



An integrated TAM, IDT, trust, service quality and UI/UX in explaining mobile banking adoption in Cambodia

Ratha Seng¹, Rady Chhun², Sengtha Chay³, Bunnak Poch⁴

¹*Department Management, National University of Management, Cambodia*

²*Technology Management, National University of Management, Cambodia*

³*Technology Management, University of Hyogo, Japan*

⁴*Business Management, University of Chicago, USA*

Corresponding author: Ratha Seng, ratha.cdc@gmail.com

Abstract. This research investigates the determinants of mobile banking adoption in Cambodia using a convergent mixed-methods design. The study integrates TAM, IDT, Trust and Service Quality constructs to explain behavioral intention. Quantitative data were obtained from 528 university students and analyzed through PLS-SEM, while qualitative insights were gathered from 10 SME owners to assess practical experiences with mobile banking applications, particularly UI/UX features and Bakong-enabled transactions. Empirical results indicate that Perceived Ease of Use, Trust, Service Quality and Customer Satisfaction are the most significant predictors of Behavioral Intention. In contrast, Perceived Usefulness, Complexity, and Security do not exert direct significant influence within this context. The qualitative findings complement the statistical results by highlighting users' preference for simple navigation, efficient QR scan, and secure transaction confirmation. The study concludes that technological reliability and positive user experience are more decisive than functional benefits alone. The integrated framework provides both theoretical contribution and practical implications for financial institutions seeking to enhance digital banking adoption and strengthen Cambodia's digital financial ecosystem.

Keywords: mobile banking, user interface (UI), user experience (UX), technology acceptance model (TAM), the innovation diffusion theory (IDT)

Introduction

The rapid progression of digital transformation is reshaping industries worldwide, with the banking sector experiencing particularly significant change. Traditional financial institutions are increasingly modernizing their infrastructures to meet the evolving demands of technologically proficient customers. By leveraging online platforms and mobile banking applications, individuals can conveniently access and control their financial activities in real time. Furthermore, technological innovations pioneered by major technology companies continue to drive the evolution and sophistication of mobile banking services (Venkatesan, 2025). In recent years, rapid technological advancement has been observed across multiple sectors, especially within manufacturing and service industries, substantially shaping the characteristics and delivery of products and services (ALSAMYDAI, 2014; Panetta, 2018). The ongoing wave of digital transformation is fundamentally influencing both individual behavior and organizational practices, redefining how goods and services are created, acquired, and utilized, as well as transforming patterns of human interaction.

Despite this progress, adoption levels in developing economies such as Cambodia remain relatively modest compared to total mobile subscriber penetration. This gap highlights the importance of understanding the determinants of behavioral intention to adopt mobile banking. Accordingly, the aim of this study is to examine the factors influencing behavioral intention to adopt mobile banking in Cambodia by integrating the Technology Acceptance Model (TAM) (Davis, 1989), Innovation Diffusion

DOI: [dx.doi.org/10.24123/seajsm.v3i35](https://doi.org/10.24123/seajsm.v3i35)

Copyright: © 2025 by Authors, Published by Faculty of Business and Economics, University of Surabaya (E-ISSN: 3089-1469). This is an open-access article under the CC BY-SA License (<https://creativecommons.org/licenses/by-sa/4.0/>).

Article history: Received: 2/March/2026; Accepted date: 25/March/2026; Available Online: 12/July/2026; Published: 15/July/2026

Theory (IDT) (Everett M. Rogers, 1962), and Service Quality perspectives (DeLone & McLean, 2003), while incorporating User Interface (UI) and User Experience (UX) dimensions as critical service design components (Gabor Aranyi & Paul van Schaik, 2016; Johnson, 2020). By combining these theoretical foundations into a unified framework, this research seeks to provide a comprehensive explanation of mobile banking adoption behavior within the Cambodian context.

Mobile banking adoption has been widely examined in both developed and developing economies, where technological infrastructure, institutional trust, and digital literacy shape adoption patterns differently. In mature digital economies, studies emphasize system usability, service quality, and technology readiness as key determinants of digital financial service adoption. Recent research on digital transformation and technology-supported services in advanced environments highlights how cloud technologies, mobile platforms, and digital ecosystems influence user behavior and learning experiences (Papadaki et al., 2024; Samala et al., 2025). In contrast, developing countries often face challenges related to financial inclusion, technological infrastructure, and trust in digital systems. Therefore, examining mobile banking adoption in Cambodia provides an opportunity to explore how established theoretical models such as the Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), and service quality perspectives operate within an emerging digital financial ecosystem. This study contributes to the literature by integrating these theoretical perspectives while considering the role of national digital payment infrastructure, particularly the Bakong platform, in supporting mobile banking adoption.

This study contributes to the body of knowledge in Service Management in Southeast Asia in several ways. First, while TAM and IDT have been widely applied in technology adoption studies (Al-Rahmi et al., 2019; King & He, 2006), limited research has simultaneously integrated these models with service quality and UI/UX constructs within emerging Southeast Asian banking markets. Second, Service Quality has been recognized as a critical determinant of information system success and customer satisfaction (DeLone & McLean, 2003), yet its interaction with perceived usefulness, ease of use, trust, and security in mobile banking environments requires deeper contextual investigation. Third, UI and UX play an increasingly central role in digital service management, given that nearly half of system development effort is often devoted to interface design (Brad A. Myers & Mary Beth Rosson, 1992), and user experience shapes attitudes, emotions, and behavioral responses toward digital platforms (Gabor Aranyi & Paul van Schaik, 2016). By integrating these dimensions, this study extends service management theory within a rapidly digitalizing Southeast Asian economy.

The introduction of national digital payment infrastructure, including Bakong and KHQR systems, has strengthened interoperability and digital transaction efficiency. However, technological availability alone does not guarantee adoption. Prior research emphasizes that perceived usefulness and perceived ease of use significantly influence technology acceptance (Davis, 1989; Poon, 2007), while innovation attributes such as relative advantage, compatibility, and complexity also shape adoption decisions (Everett M. Rogers, 1962). Trust and security remain foundational elements in financial services, as banking institutions historically operate on principles of confidence and reliability (Arjunwadka, 2018). Therefore, a comprehensive examination of these determinants is essential for understanding mobile banking adoption in Cambodia.

Literature Review and Hypothesis Development

The purpose of this literature review is to establish a strong theoretical foundation for examining the behavioral intention to adopt mobile banking in Cambodia. As digital financial services continue to evolve, understanding user acceptance requires a multidimensional perspective that integrates technology adoption theories with service quality and UI/UX. Previous studies have demonstrated that no single theoretical framework is sufficient to fully explain mobile banking adoption behavior, particularly in

emerging economies where contextual, technological, and service-related factors interact dynamically (Al-Rahmi et al., 2019; King & He, 2006). Therefore, this review synthesizes key theoretical models and empirical findings to construct an integrated conceptual framework tailored to the Cambodian context.

Technology Acceptance Model (TAM), developed by Davis (1989), remains one of the most influential frameworks in explaining technology adoption. TAM posits that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the primary determinants of users' behavioral intention. Empirical research consistently supports the significant impact of these constructs on e-banking and mobile banking usage (Poon, 2007). However, while TAM provides a parsimonious explanation of user acceptance, it does not fully capture innovation characteristics or broader service quality dimensions.

To address these limitations, Innovation Diffusion Theory (IDT), introduced by Everett M. Rogers (1962), is incorporated to explain how innovation attributes such as Relative Advantage, Compatibility, and Complexity influence adoption decisions. IDT emphasizes that individuals evaluate new technologies based on perceived benefits and alignment with their existing values and practices. In the context of mobile banking, these attributes are particularly relevant in developing countries where technological familiarity and lifestyle compatibility vary significantly.

