

## Mobile Banking Continuance in an Emerging Market: The Interplay of Innovation Resistance, Technology Readiness, Adoption, and Satisfaction

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### ABSTRACT

Digital transformation has, for example, brought increased use of mobile banking services to countries such as Indonesia. Even with its rapid initial use, the main problem to solve is the sustainability of mobile banking. This study presents the first account of innovation resistance, technology readiness, adoption, and satisfaction concerning mobile banking service intention continuance in East Kalimantan. The study surveyed 600 active mobile banking users and analyzed the results by applying partial least squares regression structural equation Modeling. Innovation resistance negatively impacts adoption and satisfaction, whereas technology readiness positively impacts adoption, satisfaction, and intention to continue. Satisfaction and intention to continue mobile banking are positively driven by adoption. Satisfaction is the strongest predictor of loyalty. The mediating effects of adoption and satisfaction on continuance intention from the other variables in the study is most likely driven by the fact that adoption and satisfaction are the most The strongest drivers of the other variables in relation to the study are the variables to enable adoption and satisfaction as the strongest drivers. At a theoretical level, this research improves upon the comprehension of the integration of Innovation Resistance Theory (IRT), the Technology Readiness Model (TRM), and Social Exchange Theory (SET) regarding the adoption of sustainability within financial technologies. On a practical level, the results provide actionable insights into how banks can reduce resistance, improve technological readiness, and maintain a high level of customer satisfaction through the continued provision of safe, seamless, and value-adding service encounters.

**Keywords:** Mobile Banking, Innovation Resistance, Technology Readiness, Adoption, User Satisfaction, Continuance Intention, Emerging Markets

### INTRODUCTION

Recent advancements in digital technology have transformed the payment systems globally and enhanced the efficiency and convenience of banking services. Mobile banking technology enables consumers to perform banking functions on their mobile devices. Choudrie and his colleagues (2022) state that in emerging economies where

customers are acquiring smartphones and internet connectivity is becoming more ubiquitous, mobile banking services are increasingly being embraced. In addition, the rate of mobile banking adoption substantially depends on users' personal digital technologies and services, as stated by Lin and Kim (2023).

The rapid adoption of mobile banking in Southeast Asia can be attributed, in part, to the digital economy ecosystem. According to Nguyen et al. (2024), digital transactions in the region are expected to more than double by 2030, with Indonesia being one of the main countries driving this expansion. East Kalimantan, compared to other regions, is also digital services adoption growing rapidly. Gao and Waechter (2023) noted the high mobile banking adoption rates in Indonesia can be attributed to the service's perceived security and convenience. However, the regions outside of Java are marked by low mobile banking adoption due to uneven digital literacy and more challenging geographical conditions.

Successful mobile banking depends not only on customer service adoption, but also on customer service usage over time. According to Song Bee and Liew Chee (2023), user satisfaction drives long-term loyalty more than any other single factor. Conversely, Gao and Waechter (2023) illustrated that perceived security strengthens this bond. As such, banks must ensure that the customers' experience after service adoption is one that is valuable and affirming.

Despite this, there continues to be skepticism, risk, complexity, and delay toward innovations. Talwar et al. (2022) states that all of these ultimately discourage potential value-added new service adopters. The possibility of loss is one of the greater barriers to the adoption of digital finance (Marakhimov and Joo, 2023). During the sustainability period, resistance may appear, particularly during the pendency period (Spinelli et al., 2024).

Apart from resistance, not overlooking technological readiness is crucial. Ho et al. (2025) noted that optimism and innovativeness positively impact satisfaction and loyalty, while insecurity negatively impacts these outcomes. On the issue of technological readiness, Rahardja et al. (2023) demonstrated that consumers in Indonesia, in comparison to other populations, more regularly and consistently utilize digital payment services. This suggests that an absence of technological readiness presents users difficulties in sustaining their mobile banking use after an initial unwillingness to the service.

Shareef et al. (2024) identify satisfaction after adoption and the use of features as important mediating factors. He described that loyalty is a function of user experience, while Nguyen et al. (2024) empirically demonstrated that satisfaction mediates the relationship between perceived usefulness and the intention to continue. Vaddhano (2023) elucidates that increased use of mobile banking features is a sign of greater commitment to the service.

