence, and positive expectations toward the service. In the context of Bank BPD Bali, a simple application interface, easily accessible features, and clear transaction procedures can reduce customers' perceived difficulties before actual use. Thus, ease of use contributes to the formation of positive evaluations and satisfaction at the pre-usage stage. This finding is consistent with (Al-Harbi & Al-Debei, 2022), who found that perceived ease of use has a positive and significant effect on pre-usage satisfaction.

The Effect of Perceived Usefulness on Pre-Usage Satisfaction

The results indicate that perceived usefulness has a positive and significant effect on pre-usage satisfaction at Bank BPD Bali. This means that customers who perceive mobile banking as beneficial for facilitating transactions, saving time, improving efficiency, and managing their financial activities are more likely to develop positive initial satisfaction. Perceived usefulness provides customers with an expectation that the service will deliver meaningful benefits and meet their needs. Before actual use, these perceived benefits can strengthen

customers' confidence and create a favorable evaluation of mobile banking. Therefore, the greater the usefulness perceived by customers, the stronger their initial satisfaction toward the service. This finding is consistent with (L. Chen & Wang, 2022), who found that perceived usefulness positively influences pre-usage satisfaction.

The Effect of Perceived Ease of Use on Usage Intention

The results show that perceived ease of use has a positive and significant effect on mobile banking usage intention at Bank BPD Bali. This finding indicates that customers are more likely to intend to use mobile banking when they perceive the application as easy to learn, understand, and operate. Ease of use can reduce the effort required to perform banking activities and minimize concerns about difficulties or errors during transactions. Features that are clearly presented, easily accessible, and supported by simple procedures can create a more comfortable perception of the service. As a result, customers become more confident and willing to consider mobile banking as part of their banking activities. This finding is consistent with (Thompson & Miller, 2024), who found that perceived ease of use has a positive and significant effect on mobile banking usage intention.

The Effect of Perceived Usefulness on Usage Intention

The results indicate that perceived usefulness has a positive and significant effect on mobile banking usage intention. This means that the greater the benefits customers perceive from using mobile banking, the stronger their intention to use the service. Customers are more likely to adopt mobile banking when they believe that it can simplify transactions, save time, increase efficiency, and facilitate the management of their financial activities. The perception that mobile banking provides practical and relevant benefits creates a positive attitude toward the service and encourages customers to consider using it in their daily banking activities. Therefore, perceived usefulness represents an important factor in strengthening customers' intention to adopt mobile banking at Bank BPD Bali. This result is consistent with (Anderson & Peterson, 2024), who found that perceived usefulness has a positive and significant effect on mobile banking usage intention.

The Effect of Pre-Usage Satisfaction on Usage Intention

The results show that pre-usage satisfaction has a positive and significant effect on mobile banking usage intention at Bank BPD Bali. This finding indicates that positive satisfaction formed before actual use can encourage customers to develop stronger intentions to use the service. Pre-usage satisfaction is influenced by customers' initial expectations, information received, service reputation, and previous relevant experiences. When these factors create a favorable evaluation of mobile banking, customers are more likely to believe that the service will meet their needs and expectations. This positive initial evaluation can reduce uncertainty and strengthen customers' willingness to try and use the application. Therefore, maintaining positive perceptions before actual use is important for encouraging mobile banking adoption. This finding is consistent with (Fernandez & Torres, 2022), who found that pre-usage satisfaction has a positive effect on mobile banking usage intention.

The Effect of Perceived Ease of Use on Usage Intention through Pre-Usage Satisfaction

The results demonstrate that perceived ease of use has a positive and significant effect on mobile banking usage intention through pre-usage satisfaction. This finding indicates that ease of use influences customers' intention not only directly but also indirectly by creating positive initial satisfaction. When customers perceive mobile banking as easy to learn, understand, and operate, they are likely to develop more favorable expectations and greater comfort toward the service. These positive initial evaluations subsequently strengthen their satisfaction before actual use, which further encourages their intention to use mobile banking. Thus, pre-usage satisfaction serves as an important mechanism that explains how perceived ease of use is translated into stronger usage intention. Because the direct effect of perceived ease of use on usage intention also remains significant, the mediation is classified as partial mediation. This finding is consistent with (Hernandez & Cruz, 2024), who found that pre-usage satisfaction mediates the relationship between perceived ease of use and mobile banking usage intention.

The Effect of Perceived Usefulness on Usage Intention through Pre-Usage Satisfaction

The results indicate that perceived usefulness has a positive and significant effect on mobile banking usage intention through pre-usage satisfaction. This means that customers' perceptions of the benefits provided by mobile banking can strengthen their initial satisfaction, which subsequently increases their intention to use the service. When customers believe that mobile banking can provide practical benefits, such as faster transactions, greater efficiency, and easier access to financial services, they are more likely to form positive expectations toward the application. These expectations contribute to higher pre-usage satisfaction, which then strengthens their willingness to use mobile banking. Therefore, pre-usage satisfaction functions as an important mechanism linking perceived usefulness to usage intention. Since the direct effect of perceived usefulness on usage intention remains significant, the mediation is classified as partial mediation. This finding is consistent with (Williams & Brown, 2024), who reported that pre-usage satisfaction mediates the relationship between perceived usefulness and mobile banking usage intention.

5. Conclusion

This study concludes that perceived ease of use and perceived usefulness have positive and significant effects on both pre-usage satisfaction and mobile banking usage intention at Bank BPD Bali. Pre-usage satisfaction also has a positive and significant effect on usage intention. Furthermore, pre-usage satisfaction partially mediates the effects of perceived ease of use and perceived usefulness on usage intention. These findings confirm that customers' perceptions of ease of use and usefulness contribute not only directly to usage intention but also indirectly through positive satisfaction formed before actual use. The findings extend the application of the Technology Acceptance Model by incorporating pre-usage satisfaction as a mediating mechanism in explaining mobile banking adoption.

The findings imply that Bank BPD Bali should improve the usability and practical benefits of its mobile banking service while strengthening customers' initial perceptions of service quality. However, this study is limited by its cross-sectional design, relatively limited sample of 160 respondents, and focus on customers of a single banking institution, which may restrict the generalizability of the findings. Future research should consider additional factors such as perceived risk, trust, accessibility, system quality, and social influence, as well as broader samples involving customers from different types of banks and longitudinal designs to examine changes in mobile banking usage intention over time.

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