While many studies on mobile banking adoption focus on developing economies, research from developed countries provides valuable comparative insights into technology acceptance and digital service innovation. Studies in Western contexts highlight the importance of digital ecosystems, user experience design, and integrated technology platforms in shaping digital service adoption. For instance, Papadaki et al. (2024) emphasized the transformative role of digital innovation and cloud technologies in enabling user engagement and system usability, while Samala et al. (2025) highlighted the global expansion of mobile technologies and their increasing influence on digital service interaction. These studies suggest that technological infrastructure and digital readiness significantly affect how users perceive and adopt mobile technologies. In emerging economies such as Cambodia, where financial technology adoption is rapidly evolving, the integration of interoperability platforms such as Bakong may play a similar enabling role by enhancing trust, interoperability, and accessibility of digital financial services.

Beyond technological and innovation perspectives, Service Quality plays a central role in digital banking adoption. According to DeLone and McLean (2003), service quality is a key determinant of information system success, influencing user satisfaction and continued usage intention. In financial services, trust and security are also foundational elements, as banking institutions operate on principles of reliability and confidence (Arjunwadka, 2018). Customer satisfaction, therefore, functions as a mediating mechanism linking service quality and behavioral intention.

A digital platform that facilitates the search for boarding accommodation plays a significant role in supporting individuals who relocate for education, employment, or other purposes. Evaluating the user interface (UI) and user experience (UX) of such a platform is essential for improving usability, functionality, and overall interaction quality. UI refers to the visual and interactive design elements that enable users to navigate the system effectively, while UX encompasses users' perceptions, emotions, and satisfaction when engaging with the platform. Systematic assessment of UI/UX contributes to enhancing service performance, strengthening user trust and loyalty, and sustaining competitiveness within a rapidly evolving digital market (Burhan & Mauritsius, 2024). Furthermore, contemporary digital service management increasingly recognizes the importance of User Interface (UI) and User Experience (UX). Nearly half of system development efforts are often dedicated to interface design (Brad A. Myers & Mary Beth Rosson, 1992), and user experience significantly shapes attitudes, emotions, and behavioral responses toward digital platforms (Gabor Aranyi & Paul van Schaik, 2016). As mobile banking is

delivered primarily through application-based interfaces, UI and UX become critical determinants of perceived ease of use, satisfaction, and ultimately adoption.

Finally, it synthesizes these perspectives to develop the proposed integrated conceptual framework guiding this study. Abdul Razak Munir (2013) reported that users' acceptance and intention to utilize mobile banking services are significantly shaped by perceived usefulness, a finding that is consistent with Bara Waleed Rababa et al. (2025), who likewise identified perceived usefulness (PU) as a primary predictor of Jordanians' willingness to adopt mobile banking.

Perceived usefulness has been widely recognized as a pivotal factor influencing users' intention to adopt mobile banking, with empirical evidence consistently demonstrating its strong and direct positive effect on usage intention across different contexts (Bile Abdisalan Nor et al., 2024; Chen et al., 2003; Szajna, 1996). In this respect, the following hypothesis is developed:

H1: Perceived Usefulness has a positive effect on the behavioral intention to adopt Mobile Banking.

Perceived ease of use is consistently shown to be a significant predictor of technology adoption, as it positively influences users' attitudes, intentions, and actual usage behavior. Empirical evidence across multiple studies confirms that when systems are perceived as easy to operate, users are more likely to develop favorable perceptions and engage with mobile banking services (Curran & Meuter, 2005; Fadillah Wira Hutomo, 2023; Marko van Deventer et al., 2018; Wessels & Drennan, 2010). Additionally, Bile Abdisalan Nor et al. (2024) studied about mobile banking adoption in Somalia by surveying 130 users, the results showed that perceived ease of use has a positive effect on the intention to use mobile banking.

H2: Perceived Ease of Use has a positive effect on the behavioral intention to adopt Mobile Banking.

Empirical findings from Poland indicate that perceived ease of use plays a significant role in strengthening users' perceptions of the usefulness of mobile banking services (Solarz & Adamek, 2021). Similarly, within the mobile banking context, Suresh Kumar and Angela Leonie Keyko Yukita (2021) reported that Perceived Ease of Use (PEOU) significantly influences Perceived Usefulness (PU).

H3: Perceived Ease of Use has a positive effect on the perceived usefulness.

Marko van Deventer et al. (2018) indicated the result of the study on influencing of perceived relative advantage on generation Y students' attitudes towards and usage behavior of mobile banking in South Africa that perceived relative advantage had a positive influence on mobile banking usage behavior. Additionally, M.A.C Jayamali and Gunaratna (2024) indicated that relative advantage has a positive and significant effect on customers' behavioral intention to adopt mobile banking, highlighting its role as an important determinant of adoption alongside other key factors. This is consistent with other empirical findings showing that relative advantage significantly influences users' acceptance of digital financial services, further reinforcing its role as a key technological factor shaping adoption decisions (Kelly & Palaniappan, 2022).

H4: Relative Advantage has a positive effect on the behavioral intention to adopt Mobile Banking.

Yong Liu and Li (2010) identified relative advantage as a significant factor in predicting the intention to adopt and use a specific innovation. Additionally, they suggested that relative advantage could also affect the perceived usefulness of the innovation. Waleed Mugahed Al-Rahmi et al. (2019) illustrated that the relationship between relative advantages and perceived usefulness has a positive and

significant relationship while GMY Owusu et al. (2021) studying about mobile banking adoption among the Ghanaian youth demonstrated that relative advantage impacted positively on perceived usefulness.

H5: Relative advantage has a positive effect on the perceived usefulness.

Compatibility is defined as the degree to which M-banking services are in line with consumers' lifestyle and current needs (Kleijnen et al., 2004). Koenig-Lewis et al. (2010) studied the effect of compatibility on usage intention and found out that there is a positive significant relationship between compatibility and intention to use. Therefore, the high level of compatibility of a technology with the needs and wants of individuals would increase the possibility of its adoption. Accordingly, it has been found that high compatibility leads to an increased chance of technology adoption Yining Chen et al. (2016) and raises the question as to whether this extends to M-banking. In this regard, the following hypothesis is developed:

H6: Compatibility has a positive effect on the behavioral intention to adopt Mobile Banking.

Potential customers are unlikely to adopt a new service solely based on its compatibility (Ritu Agarwal & Elena Karahanna, 1998; Sangjo Oh et al., 2003). Therefore, it is reasonable to conclude that compatibility alone does not drive the adoption of technological innovations. According to (Sangjo Oh et al., 2003), perceived usefulness (PU) and perceived ease of use (PEOU) mediate the influence of compatibility on customers' behavioral intentions (BI). Individuals who perceive a new technology as compatible are better equipped to assess its usefulness and are more likely to find it easier to use.

H7: Compatibility has a positive effect on the Perceived Ease of Use.

H8: Compatibility has a positive effect on the Perceived Usefulness.

In accordance with the study of Louis G. Tornatzky and Katherine J. Klein (1982) concluded that complexity was negatively related to adoption, while GMY Owusu et al. (2021), who also studied mobile banking adoption among the Ghanaian youth demonstrated the result that complexity is a key predictor of intentions to adopt mobile banking technology in Ghana.

H9: Complexity has a negative effect on the behavioral intention to adopt Mobile Banking.

Empirical evidence reported by Waleed Mugahed Al-Rahmi et al. (2019) demonstrates a statistically significant positive association between complexity and perceived ease of use. From the perspective of innovation diffusion, perceived ease of use may be interpreted as conceptually opposite to the notion of complexity (Davis, 1989). Supporting this relationship, a study conducted by GMY Owusu et al. (2021) on mobile banking adoption in Ghana also found that complexity exerts a positive effect on perceived ease of use.

H10: Complexity has a positive effect on the perceived ease of use.

Bile Abdisalan Nor et al. (2024) examined mobile banking adoption in Somalia using survey data collected from 130 users and found that trust significantly and positively influences users' intention to adopt mobile banking services. In contrast, Farah et al. (2018) reported no statistically significant association between trust and intention to use mobile banking. Given these inconsistent findings, further examination of this construct and its impact on users' attitudes and behavioral intention remains warranted. Koenig-Lewis et al. (2010) found that trust does not exert a direct effect on the intention to use mobile banking; instead, its influence operates indirectly, particularly through compatibility, which subsequently shapes usage intention. In addition, Sharma (2019) suggested that trust not only strengthens

users' behavioral intention to adopt mobile banking but also enhances their perceived satisfaction with the service.