Despite being a popular subject of study, mobile banking still has many unanswered questions. Most prior research has concentrated on early stages of adoption, mostly within the TAM and UTAUT frameworks (Chatterjee et al., 2022). Despite the importance of psychology, the psychological adoption barriers has the least focus. Negative research gaps as described by Veronika et al. (2025) within a psychological barriers framework remains as a main research gap within the positive research on continuance intention. Notably, the research gap in eastern Indonesia, particularly East Kalimantan, should not be overlooked. East Kalimantan presents an economically and geographically distinct setting than the more developed and urbanized areas of Java (Sebayang et al., 2024).

To advance research in these areas, this study examines the factors of innovation resistance, technology readiness, adoption and user satisfaction on mobile banking continuance intention in East Kalimantan. With respect to Innovation Resistance Theory (IRT), the Technology Readiness Model (TRM) and Social Exchange Theory (SET), the study aims to contribute to theory and practical actionable bank user retention in strategies in lower income countries.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Resistance to Innovation

Innovation resistance occurs early when it is perceived as having risks and uncertainty and clashing with deeply rooted habits. Digital banking services met resistance. For example, Tunisia research found resistance to digital banking driven primarily by trust and security (Abdennebi et al., 2023). In Turkey, research of a similar vein found that financial literacy plays a role in minimizing resistance (Onay et al., 2023). Consequently, in the case of mobile banking, it is reasonable to say that resistance to innovation would correlate to a decrease in intent to adopt the service, satisfaction, and intent to use it continually.

**H1.** Innovation resistance impacts mobile banking adoption.

**H2.** Innovation resistance impacts user satisfaction.

**H3.** Innovation resistance impacts continuance intentions.

## Technology Readiness

Psychological factors such as disposition, optimism, innovativeness, discomfort, and insecurity, can impact one's attitude towards mental technology. Lin & Kim (2023) showed that adopters of mobile banking do not regard their religion as a hindrance towards their appreciation of mobile banking technology. They asserted that banking patrons who adopted mobile banking technology reported improvement to their satisfaction during mobile banking sessions. Retention mobile banking during service to customers, mobile banking patrons or customers, and customer satisfaction in their faith is improved. In Indonesia, Rahardja et al. (2023) stated that Mobile banking customers satisfied customers regard technology adoption as a driver of banking retention and satisfaction.

**H4:** Customer Technology Satisfaction IN mobile banking.

**H5:** Technology satisfaction enhances mobile banking retention.

**H6:** Technology adoption enhances overall mobile banking satisfaction.

## Mobile Banking Adoption

Utilization of mobile banking services for everyday banking activities as well as services offered by the respective branch is referred to as the adoption of mobile banking. Quality of e-service enhances customer satisfaction and consequently customer loyalty concerning mobile banking offered in the context of Indoensia (Beanning & Zulkarnain, 2024). Additionally, the number of mobile banking features offered correlates positively with satisfaction (Sebayang et al., 2024). This implies adoption as an appropriate intermediary variable to bridge the gap between technology readiness and the constructs of satisfaction and continuance intention.

**H7:** There is an influence of mobile banking adoption towards user satisfaction.

**H8:** There is an influence of mobile banking adoption towards continuance intention.

## User Satisfaction

Convenience, simplicity, safety, and usefulness are the key pillars that shape customer experience in mobile banking and contribute to positive evaluations. Continual intention and customer satisfaction are intrinsically linked. User digital services satisfaction and perceived service quality are critical variables to customer loyalty. Within Social Exchange Theory, satisfaction serves as a psychological reward that nurtures loyalty.

**H9:** User satisfaction positively influences continuance intentions.

## The Mediating Role of Adoption and Satisfaction

The level of technology readiness impacts the intent to continue using a technology, while satisfaction impacts the rate of technology adoption, alongside the intent to continue using the technology. Hence, both satisfaction and adoption are tied to continuance intention. By incorporating continuance intention into the previous three hypotheses, I form hypotheses that address the intrinsic and extrinsic variables explaining continuance intention in a technology framework. Previous studies have pointed out that the links between technology adoption, continuance intention, satisfaction, and technology readiness are under-researched. The relationship between various technologies impacts the pace of adopted technologies. The rate of adopted technology also affects the rate of continuance intention. Hence, the following hypotheses were formulated to address technological adoption, satisfaction, and continuance intention.

**H10:** Adoption acts as a mediator between technology readiness and continuance intentions.

**H11:** The relationship between adoption and continuance intention is mediated by satisfaction.

**H12:** The relationship between technological readiness and continuance intentions is mediated by satisfaction.

## METHODOLOGY

### Research Design

This study employs a quantitative research methodology, namely a survey, to examine innovation resistance, technology readiness, adoption, satisfaction, and continuance intention concerning mobile banking. For research focused on digital financial services, quantitative survey designs facilitate the empirical examination of causal relationships among the variables in question (Chatterjee et al., 2022; Jarad et al., 2022).

### Population and Sample

In 2024, the study population was Mobile Bank users in the East-Kalimantan Province, which is 1,781,440 users representing 44.45% of the province's total population. To qualify, respondents had to (1) be a resident of East Kalimantan, (2) have used mobile banking for the previous six months, (3) be at least 17 years of age, (4) have an active mobile banking account, and (5) agree to respond to the questionnaires for this study. Sample size

determination was done using the Cochran formula which yielded an estimated 384 respondents. Adjusting for an expected nonresponse rate, 426 respondents were set as the target. Ultimately, for statistical purposes in the study, 600 respondents was a justified figure. Sampling was done proportionately across the 10 districts/cities of East Kalimantan so that there is urban, semi-urban and rural spread in all the geographical areas.

## Research Instruments

The components of the research questionnaire include innovation resistance, technology readiness, adoption, satisfaction, and continuance intention. A five-point Likert scale was utilized to measure these constructs, where respondents indicated their level of agreement from 'strongly disagree' to 'strongly agree.' The phrase 'Easy to use' to 'disagree' was included because the five-point Likert scale is the most frequently utilized scale in the research pertaining to digital consumer behavior and is well-documented as reliable in technology adoption studies (Kurniawan et al., 2024; Bvuma et al., 2025).

## Data Analysis Techniques

The PLS-SEM model analyses were carried out using SmartPLS software. The PLS-SEM method is considered applicable due to the data being predictive, complex, and non-normal, as noted by Hair et al. (2019) and Henseler et al. (2015). SEM-PLS has also been successfully applied to the analysis of the adoption of financial technologies in emerging markets (Rana et al., 2022). The analysis was performed in two stages; the first stage involved testing the measurement model to ascertain validity and reliability, and the second stage involved testing the structural model to verify the proposed hypotheses.

## RESULT

### Descriptive Research

This study included 600 participants. All of them were mobile banking service users in East Kalimantan. Table 1 presents the participants' demographic characteristics.

**Table 1.** Respondent Characteristics (N = 600)

Characteristics	Category	Amount	%
<b>Gender</b>	Man	319	53.2
	Woman	281	46.8
<b>Age</b>	<20	40	6.7
	21–30	219	36.5
	31–40	182	30.3
	41–50	113	18.8
	>50	46	7.7
<b>Education</b>	Senior High School	213	35.5
	Diploma	100	16.7
	S1	214	35.7
	S2	65	10.8
	S3	8	1.3
<b>Work</b>	civil servant	77	12.8
	Private sector employee	251	41.8
	Businessman	122	20.3
	Student	82	13.7
	Other	68	11.3
<b>Experience</b>	1–3 years	228	38.0
	4–6 years	254	42.3
	>6 years	118	19.7
<b>Frequency</b>	Daily	317	52.8
	Weekly	168	28.0
	Monthly	89	14.8
	Seldom	26	4.4

An impressive 66.8% of those surveyed fell into the 21 to 40 age range, indicating they are part of the working-age population. High school (35.5%) and undergraduate (35.7%) education levels were also highlighted, and over

half reported daily usage of mobile banking. This observation is aligned with international studies which stake the most active mobile banking users between the ages of 18 and 35, with considerable digital literacy (Choudrie et al., 2022; Abdennabi et al., 2023).

The tendencies exhibited by respondents in their answer patterns linked to each research variable were assessed using descriptive statistics. This suggests that the perception variables associated with mobile banking were in the moderate to high range, indicating a favorable perception of mobile banking.

**Table 2.** Descriptive Statistics of Constructs

Variables	Mean
Resistance to Innovation (IR)	3.00
Technology Readiness (TR)	2.98
Adoption (ADP)	3.00
Satisfaction (SAT)	3.00
Sustainable Intention (CI)	3.01

Innovation resistance showed moderate means; however, the respondents showed high technological readiness. Also, the levels of satisfaction and continuance intention were positive. As Nguyen et al. (2024) state, psychological barriers may still exist, however most consumers from emerging markets display strong willingness to adopt and utilize digital services.