H11: Trust has a positive effect on the behavioral intention to adopt Mobile Banking.

Security represents a fundamental consideration for users when performing online transactions. Within digital environments, perceived security refers to the extent to which individuals believe that a system can safely handle and transmit confidential personal data. Consequently, customers expect services that provide strong protection standards (W. David Salisbury et al., 2001). Consistent with this perspective, Richard Apau et al. (2025) emphasized that future efforts to promote both the adoption and sustained use of mobile banking applications should prioritize robust security mechanisms, enhanced privacy safeguards, and the cultivation of user trust.

H12: Security has a positive effect on the behavioral intention to adopt Mobile Banking.

Building trust in mobile banking is vital for achieving strong customer satisfaction, which in turn plays a key role in the overall success of such services (Abdullah M. Baabdullah et al., 2019). Within the broader e-business environment, mobile banking can raise user concerns not only regarding transaction security but also about the system's reliability, ethical integrity, and goodwill. This observation underscores that prior research on mobile banking has paid relatively limited attention to examining how trust influences customer satisfaction (Sarraf Berraies et al., 2017).

H13: Trust has a positive effect on the customer satisfaction within mobile banking.

Empirical evidence also supports this relationship, as Abu-Ta'ieh et al. (2022), in their study on the continued intention to use mobile banking in Jordan, found that service quality has a significant positive impact on users' behavioral intention to adopt and continue using mobile banking services. Existing studies have explored service quality as an indicator of overall mobile banking performance and its influence on initial trust and customer satisfaction (Gao; & Waechter, 2015; Sharma, 2019; Zhou, 2012).

H14a: Service quality has a positive effect on trust.

H14b: Trust has mediating effect on the relationship between service quality and customer satisfaction.

Customer satisfaction serves as an indicator of product or service success, as higher satisfaction levels tend to foster repeat usage and customer retention (Yu-Hui Fang et al., 2011). Supporting this view, Yanqun He et al. (2008) found that greater consumer satisfaction strengthens users' intention to adopt or continue using a service, which ultimately contributes to improved organizational profitability. Consistent with these results, Hossain et al. (2021) identified customer satisfaction as the most influential predictor of behavioral intention in the context of banking service adoption.

H15: Customer satisfaction has a positive effect on behavioral intention.

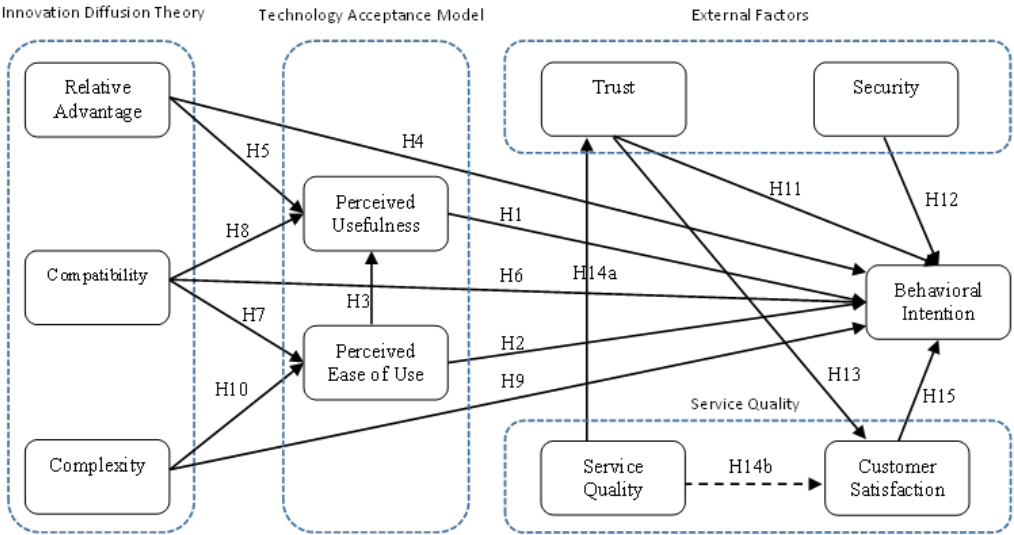


Figure 1: Conceptual Framework

Research Methodology

This study employed a mixed-methods approach combining quantitative and qualitative data to provide a more comprehensive understanding of mobile banking adoption. The quantitative survey targeted university students because they represent a digitally active population with high smartphone penetration and frequent exposure to mobile applications. This group is considered an important segment of potential and emerging digital banking users. To complement these findings, the qualitative phase involved interviews with SME business owners and managers who actively use mobile banking services in daily business transactions. Unlike students, these participants represent experienced users who regularly rely on digital financial services for operational and commercial activities. Their insights provide deeper understanding of practical system usage, interoperability, trust mechanisms, and the role of national digital payment infrastructure such as Bakong. By combining these two populations, the study triangulates behavioral intention data from young digital users with experiential insights from business practitioners, thereby strengthening the explanatory power of the research.

A mixed-method research designs to examine the determinants of mobile banking adoption in Cambodia. The research integrates the Technology Acceptance Model (TAM) (Davis, 1989), Innovation Diffusion Theory (IDT) (Everett M. Rogers, 1962), and Service Quality, extended with Trust, Security, Customer Satisfaction, and User Interface/User Experience (UI/UX) constructs.

The quantitative component empirically tests the proposed structural model using Partial Least Squares Structural Equation Modeling (PLS-SEM), while the qualitative component provides contextual insights into user perceptions and digital banking experiences. PLS-SEM is a widely used analytical technique in social sciences, particularly suitable for complex models involving multiple latent constructs and indicators (Joseph Hair et al., 2022). The combination of methods strengthens the explanatory power and enhances the robustness of the findings through triangulation.

The target population consisted of university students in Cambodia, representing a digitally engaged demographic group with active exposure to mobile banking services. Data were collected through an online survey distributed across multiple universities.

After data screening and cleaning, **528** valid responses were retained for analysis. The sample size exceeds recommended thresholds for PLS-SEM and is appropriate for testing complex predictive models.

Participation was voluntary and anonymous. Respondents were informed about the academic purpose of the study and assured of confidentiality.

Measurement items were adapted from validated prior studies to ensure reliability and content validity. The constructs included: Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Relative Advantage (RA), Compatibility (COM), Complexity (COMPLEX), Trust (TRUST), Security (SEC), Service Quality (SEQ), Customer Satisfaction (CSAT), Behavioral Intention (BINTEN). All items were measured using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The 7-point scale enhances response sensitivity and improves statistical precision in structural modeling.

Prior to full distribution, the instrument was reviewed by experts to ensure contextual appropriateness within the Cambodian banking environment.

The data analysis process for this study was conducted in two main stages using SPSS version 25 and SmartPLS 4. The use of these software tools provided a comprehensive and systematic approach to both preliminary data assessment and advanced structural modeling. This two-step procedure ensured that the data met the necessary assumptions for multivariate analysis and facilitated rigorous testing of the proposed research model.

To complement quantitative findings, semi-structured interviews were conducted with 10 SME business owners in Cambodia. Purposive sampling was employed to ensure participants were active users of mobile banking applications and Bakong (KHQR) systems.

Interviews explored perceptions of UI/UX design, trust, security, service quality, and motivations for adoption. All interviews were conducted with informed consent and transcribed for analysis. Thematic analysis was used to identify recurring patterns and themes. Qualitative findings were utilized to triangulate quantitative results, particularly in explaining the practical impact of **UI/UX** and digital payment integration on user intention.

Participation was voluntary, and respondents provided informed consent prior to participation. Data were collected anonymously and used solely for academic purposes.