### Outer Model: Validity and Reliability

**Table 3.** Reliability

Construction	CA	CR	AVE
<b>IR</b>	0.89	0.89	0.64
<b>TR</b>	0.89	0.89	0.69
<b>SAT</b>	0.90	0.90	0.66
<b>ADP</b>	0.85	0.86	0.63
<b>CI</b>	0.87	0.87	0.67

All constructs exhibited reliability, as shown by Cronbach's Alpha and Composite Reliability exceeding 0.70, as well as convergent validity, demonstrated by Average Variance exceeding 0.50. This shows conformity to the standards set for instruments by Hair et al. (2019) for structural equation modelling partial least squares (SEM-PLS) techniques.

**Table 4.** Convergent Validity

Construct	Indicator	Outer Loading	Interpretation
<b>Resistance to Innovation (IR)</b>	IR1: Preference remains with the old way	0.82	Valid
	IR2: Perception of risk or security	0.80	Valid
	IR3: Difficulty learning technology	0.79	Valid
	IR4: Low utility value	0.82	Valid
	IR5: Avoiding new technological changes	0.77	Valid
	IR6: Innovation information is unclear	0.79	Valid
<b>Technology Readiness (TR)</b>	TR1: Optimism towards technology	0.87	Valid
	TR2: Trust in the convenience of digital features	0.82	Valid
	TR3: Enthusiasm for trying new technologies	0.82	Valid
	TR4: Ability to quickly learn technology	0.85	Valid
	TR5: Technology support or training	0.79	Valid
<b>Satisfaction (SAT)</b>	SAT1: Satisfaction of use experience	0.82	Valid
	SAT2: Feeling of pleasure after using	0.82	Valid
	SAT3: Overall positive experience	0.83	Valid
	SAT4: User needs are met	0.82	Valid
	SAT5: Satisfaction with security and privacy	0.80	Valid
	SAT6: Satisfaction with service response	0.79	Valid
<b>Adoption (ADP)</b>	ADP1: Frequency of application usage	0.82	Valid
	ADP2: Transaction type variations	0.82	Valid
	ADP3: Duration of application use	0.81	Valid

	ADP4: Utilization of additional features (QRIS, investment)	0.75	Valid
	ADP5: Adaptation to personal needs	0.76	Valid
<b>Sustainable Intention (CI)</b>	CI1: Intention to continue using	0.84	Valid
	CI2: Re-selecting services in the future	0.84	Valid
	CI3: Intention to increase frequency of use	0.82	Valid
	CI4: Recommendations to others	0.78	Valid
	CI5: Personal commitment to continue using	0.78	Valid

The findings indicate that all indicators have outer loading values of greater than 0.75 which suggests that all indicators correctly represent the respective construct. Furthermore, the AVE values of all the constructs are over 0.50, meaning that the construct explains more than half the variance of the indicators. Since the values of CR and CA are greater than 0.85, this demonstrates that construct reliability is excellent. Consequently, all constructs pass the tests for convergent validity and reliability, and can proceed to the structural model testing.

**Table 5.** Fornell–Larcker Criterion

	<b>ADP</b>	<b>CI</b>	<b>IR</b>	<b>SAT</b>	<b>TR</b>
<b>ADP</b>	<b>0.793</b>				
<b>CI</b>	0.455	<b>0.816</b>			
<b>IR</b>	-0.309	-0.346	<b>0.797</b>		
<b>SAT</b>	0.333	0.525	-0.343	<b>0.814</b>	
<b>TR</b>	0.452	0.411	-0.160	0.504	<b>0.831</b>

**Table 6.** HTMT Ratio

	<b>ADP</b>	<b>CI</b>	<b>IR</b>	<b>SAT</b>	<b>TR</b>
<b>ADP</b>		0.524	0.352	0.378	0.518
<b>CI</b>	0.524		0.391	0.592	0.467
<b>IR</b>	0.352	0.391		0.382	0.180
<b>SAT</b>	0.378	0.592	0.382		0.563
<b>TR</b>	0.518	0.467	0.180	0.563	

All indicators show outer loading values above 0.75, meaning that each indicator accurately reflects each construct. Moreover, the AVE values of all the constructs exceeds 0.50 which implies that the construct accounts for more than half of the variance of the indicators. Also, the CR and AVE values which are well above 0.85 show excellent construct reliability. Therefore, all constructs are used to evaluate the structural model.

### Inner Model: Goodness of Fit

Evaluating the inner model focused on judging if the relationships between the constructs were adequately captured by the structural model. For this purpose, the most important indicators are the determination coefficient (R<sup>2</sup>), effect size (f<sup>2</sup>), predictive relevance (Q<sup>2</sup>), multicollinearity (VIF), and model fit (SRMR and NFI).

**Table 7.** R<sup>2</sup> and R<sup>2</sup> Adjustment Values.

Endogenous Variables	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>
<b>ADP</b>	0.204	0.203
<b>CI</b>	0.384	0.380
<b>SAT</b>	0.325	0.322
<b>TR</b>	0.026	0.024

**Table 8.** Effect Size (f<sup>2</sup>)

Track	<b>f<sup>2</sup></b>
<b>TR - ADP</b>	0.256
<b>TR - SAT</b>	0.306
<b>SAT - CI</b>	0.129
<b>ADP - CI</b>	0.077
<b>IR - SAT</b>	0.104

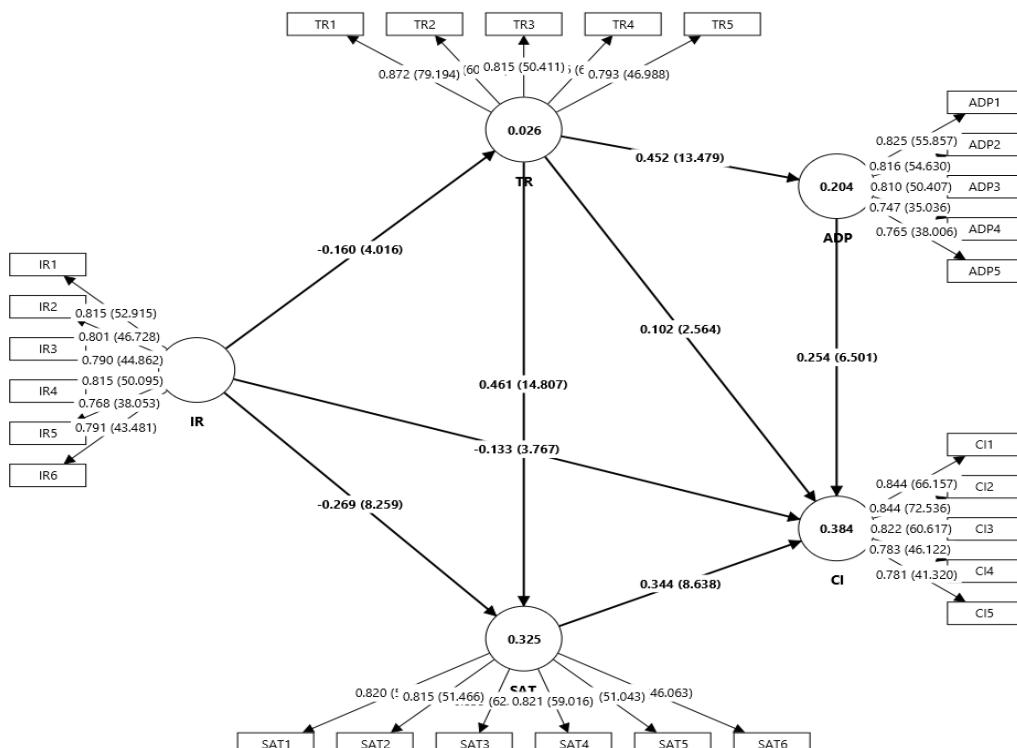
**Table 9.** Goodness of Fit

Index	Saturated	Estimated
<b>SRMR</b>	0.039	0.062
<b>NFI</b>	0.927	0.925

**Table 10.** Predictive Relevance ( $Q^2$ )

Variables	$Q^2$
<b>ADP</b>	0.127
<b>CI</b>	0.252
<b>SAT</b>	0.212
<b>TR</b>	0.017

The combination of moderate  $R^2$  values with positive  $Q^2$  values for satisfaction and continuance intention indicate predictive relevance. Since the SRMR is less than 0.08, an SRMR of 0.062 indicates good model fit as well. This aligns with the most recent studies that have utilized SEM-PLS in mobile banking in emerging markets (Nguyen et al., 2024; Veronika et al., 2025).