This mixed-method approach enhances theoretical validation while providing contextual depth, offering a comprehensive understanding of mobile banking adoption within Cambodia’s evolving digital financial ecosystem.

Findings

This section presents the results of both the quantitative and qualitative analyses, with emphasis on statistically significant relationships and their theoretical and managerial implications within the Cambodian mobile banking context.

Table 1. Demographic profile of respondents

Item		Category (N=528)	Frequency	Percentage
Gender	Female		401	75.95%
	Male		127	24.05%
Age	Under 18		29	5.49%
	18 - 24		415	78.60%
	25 - 34		62	11.74%

Item	Category (N=528)	Frequency	Percentage
	35 - 44	19	3.60%
	45 - 54	3	0.57%
Education	Associate degree	40	7.58%
	Bachelor's degree	428	81.06%
	Master's degree	53	10.04%
	Doctorate degree	7	1.33%
University	National University of Management	173	32.77%
	ACLEDA University of Business	3	0.57%
	Human Resource University	3	0.57%
	WESTERN University	91	17.23%
	VANDA Institution	203	38.45%
	International University	9	1.70%
	Essec Business school Singapore	1	0.19%
	Institute of Finance and Accounting	4	0.76%
	Bright Hope Institute	7	1.33%
	UME University	33	6.25%
	Cambodian University for Specialties (CUS)	1	0.19%

A total of 528 valid responses were analyzed in this study. The sample was predominantly female (75.95%), with males representing 24.05%. The majority of respondents were aged between 18 and 24 years (78.60%), followed by those aged 25–34 (11.74%), indicating that the sample largely reflects Generation Z and young adults. In terms of educational attainment, most participants held a Bachelor's degree (81.06%), while 10.04% possessed a Master's degree and 7.58% held an Associate degree. Respondents were drawn from multiple universities in Cambodia, with the largest proportions from VANDA Institution (38.45%), National University of Management (32.77%), and WESTERN University (17.23%). Overall, the demographic profile represents a young, educated, and digitally engaged population, appropriate for examining mobile banking adoption behavior in Cambodia.

Table 2. Composite Reliability and Convergent Validity

Latent Variable	Manifest Variable	Outer Loading	rho_c	AVE
Perceived Ease of Use	PEOU1	0.765	0.848	0.584
	PEOU2	0.668		
	PEOU3	0.822		
	PEOU4	0.792		
Perceived Usefulness	PU1	0.919	0.915	0.844
	PU2	0.919		
Relative Advantage	RA1	0.848	0.919	0.739
	RA2	0.865		

Latent Variable	Manifest Variable	Outer Loading	rho_c	AVE
	RA3	0.856		
	RA4	0.868		
Compatibility	COM2	0.906	0.913	0.777
	COM3	0.891		
	COM4	0.846		
Complexity	COMPLEX1	0.821	0.913	0.724
	COMPLEX2	0.854		
	COMPLEX3	0.863		
	COMPLEX4	0.864		
Trust	TRUST1	0.873	0.909	0.715
	TRUST2	0.890		
	TRUST3	0.758		
	TRUST4	0.854		
Security	SEC2	0.948	0.947	0.899
	SEC3	0.948		
Service Quality	SEQ3	0.940	0.938	0.883
	SEQ4	0.940		
Customer Satisfaction	CSAT2	0.926	0.924	0.858
	CSAT4	0.926		
Behavioral Intention	BINTEN1	0.940	0.938	0.884
	BINTEN2	0.940		

The measurement model was evaluated in terms of indicator reliability, internal consistency reliability, and convergent validity. The results indicated that all constructs demonstrated satisfactory reliability and validity. Outer loadings for all retained items exceed the recommended threshold of 0.60, confirming adequate indicator reliability. Most items exhibit strong loadings above 0.70, suggesting that the observed variables are well represented by their respective latent constructs.

Internal consistency reliability was assessed using composite reliability, with values ranging from 0.848 to 0.947. All constructs exceed the recommended threshold of 0.70, indicating satisfactory to high reliability. Notably, constructs such as Security ($\rho_c = 0.947$), Service Quality ($\rho_c = 0.938$), and Behavioral Intention ($\rho_c = 0.938$) demonstrate very strong internal consistency.

Convergent validity was confirmed through Average Variance Extracted (AVE), with values ranging from 0.584 to 0.899, all exceeding the minimum threshold of 0.50. This indicates that each construct explains a substantial proportion of variance in its indicators. Overall, the measurement model satisfies the recommended criteria for reliability and convergent validity, supporting the robustness of the constructs used in this study.

Table 3. Cross Loading of Measurement Items

	BIN TE N	CO M	CO MP LE X	CSA T	PE OU	PU	RA	SEC	SE Q	TR UST
BINTE N1	0.941	0.6 56	-0.223	0.7 02	0.67 2	0.6 33	0.7 14	0.6 65	0.6 92	0.68 9
BINTE N2	0.939	0.7 08	-0.183	0.7 40	0.61 1	0.6 08	0.6 81	0.6 64	0.7 24	0.67 4
COM2	0.697	0.9 10	-0.155	0.6 41	0.64 8	0.6 33	0.7 11	0.6 27	0.6 36	0.62 6
COM3	0.645	0.8 96	-0.161	0.6 44	0.60 3	0.6 80	0.6 72	0.5 79	0.6 18	0.58 8
COM4	0.567	0.8 36	-0.202	0.5 92	0.52 5	0.5 64	0.6 52	0.5 60	0.5 94	0.55 2
COMPL EX1	-0.198	- 0.1 52	0.826	- 0.1 74	- 0.19 0	- 0.1 55	- 0.1 61	- 0.2 01	- 0.1 79	- 0.13 3
COMPL EX2	-0.179	- 0.1 90	0.854	- 0.1 73	- 0.20 9	- 0.1 58	- 0.1 97	- 0.2 15	- 0.1 85	- 0.13 5
COMPL EX3	-0.195	- 0.1 62	0.861	- 0.1 67	- 0.19 1	- 0.1 73	- 0.1 84	- 0.1 91	- 0.1 38	- 0.10 2
COMPL EX4	-0.164	- 0.1 56	0.863	- 0.1 76	- 0.22 4	- 0.1 45	- 0.2 13	- 0.1 46	- 0.1 45	- 0.09 9
CSAT2	0.758	0.6 90	-0.197	0.9 38	0.56 4	0.6 16	0.6 88	0.6 94	0.7 99	0.72 8
CSAT4	0.655	0.6 22	-0.177	0.9 14	0.48 7	0.5 12	0.5 57	0.6 08	0.6 74	0.58 4
PEOU1	0.509	0.4 90	-0.197	0.4 40	0.75 9	0.5 08	0.5 64	0.4 27	0.4 62	0.45 4
PEOU2	0.393	0.3 94	-0.178	0.3 25	0.64 0	0.3 85	0.3 75	0.2 82	0.3 36	0.33 5
PEOU3	0.571	0.5 38	-0.230	0.4 65	0.82 5	0.5 63	0.5 88	0.4 93	0.5 07	0.51 3
PEOU4	0.585	0.6 11	-0.137	0.4 91	0.81 6	0.6 70	0.6 07	0.5 06	0.5 09	0.52 7
PU1	0.562	0.6 24	-0.186	0.5 28	0.65 0	0.9 10	0.6 36	0.4 87	0.5 17	0.47 9
PU2	0.647	0.6 81	-0.157	0.5 96	0.65 5	0.9 26	0.7 36	0.5 79	0.5 89	0.59 7
RA1	0.625	0.6 60	-0.167	0.5 83	0.58 9	0.6 12	0.8 46	0.6 08	0.5 90	0.61 5
RA2	0.675	0.6 44	-0.228	0.5 73	0.63 7	0.6 53	0.8 68	0.6 14	0.5 96	0.62 6
RA3	0.624	0.6 68	-0.176	0.5 79	0.62 4	0.6 36	0.8 56	0.5 77	0.5 64	0.62 2