**Figure 1.** SmartPLS 4 Output

Hypothesis testing was performed using the bootstrapping method with 5,000 resamplings. The findings were delineated into two sections: direct and indirect effects/mediation.

**Table 10.** Results of Direct Hypothesis Testing (H1-H8)

Track	Coef.	t	p	Status
<b>IR - ADP</b>	-0.160	4,011	0,000	Supported
<b>IR - SAT</b>	-0.269	8,246	0,000	Supported
<b>IR - CI</b>	-0.133	3,820	0,000	Supported
<b>TR - ADP</b>	0.452	13,476	0,000	Supported
<b>TR - SAT</b>	0.461	15,025	0,000	Supported
<b>TR - CI</b>	0.102	2,572	0,010	Supported
<b>ADP - SAT</b>	0.254	6,566	0,000	Supported
<b>SAT - CI</b>	0.344	8,786	0,000	Supported

Consequently, no hypotheses could be accepted. The disinclination towards innovation diminished adoption, satisfaction, and intention to continue, while the readiness to use technology amplified these factors. The

relationship of adoption to satisfaction, and especially the former to the intention to continue, is considerably strong. These findings align with those of Talwar et al. (2022), Lin and Kim (2023), and S. (2023).

**Table 11.** Mediation Test Results (H9–H12)

Indirect Path	Coef.	t	p	Status
TR - ADP - CI	0.273	10,420	0,000	Supported
IR - ADP - SAT	-0.074	3,905	0,000	Supported
ADP - SAT - CI	0.153	7,227	0,000	Supported
TR - SAT - CI	0.072	3,561	0,000	Supported

Satisfaction is essential as a mediator in the relationships between adoption, readiness, and continuance intention. Also, adoption is a mediator in the relationships between technology readiness and continuance intention and between innovation resistance and satisfaction. This is consistent with Zhang et al. (2023), who affirmed satisfaction as a psychological mechanism, and reinforces the position of Veronika et al. (2025), who argued the inclusion of mediating variables provides a more fleshed-out model.

## DISCUSSION

The model clarifies three findings. First, there is innovation resistance, which negatively impacts adoption, satisfaction, and intention to continue use. Second, technology readiness is a critical leverage point, increasing adoption and satisfaction and, in turn, prolonging intentions to use. Third, and most importantly, satisfaction and adoption are not purely behavioral outcomes of a process; they are psychological metrics that reflect and mediate, dissipatively, the impact of the drivers and inhibitors of retention. The effect sizes indicate where the model needs particular intervention, and there is a marked relationship between technology readiness and satisfaction and adoption. Satisfaction is a stronger predictor of intention to continue use than satisfaction, which suggests that banks should not only focus on encouraging the use of a service but also on improving satisfaction with the service post-use to enhance retention.

### Resistance to Innovation as a Systemic Barrier.

Resistance to adoption and use, satisfaction, and subsequent intention to use once again, emphasize the principal assertion of Innovation Resistance Theory. The concern, complexity, and incompatibility of resistance to be incorporated into existing routines, emerging markets, driven by divergent levels of financial literacy and trust in digital services, will enhance this phenomenon. Studies in Tunisia and Turkey identify perceived security risk and financial literacy as barriers. However, these barriers, as Abdennabi et al. (2023) and Onay et al. (2023) indicate, can be minimally, but never wholly, resolved. Cross-national studies confirm our findings about persistence resistance, and in this case, disengagement of use, as a ongoing phenomenon. Distrust generates intense scrutiny of a service, thus making the relatively straightforward phenomenon of satisfaction dissonance almost impossible. Consequently, the reduction of resistance must be paired with the engineering of a service experience to alter a negative initial impression and culminate in an overall satisfactory experience.

### Technology Readiness as the Main Lever

Compared to other factors, technology readiness significantly shapes satisfaction and adoption outcomes. This is consistent with the literature, which states that, relative to other types of users, those with optimistic and digitally competent attitudes demonstrate superior learning and feature utilization, frustration control, and the ability to quickly decipher useful experiences (Lin and Kim, 2023; Ho et al., 2025; Rahardja et al., 2023). Within the Technology Readiness Model, this moves the focus from mere adoption predisposition to including readiness as a pivotal component in post-adoption evaluations. From a practical standpoint, the benefits of focusing on the readiness construct are two-fold: it will most likely boost feature utilization and enhance the user experience in a way that deepens their engagement.

### Dynamics of Adoption, Satisfaction, and Continuation Intentions

The intricate associations among service adoption, caused satisfaction, and intention to perpetually utilize a service reveals that users are capable of disengaging or navigating across the transactional, utilitarian, and hedonic tiers of a service. Users cognizant and attentive of the value-added features of a service will value the overall usefulness of the service, and subsequently, more positively evaluate their intention to sustain the service. Such attitudes have been noted in the satisfaction and loyalty observed in the Indonesian and Southeast Asian markets (Sebayang et al., 2024; Vaddhano, 2023; Nguyen et al., 2024). Notably, the user satisfaction predicting the continuance intention is valuable. This aligns with regard to satisfaction predicting retention in digital banking

services, more so with automated delivery systems, where service quality aligns with the user's perceived safety (Song Bee & Liew Chee, 2023; S., 2023).

### **Dual Mediation Architecture and Psychological Mechanisms**

The two pathways integrate seamlessly to attain the desired outcomes identified in mediation. Technology readiness impacts the first pathway wherein intention is maintained through adoption, with the understanding that commitment, in the first instance, is neither developed nor fostered without actual usage, and readiness is in itself an insufficient condition. In the latter, second pathway, adoption and readiness together contribute to intention to sustainment through satisfaction. Here, the hypothesis framed concern the positive psychological experiences that fuel the user to transition from mere usage to a loyalty continuum. This is supported by the literature where satisfaction mediates the quality of experience provided and retention, particularly in the fintech sector (Zhang et al., 2023; Veronika et al., 2025). In the instance of resistance, the negative mediation described through declining adoption and satisfaction portrays how early reluctance creates a less rewarding experience and subsequently hinders retention.

### **Model Fit and Predictive Power: What Remains Unexplained**

The model indicates strong user behavior prediction capabilities supported by robust fit indices and positive predictive relevance. Nonetheless, the explained variance pertaining to continuance intention was still moderate. This suggests that additional factors such as trust, reliance, switching costs, certain risk perceptions, and some aspects of perceived service quality might be involved. Even the literature explicitly points out that security and trust are moderating factors pertaining to the satisfaction-retention relationship, and addressing such factors could resolve some of the model ambiguity (S., 2023; Pokhrel, 2024). Their inclusion in future research could serve the purpose of incorporating additional moderators to further enhance the model's explanatory and predictive capabilities.

### **Contextual Nuances of East Kalimantan and User Heterogeneity**

Sample profile indicates the predominance of young people of productive ages, a high share of the population has secondary to tertiary education, and there is a high rate of daily servicing utilization. Such profiles are consistent with the literature, which indicates that the young and digitally literate population users in developing economies are the early adopters. On the other hand, older and less educated segments are more likely to endure resistance, require more extensive support, and exhibit greater reluctance. Research about older adults in developing regions illustrates that the retention of digitally enabled banking services is largely a function of support and intention (Bvuma et al., 2025). This is of strategic tactical positioning implications—which might involve a readiness to centre on the more vulnerable users—while more advanced users can be offered additional frictioned value added services.

### **Specific Theoretical Contributions**

This research also contributes to the development of more theoretical frameworks. Contribution to the Innovation Resistance Theory explains that the consequences of resistance occur not only during the adoption period but also impacts post-use evaluative retention. Contributing to the Technology Readiness Model demonstrates that readiness for adoption is an... experience rather than an activated lever. This research also affirms the Social Exchange Theory mechanism for the loyalty of use, where the perceived value of the benefits of use is provisioned in an currency of satisfaction and adoption. These three frameworks in the context of the developing world have increased external validity and presented a more cohesive model for sustainability.

### **Managerial Implications and Intervention Priorities**

The preparation of a structured work order would start with the defining technological readiness as one of the key fundamental issues. Implementation of tiered in-app onboarding, short micro-learning sessions, a help center, and even in-branch support for older generations will quicken the learning curve and alleviate frustration. To mitigate resistance, persistent and clear communication around the 'security' and 'alert' terms and transaction demonstrations should be provided. This should be in addition to the suggestion of developing and promoting in-valuation features of high frequency, locally used, and actively employed work features such as local bill payment and a digital wallet. The features positively correlate to the frequency of use. The 'post-use experience' perspective also deserves more attention. Tracking satisfaction, enhancing interface usability, resolving issues in a timely manner will ensure a smooth shift from use to loyalty. This aligns with the contractual sequence in the model, confirming there is an impact path for every investment.