	BIN TE N	CO M	CO MP LE X	CSA T	PE OU	PU	RA	SEC	SE Q	TR UST
RA4	0.626	0.675	-0.190	0.593	0.589	0.671	0.868	0.620	0.588	0.655
SEC2	0.688	0.659	-0.183	0.676	0.558	0.582	0.685	0.951	0.723	0.731
SEC3	0.651	0.607	-0.238	0.662	0.524	0.521	0.649	0.945	0.729	0.747
SEQ3	0.699	0.662	-0.179	0.724	0.556	0.577	0.641	0.719	0.936	0.707
SEQ4	0.716	0.653	-0.178	0.778	0.575	0.558	0.637	0.719	0.943	0.734
TRUST1	0.581	0.520	-0.073	0.540	0.473	0.464	0.590	0.648	0.627	0.865
TRUST2	0.611	0.585	-0.119	0.629	0.531	0.505	0.640	0.689	0.669	0.886
TRUST3	0.583	0.559	-0.115	0.528	0.500	0.488	0.592	0.524	0.555	0.760
TRUST4	0.669	0.595	-0.154	0.699	0.548	0.529	0.650	0.753	0.728	0.864

Discriminant validity was further assessed using cross-loading analysis. As presented in Table 3, each measurement item exhibits the highest loading on its respective construct compared to all other constructs. For example, items measuring Behavioral Intention (BINTEN1 = 0.941; BINTEN2 = 0.939) load substantially higher on their intended construct than on other latent variables. Similarly, constructs such as Compatibility, Trust, Security, and Service Quality demonstrate strong indicator loadings exceeding 0.80 on their respective constructs.

Negative cross-loadings observed for Complexity are theoretically consistent, reflecting its inverse relationship with PEOU and BINTEN. Overall, these results confirm that the measurement items are well differentiated across constructs, thereby supporting adequate discriminant validity of the measurement model.

Table 4. Result of Heterotrait-monotrait (HTMT analysis)

Constr ucts	BINT EN	CO M	COMPL EX	CS AT	PE OU	PU	RA	SE C	SE Q	TRU ST
BINTE N										
COM	0.838									
COMPL EX	0.248	0.227								
CSAT	0.896	0.837	0.237							
PEOU	0.830	0.823	0.299	0.705						

Constructs	BINTEN	COM	COMPLEX	CSAT	PEOU	PU	RA	SEC	SEQ	TRUST
PU	0.782	0.848	0.221	0.736	0.886					
RA		0.886	0.252	0.783	0.855	0.880				
SEC	0.805	0.766	0.253	0.816	0.681	0.681	0.795			
SEQ	0.867	0.812	0.218	0.833	0.732	0.716	0.778	0.872		
TRUST	0.835	0.776	0.157	0.828	0.739	0.697	0.838	0.884	0.881	

According to Table 4, discriminant validity was examined using the HTMT for the refinement model, the majority of the HTMT values fall well below the threshold of 0.90 compared to the initial analysis, suggesting adequate discriminant validity across most constructs. Although these values approach the 0.90 threshold, they remain within the acceptable limit for social science research, especially when using the liberal criterion suggested by (Jörg Henseler et al., 2015).

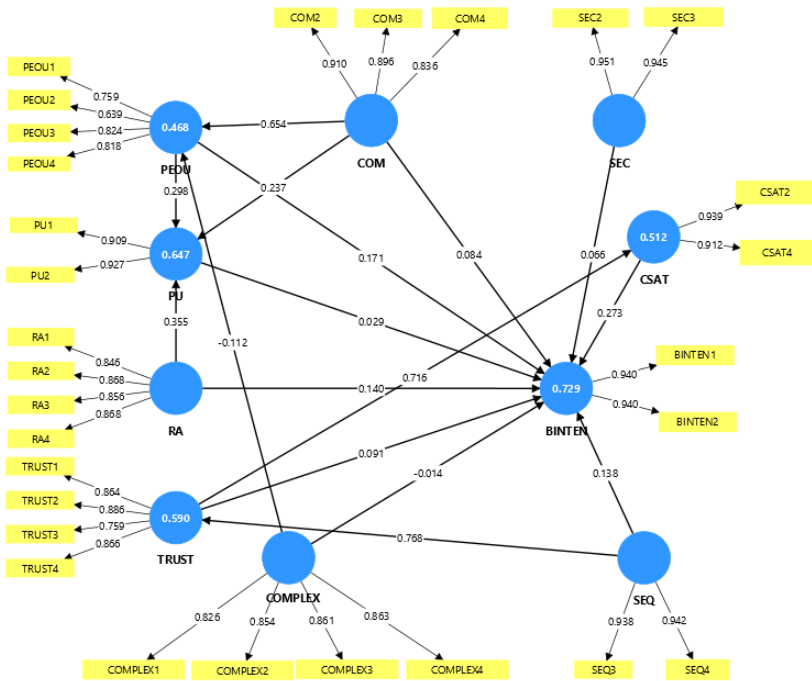


Figure 2. Results of refined model

Structural Model Result

The structural model assessment plays a crucial role in validating the hypothesized relationships among the latent constructs within the proposed framework. In this study, Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to test the significance, strength, and direction of the relationships based on 15 hypotheses derived from the integration of the Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), and Service Quality frameworks (Joe F Hair et al.,

2019). The evaluation considers the standardized path coefficients (β), t-values, and p-values as illustrated in Table 4.

Table 5. Result of the structural model

Hypothesis	Paths	β	SD	T-Value	P-Value	Decision
H1	PU -> BINTEN	0.029	0.045	0.660	0.509	Not Supported
H2	PEOU -> BINTEN	0.180	0.039	4.622	0.000	Supported
H3	PEOU -> PU	0.298	0.051	5.800	0.000	Supported
H4	RA -> BINTEN	0.150	0.050	2.991	0.003	Supported
H5	RA -> PU	0.355	0.060	5.877	0.000	Supported
H6	COM -> BINTEN	0.208	0.052	4.017	0.000	Supported
H7	COM -> PEOU	0.654	0.036	17.979	0.000	Supported
H8	COM -> PU	0.432	0.060	7.151	0.000	Supported
H9	COMPLE X -> BINTEN	-0.034	0.026	1.300	0.194	Not Supported
H10	COMPLE X -> PEOU	-0.112	0.036	3.098	0.002	Supported
H11	TRUST -> BINTEN	0.286	0.068	4.237	0.000	Supported
H12	SEC -> BINTEN	0.066	0.050	1.315	0.189	Not Supported
H13	TRUST -> CSAT	0.716	0.025	28.732	0.000	Supported
H14a	SEQ -> TRUST	0.768	0.023	33.011	0.000	Supported
H14b	TRUST -> CSAT	0.716	0.025	28.732	0.000	Supported
H15	CSAT -> BINTEN	0.273	0.069	3.964	0.000	Supported

The hypothesis testing results indicate that the majority of proposed relationships were statistically significant. Behavioral Intention (BINTEN) was significantly influenced by Perceived Ease of Use ($\beta = 0.180$, $p < 0.001$), Relative Advantage ($\beta = 0.150$, $p = 0.003$), Compatibility ($\beta = 0.208$, $p < 0.001$), Trust ($\beta = 0.286$, $p < 0.001$), and Customer Satisfaction ($\beta = 0.273$, $p < 0.001$). Among these, Trust and Customer Satisfaction emerged as the strongest direct predictors of adoption intention.

Perceived Usefulness did not have a significant direct effect on Behavioral Intention ($\beta = 0.029$, $p = 0.509$), indicating that usefulness alone does not directly drive adoption in this context. Similarly, Complexity did not significantly influence Behavioral Intention ($\beta = -0.034$, $p = 0.194$), although it negatively affected Perceived Ease of Use ($\beta = -0.112$, $p = 0.002$), suggesting an indirect impact.

The results also reveal important indirect relationships. Perceived Ease of Use significantly influenced Perceived Usefulness ($\beta = 0.298$, $p < 0.001$). Relative Advantage significantly affected Perceived Usefulness ($\beta = 0.355$, $p < 0.001$). Compatibility demonstrated strong effects on Perceived Ease of Use ($\beta = 0.654$, $p < 0.001$) and Perceived Usefulness ($\beta = 0.432$, $p < 0.001$), indicating its central role within the model.