## Additional Analysis and Validity of Findings

The discriminant and convergent validity were confirmed using AVE, loading, the Fornell-Larcker criterion, and the HTMT. It would also strengthen predictive causal claims to include simple endogeneity and common method bias tests, predictive performance assessments using PLS-Predict, and measures for predictive performance outside the sample. Considering the differences in paths among groups defined by age, gender, and usage intensity, I recommend cross-sectional multigroup analyses. For inter-group analysis, testing for measurement invariance is recommended.

## Research Limits and Agenda

This study's primary limitation stems from the use of a cross-sectional design which captures a single moment in time, rather than the sequential order of learning and habit formation. Consequently, these findings will be of limited national relevance, given that the research was focused on East Kalimantan. The reliance on self-report surveys may also result in perception bias. Subsequent research in this region would be greatly enhanced by the use of longitudinal studies to analyze the formation of habits and by the use of field studies designed to assess the impact of readiness increasing interventions. The research would also benefit from including other East Jurisdiction as well as cross-national studies. The framework would be strengthened by the inclusion of the potential effects of moderating variables such as trust, habits, and switching costs, and the proposed additional mediating variable of perceived value.

## CONCLUSION

In addition, the study identifies innovation resistance as a major challenge to the acceptance of mobile banking, unlike satisfaction, continuance intention, and the adoption of mobile banking. On the other hand, technology readiness strongly facilitates adoption, satisfaction, and intention to continue. The adoption of mobile banking has increased user experience and satisfaction. Therefore, satisfaction is a significant predictor of intention. The psychological dimensions of adoption and satisfaction explain retention and satisfaction interdependently, as evidenced by the mediation analysis. The proposed model, for the first time, is articulated in a unified form by integrating Innovation Resistance Theory, the Technology Readiness Model, and Social Exchange Theory.

This research demonstrates how resistance to innovation affects not only the satisfaction and level of sustained use after initial adoption but the initial adoption phases as well. This expands the explanatory potential of Innovation Resistance Theory pertaining to digital banking in emerging market economies. In addition, it contributes to the Technology Readiness Model by suggesting that the concept of technology readiness includes not only the willingness to adopt technology but also the post adoption experiences practitioners have. Lastly, in the context of Social Exchange Theory, this research illustrates that satisfaction and adoption parameters serve as intermediary functions in the exchange processes of experience and longitudinal loyalty.

These findings provide banking institutions with the opportunity to implement a number of strategic actions. The first of these the preparation of users' technology readiness with digital literacy, interactive walkthroughs, and flexible real-time help. On the other hand, and related to the mitigation of the adoption of innovation, the provision of security of technology and risk communication, transparency, and the balancing the digital literacy education effort on a continuum are crucial. To stimulate more extensive adoption, value-adoptive features pertinent to the local context can be incorporated, which may include digital wallets and payment of public services. For the preservation of post-adoption satisfaction, there are no substitutes to the service quality, proactivity to issues, design for ease of use, and service provision speed.

Enhancing the generalizability of the results Subsequent research should incorporate more regions and countries to enhance the generalizability of the findings. Longitudinal research would facilitate an exploration of the complexities surrounding intent persistence and the evolution of habits over time. Including trust, switching costs, and digital literacy as additional variables would increase the model's comprehensiveness. Lastly, field experiments would assess the effects of applied techniques on the technology readiness of participants, as well as on the communication strategies designed to mitigate innovativeness and resistance behavior.

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## Author Contributions

Darayani Annisa Nuramalina was responsible for the initial conceptualization of the study and contributed to the preparation of the introduction and literature review. Syarifah Hudayah focused on the development of the research methodology and data collection process. Irsan Tricahyadinata, as the corresponding author, led the data analysis, interpretation of results, and preparation of the final draft of the manuscript. Saida Zainurossalamia ZA contributed to the discussion, implications, and refinement of the conclusions. All authors reviewed and approved the final version of the manuscript.

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## Conflicts of Interest Statement

The authors declare that there are no conflicts of interest concerning the publication of this paper. The research was conducted independently, without any financial or personal relationships that could have influenced the findings or interpretations presented in this study.

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