Furthermore, the results of the mediation analysis confirm that Trust plays a partial mediating role in the relationship between Service Quality and Customer Satisfaction. The direct effect of Service Quality on Customer Satisfaction remains statistically significant ($\beta = 0.549$, $t = 17.298$, $p < 0.001$), while the indirect effect through Trust is also significant. This suggests that Service Quality not only directly enhances user satisfaction but also builds Trust, which in turn further reinforces Customer Satisfaction. Therefore, improving service quality strengthens satisfaction both directly and by cultivating a trustworthy relationship between users and mobile banking platforms.

Table 6. Participation Profile

Code	Gender	Age Group	Educati on	Skill	Business Sector	Business Size	Type
P-01	Male	35 - 44	Bachelor	Banking & Finance	Constru ction & Fuel	Medium	Owner
P-02	Male	35 - 44	High school	Business	Food & Beverag e	Small	Owner
P-03	Male	45 -54	PhD	Econom ic & Finance	Constru ction	Small	Owner
P-04	Male	35 - 44	Master	Informa tion Technol ogy	Technol ogy	Small	Owner
P-05	Male	25 - 34	Master	Informa tion Technol ogy	Technol ogy	Small	IT-Manager
P-06	Male	25 - 34	Bachelor	Informa tion Technol ogy	Food & Beverag e	Small	Owner
P-07	Male	35 - 44	Master	Informa tion Technol ogy	Technol ogy	Medium	Owner
P-08	Male	35 - 44	Bachelor	Informa tion Technol ogy	Technol ogy	Medium	IT-Manager

Code	Gender	Age Group	Education	Skill	Business Sector	Business Size	Type
P-09	Male	35 - 44	Bachelor	Banking & Finance	Trading	Medium	Owner
P-10	Male	35 - 44	Master	Banking & Finance	Trading	Medium	Sale Manager

The qualitative phase involved 10 participants, all of whom were male business professionals actively engaged in SME operations in Cambodia. The majority were aged between 35–44 years, with two participants aged 25–34 and one aged 45–54. In terms of educational background, most held at least a Bachelor’s degree, while several possessed Master’s degrees and one held a PhD, indicating a highly educated sample.

Participants represented diverse professional skills, primarily in Information Technology, Banking & Finance, Business, and Economics. Their business sectors included Technology, Construction, Fuel, Food & Beverage, and Trading. Most were business owners, while a smaller number served as IT Managers or Sales Managers. Regarding firm size, participants were evenly distributed between small and medium-sized enterprises.

The sample reflects experienced, educated SME decision-makers with direct involvement in digital financial transactions, making them well positioned to provide informed insights into mobile banking usage, and UI/UX experience.

Table 7. Bakong Interview with Participants

Participants	Questions				
	Do you know Bakong?	How do you think about Bakong?	Why do you use Bakong?	How was your experience?	If Bakong did not exist, would you still use Mobile Banking? How often?
P-01	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use -Sometime met error	-Yes, still use. -Daily, sometime need to use physical cash.
P-02	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use -Slower than other transactions	-Yes, still use. -Daily, sometime need to use physical cash.
P-03	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use	-Yes, still use. -Daily
P-04	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts)	-Easy to use	-Yes, still use. -Daily, sometime need

Participants	Questions				
	Do you know Bakong?	How do you think about Bakong?	Why do you use Bakong?	How was your experience?	If Bakong did not exist, would you still use Mobile Banking? How often?
			-High security (Blockchain Tech.)		to use physical cash.
P-05	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use -Sometimes met error (Bank of receiver)	-Yes, still use. -Daily
P-06	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use -Never met error	-Yes, still use. -Daily, sometime need to use physical cash.
P-07	Yes	-Able to transfer money across the banks	-Fast -High security (Blockchain Tech.)	-Easy to use -Sometimes met error	-Yes, still use. -Daily, sometime need to use physical cash.
P-08	Yes	-Able to transfer money across the banks	-Fast -High security (Blockchain Tech.)	-Easy to use	-Yes, still use. -Daily
P-09	Yes	-Able to transfer money across the banks	-Fast -High security (Blockchain Tech.)	-Easy to use -Sometimes met error	-Yes, still use. -Daily
P-10	Yes	-Able to transfer money across the banks	-Fast -No fee charge (limited amounts) -High security (Blockchain Tech.)	-Easy to use -Rarely use physical cash	-Yes, still use. -Daily

All interview participants (100%) were familiar with Bakong and actively used it in their daily business transactions. A dominant theme across responses was Bakong's ability to facilitate interbank transfers seamlessly. Participants consistently highlighted its speed, absence of transaction fees (within limited amounts), and high security supported by blockchain technology as key advantages.

Ease of use was another recurring theme. Most respondents described the system as simple and user-friendly, reinforcing the importance of usability in digital financial adoption. However, a few participants reported occasional technical issues, such as transaction delays or system errors, particularly related to recipient banks. Despite these minor concerns, overall experience was evaluated positively.

Importantly, all participants indicated that they would continue using mobile banking even if Bakong did not exist, with most reporting daily usage. While several respondents still occasionally relied on physical cash, particularly in specific transaction contexts, mobile banking was clearly embedded in their routine business operations. The qualitative findings suggest that Bakong strengthens digital financial adoption by enhancing interoperability, reducing transaction costs, and reinforcing perceptions

of security and convenience. These insights complement the quantitative results emphasizing trust, security, and ease of use as critical drivers of mobile banking adoption in Cambodia.

Table 8. Rating on UI & UX of the Bank Apps

Questions	UI & UX	P	P	P	P	P	P	P	P	P	P
		- 0 1	- 0 2	- 0 3	- 0 4	- 0 5	- 0 6	- 0 7	- 0 8	- 0 9	- 1 0
How do you rate the overall design of: (UI)	AC Super App	6	5	5	5	6	5	5	5	5	5
	ABA Mobile App	6	5	5	6	5	5	6	6	5	5
	CANADIA Mobile App	5	1	5	1	1	1	1	1	1	1
	AMRET Mobile App	1	1	1	1	1	1	5	1	1	1
	WING Mobile App	1	4	1	1	4	4	1	1	1	6
How would you rate the completion of Scan QR of: (UX)	AC Super App	5	5	5	5	6	6	6	6	5	6
	ABA Mobile App	5	5	5	6	6	6	6	6	5	6
	CANADIA Mobile App	5	1	5	1	1	1	1	1	1	1
	AMRET Mobile App	1	1	1	1	1	1	6	1	1	1
	WING Mobile App	1	4	1	1	4	5	1	1	1	6
How would you rate the completion of your money transfer (UX)	AC Super App	6	5	5	5	4	6	5	6	6	5
	ABA Mobile App	6	5	5	6	5	6	5	6	6	6
	CANADIA Mobile App	6	1	5	1	1	1	1	1	1	1
	AMRET Mobile App	1	1	1	1	1	1	4	1	1	1
	WING Mobile App	1	4	1	1	1	4	1	1	1	5
How would you rate the completion of payment (Water supply, Electricity,..) (UX)	AC Super App	6	5	5	5	5	6	5	5	5	5
	ABA Mobile App	1	5	5	6	6	6	5	5	5	5
	CANADIA Mobile App	1	1	4	1	1	1	1	1	1	1
	AMRET Mobile App	1	1	1	1	1	1	5	1	1	1

Questions	UI & UX	P	P	P	P	P	P	P	P	P	P
		-	-	-	-	-	-	-	-	-	-
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
	WING	1	4	1	1	1	5	1	1	1	5
	Mobile App										

Note: Rating Rank_UI: 6_Excellent, 5_Good, 4_Neutral, 3_ Fairly Poor, 2_ Poor and 1_Not applicable
Rating Rank_UX: 6_Very Easy, 5_Easy, 4_Neutral, 3_ Fairly Difficult, 2_ Difficult and 1_Not applicable

The UI and UX ratings reveal a clear preference for AC Super App and ABA Mobile App compared to other banking applications. Across all UI dimensions, both AC Super App and ABA Mobile App consistently received ratings of 5 (Good) and 6 (Excellent), indicating strong user satisfaction with overall design quality. In contrast, CANADIA, AMRET, and WING Mobile Apps frequently received ratings of 1 (Not applicable) or low scores, suggesting limited usage or weaker design perception among participants.

For QR scan completion (UX), AC Super App and ABA Mobile App were predominantly rated between 5 (Easy) and 6 (Very Easy), demonstrating smooth transaction flow and operational efficiency. Similar patterns were observed for money transfer and bill payment functions, where these two applications consistently achieved high usability scores. ABA Mobile App showed particularly strong performance in money transfer and payment completion processes.

Other applications, particularly CANADIA and AMRET, were often rated as “Not applicable,” indicating either low familiarity or limited feature usage among participants. WING Mobile App received mixed ratings, suggesting inconsistent user experience across functions.

In conclusion, the findings suggest that superior UI design and seamless UX performance significantly enhance user satisfaction and routine adoption. The strong ratings for AC Super App and ABA Mobile App reinforce the importance of intuitive interface design, fast transaction processing, and functional reliability in shaping mobile banking usage behavior in Cambodia.

Conclusion

The findings of this study demonstrate that mobile banking adoption in Cambodia is primarily influenced by Trust, Customer Satisfaction, Compatibility, Relative Advantage, and Perceived Ease of Use. Among these determinants, Trust and Customer Satisfaction emerged as the strongest predictors of Behavioral Intention, indicating that psychological assurance and positive service experience are central to digital financial adoption. While Perceived Ease of Use significantly enhances user intention, Perceived Usefulness did not show a direct effect, suggesting that functional performance is now viewed as a basic requirement rather than a competitive advantage. Security contributes indirectly through trust, reinforcing the importance of institutional credibility and system reliability in financial technology adoption.

The qualitative results further support these conclusions. Participants consistently emphasized speed, interbank transfer capability, cost efficiency, and ease of use as key strengths of digital banking services. Mobile banking has become embedded in their daily business routines, reflecting habitual usage rather than experimental adoption. High ratings for AC Super App and ABA Mobile App in UI and UX evaluation confirm that intuitive design and seamless transaction processes significantly strengthen user satisfaction and continued usage intention.

An important contextual factor influencing digital banking adoption in Cambodia is the Bakong platform developed by the National Bank of Cambodia. Bakong functions as a blockchain-based national payment infrastructure that enables interoperability among banks and financial institutions through the KHQR system. By allowing seamless interbank transfers, reducing transaction costs, and improving

payment efficiency, Bakong strengthens user trust and encourages wider adoption of mobile banking services. As a government-supported platform, Bakong plays a critical role in accelerating digital financial transformation and supporting the expansion of mobile banking usage across the Cambodian financial ecosystem.

References

- Abdul Razak Munir, M. S. I., A. Rahman Kadir, Jusni. (2013). Acceptance of Mobile Banking Services in Makassar A Technology Acceptance Model Approach. *Journal of Business and Management*, 7(6), 52-59. <https://doi.org/www.iosrjournals.org>
- Abdullah M. Baabdullah, Ali A. Alalwan, Nripendra P. Rana and Pushp Patil, & Dwivedi, Y. K. (2019). An integrated model for m-banking adoption in Saudi Arabia. *International Journal of Bank Marketing*, 452-478. <https://doi.org/10.1108/IJBM-07-2018-0183>
- Abu-Taieh, E. M., AlHadid, I., Abu-Tayeh, S., Masa'deh, R. e., Alkhawaldeh, R. S., Khwaldeh, S., & Alrowwad, A. a. (2022). Continued Intention to Use of M-Banking in Jordan by Integrating UTAUT, TPB, TAM and Service Quality with ML. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 120. <https://doi.org/10.3390/joitmc8030120>
- Al-Rahmi, W. M., Yahaya, N., Alamri, M. M., Alyoussef, I. Y., Al-Rahmi, A. M., & Kamin, Y. B. (2019). Integrating innovation diffusion theory with technology acceptance model: supporting students' attitude towards using a massive open online courses (MOOCs) systems. *Interactive Learning Environments*, 29(8), 1380-1392. <https://doi.org/10.1080/10494820.2019.1629599>
- ALSAMYDAI, M. J. (2014). Adaptation of the Technology Acceptance Model (TAM) to the Use of Mobile Banking Service. 3(4).
- Arjunwadka, P. Y. (2018). *Fintech The Technology Driving Disruption in the Financial Service Industry*.
- Bara Waleed Rababa, Azwadi Ali, & Al Montaser Mohammad. (2025). Understanding mobile banking adoption via the technology acceptance model: evidence from Jordan. *Banks and Bank Systems*, 20(1). [https://doi.org/10.21511/bbs.20\(1\).2025.03](https://doi.org/10.21511/bbs.20(1).2025.03)
- Bile Abdisalan Nor, Husein Osman Abdullahi, & Abdi, H. (2024). Understanding Mobile Banking Adoption Determinants in Somalia: A Technology Acceptance Model Approach. *Journal of Logistics, Informatics and Service Science*, 11, 367-379. <https://doi.org/10.33168/JLISS.2024.0422>
- Brad A. Myers, & Mary Beth Rosson. (1992). SURVEY ON USER INTERFACE PROGRAMMING. <https://doi.org/10.1145/142750.142789>
- Burhan, A. G. E., & Mauritsius, T. (2024). Examining Influence of User Experience Factors on Satisfaction with Mamikos Boarding House Rental App in Indonesia. *Journal of Logistics, Informatics and Service Science*, 11(5), 302-326. <https://doi.org/10.33168/JLISS.2024.0518>
- Chen, H., Zeng, D., Atabakhsh, H., Wyzga, W., & Schroeder, J. (2003). Coplink: Managing law enforcement data and knowledge. *Communications of the ACM*, 46(1), 28-34. <https://doi.org/10.1145/602421.602441>
- Curran, J. M., & Meuter, M. L. (2005). Self-service technology adoption: comparing three technologies. *Journal of Services Marketing*, 19(2), 103-113. <https://doi.org/10.1108/08876040510591411>
- Davis, F. D. (1989). Perceived Usefulness Perceived Ease of Use and User Acceptance of Information Technology. *MIS Quarterly*, 319-340. <https://doi.org/10.2307/249008>
- DeLone, W. H., & McLean, E. R. (2003). Information Systems Success: The Quest for the Dependent Variable. *Information System*, 3, 60-95. <https://doi.org/10.1287/isre.3.1.60>
- Everett M. Rogers. (1962). Bibliography on the Diffusion of Innovations.
- Fadillah Wira Hutomo. (2023). Technology Acceptance Model (TAM) methodology system analysis on mobile banking users. *Journal of Earth Kingdom*, 1(1), 26-37. <https://doi.org/10.61511/jek.v1i1.2023.32>
- Farah, M. F., Hasni, M. J. S., & Abbas, A. K. (2018). Mobile-banking adoption: empirical evidence from the banking sector in Pakistan. *International Journal of Bank Marketing*, 36(7), 1386-1413. <https://doi.org/10.1108/ijbm-10-2017-0215>
- Gabor Aranyi, & Paul van Schaik. (2016). Testing a Model of User-Experience with News Websites. *Journal of the Association for Information Science and Technology*, 1555-1575. <https://doi.org/10.1002/asi.23462>

- Gao, L., & Waechter, K. A. (2015). Examining the role of initial trust in user adoption of mobile payment services: an empirical investigation. *Information System Frontiers*(19(3)), 525-548. <https://doi.org/10.1007/s10796-015-9611-0>
- GMW Owusu, RA Bekoe, AA Addo-Yobo, & James Oticku. (2021). Mobile Banking Adoption among the Ghanaian Youth. *Journal of African Business*. <https://doi.org/10.1080/15228916.2020.1753003>
- Hossain, M. A., Jahan, N., & Kim, M. (2021). A multidimensional and hierarchical model of banking services and behavioral intentions of customers. *International Journal of Emerging Markets*, 18(4), 845-867. <https://doi.org/10.1108/ij OEM-07-2020-0831>
- Johnson, J. (2020). *Designing with the mind in mind: simple guide to understanding user interface design guidelines*. Morgan Kaufmann.
- Jörg Henseler, Christian M. Ringle, & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of Academic Marketing and Science*. <https://doi.org/10.1007/s11747-014-0403-8>
- Joseph Hair, G. Tomas Hult, Christian Ringle, Marko Sarstedt, Nicholas Danks, & Soumya Ray. (2022). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. <https://doi.org/10.1007/978-3-030-80519-7>
- Kelly, A. E., & Palaniappan, S. (2022). A conceptual model to determine factors influencing mobile money banking adoption in Ghana. *Asian Journal of Economics, Business and Accounting*, 22(22), 187-206. <https://doi.org/10.9734/AJEBA/2022/v22i2230722>
- King, W. R., & He, J. (2006). A meta-analysis of the technology acceptance model. *Information & Management*, 43(6), 740-755. <https://doi.org/10.1016/j.im.2006.05.003>
- Kleijnen, M., de Ruyter, K., & Wetzels, M. (2004). Consumer adoption of wireless services: Discovering the rules, while playing the game. *Journal of Interactive Marketing*, 18(2), 51-61. <https://doi.org/10.1002/dir.20002>
- Koenig-Lewis, N., Karjaluoto, H., Palmer, A., & Moll, A. (2010). Predicting young consumers' take up of mobile banking services. *International Journal of Bank Marketing*, 28(5), 410-432. <https://doi.org/10.1108/02652321011064917>
- Louis G. Tornatzky, & Katherine J. Klein. (1982). Innovation characteristics and innovation adoption-implementation A meta analysis of finding. *IEEE TRANSACTION S ON ENGINEERING MANAGEMENT*, EM-29. <https://doi.org/10.1109/TEM.1982.6447463>
- M.A.C Jayamali, & Gunaratna, A. G. D. L. K. (2024). Factors influencing behavioral intention to adopt mobile banking: With special reference to Gampaha District Sri Lanka. *Journal of Banking and Finance*, 7(01), 99-114. <https://doi.org/http://doi.org/10.4038/sljbf.v5i2.34>
- Marko van Deventer, Natasha de Klerk, & Bevan-Dye, A. (2018). Influence of perceived ease of use and perceived relative advantage on generation Y students' attitudes towards and usage behaviour of mobile banking in south africa. *International Journal of E-Business and E-Government Studies* 10.
- Panetta, F. (2018). Fintech and banking: today and tomorrow.
- Papadaki, E., Vrahatis, A. G., & Kotsiantis, S. (2024). Exploring innovative approaches to synthetic tabular data generation. *Electronics*, 13(10), 1965. <https://doi.org/10.3390/electronics13101965>
- Poon, W. C. (2007). Users' adoption of e-banking services: the Malaysian perspective. *Journal of Business & Industrial Marketing*, 23(1), 59-69. <https://doi.org/10.1108/08858620810841498>
- Richard Apau, Elzbieta Titis, & Harjinder Singh Lallie. (2025). Towards a Better Understanding of Mobile Banking App Adoption and Use Integrating Security Risk and Trust into UTAUT2. *MDPI*. <https://doi.org/10.3390/computers14040144>
- Ritu Agarwal, & Elena Karahanna. (1998). On the multi-dimensional nature of compatibility beliefs in technology acceptance. <http://disc-nt.cba.uh.edu/chin/digit98/first.pdf>
- Samala, A. D., Papadakis, S., & Rawas, S. (2025). Global Insights into Mobile Learning in Higher Education: A PRISMA-Guided Bibliometric Analysis from 2007 to 2023. *International Journal of Educational Reform*, 0(0). <https://doi.org/10.1177/10567879251341869>
- Sangjo Oh, Joongho Ahn, & Beomsoo Kim. (2003). Adoption of broadband internet in Korea the role of experience in building attitudes. *Journal of Information Technology*, 267-280. <https://doi.org/10.1080/0268396032000150807>
- Sarra Berraies, Karim Ben yahia, & Hannachi, m. (2017). Identifying the effects of perceived values of Mobile Banking

- applications on customers Comparative study between Baby Boomers, Generation X and Generation Y. *International Journal of Bank Marketing*, 1018-1038. <https://doi.org/10.1108/IJBM-09-2016-0137>
- Sharma, S. K., Manisha. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65-75. <https://doi.org/10.1016/j.ijinfomgt.2018.09.013>
- Solarz, M., & Adamek, J. (2021). Factors affecting mobile banking adoption in Poland: An empirical study. *European Research Studies Journal*, 24(4), 1018-1046. file:///C:/Users/Seng%20Ratha/Downloads/Factors%20Affecting%20Mobile%20Banking%20Adoption%20in%20Poland_%20An%20Empirical%20Study.pdf
- Suresh Kumar, & Angela Leonie Keyko Yukita. (2021). Millennials Behavioral Intention in Using Mobile Banking Integrating Perceived Risk and Trust into TAM (A Survey in Jawa Barat). *Advances in Economics, Business and Management Research*. <https://doi.org/10.2991/aebmr.k.210522.028>
- Szajna, B. (1996). Empirical Evaluation of the Revised Technology Acceptance Model. *Management Science*, 42(1), 85-92. <https://doi.org/10.1287/mnsc.42.1.85>
- Venkatesan, V. (2025). Revolutionary Trends in Mobile Banking Technology and the Influence of Digital Financial Literacy on Consumer Adoption in the United States. *Journal of Information Technology*. <https://doi.org/10.36838/v7i2.56>
- W. David Salisbury, Rodney A. Pearson, Allison W. Pearson, & Miller, D. W. (2001). Perceived security and World Wide Web purchase intention. *Industrial Management & Data Systems*, 4, 165-176. <https://doi.org/10.1108/02635570110390071>
- Waleed Mugahed Al-Rahmi, N. Y., Ahmed A. Aldraiweesh, Mahdi M. Alamri, Nada Ali Aljarboa, Uthman Alturki, & Abdulmajeed A. Aljeraiwi. (2019). Integrating Technology Acceptance Model With Innovation Diffusion Theory An Empirical Investigation on Students' Intention to Use E Learning System. 7. <https://doi.org/10.1109/ACCESS.2019.2899368>
- Wessels, L., & Drennan, J. (2010). An investigation of consumer acceptance of M-banking. *International Journal of Bank Marketing*, 28(7), 547-568. <https://doi.org/10.1108/02652321011085194>
- Yanqun He, Chan, L. K., & Tse, S.-K. (2008). From consumer satisfaction to repurchase intention The role of price tolerance in a competitive service market. *Total Quality Management*, 19, 946-961. <https://doi.org/10.1080/14783360802224628>
- Yining Chen, Hao Lou, & Wenhong Luo. (2016). Distance Learning Technology Adoption: A Motivation Perspective. *Journal of Computer Information Systems*, 38-43. <https://doi.org/10.1080/08874417.2002.11647485>
- Yong Liu, & Li, H. (2010). Mobile internet diffusion in China: an empirical study. *Journal of Information Technology*, 110, 309-324. <https://doi.org/10.1108/02635571011030006>
- Yu-Hui Fang, Chao-Min Chiu, & Wang, E. T. G. (2011). Understanding customers' satisfaction and repurchase intentions: An integration of IS success model, trust and justice. *Internet Research*, 21, 479-503. <https://doi.org/10.1108/10662241111158335>
- Zhou, T. (2012). An empirical examination of continuance intention of mobile payment services. *Decision Support Systems*(54(2)), 1085-1091. <https://doi.org/10.1016/j.dss.2012.10.034>