

# Examining the relationships between UTAUT2 constructs and mobile banking continuance intention in Sarawak

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## ARTICLE INFO

### *Article history:*

Received 15 October 2025  
Revised 24 December 2025  
Accepted 20 January 2026  
Online first  
Published 25 February 2026

### *Keywords:*

Mobile Banking  
UTAUT2  
Continuance Intention  
User Behaviour  
Sarawak

### *DOI:*

10.24191/ejssh.v10i1.9223

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## ABSTRACT

Mobile banking has become a vital component of digital financial services; however, sustaining users' continued engagement remains a challenge, particularly in developing regions. This study examines the relationships between key constructs of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and continuance intention of mobile banking among users in Bintulu, Sarawak. The study focuses on six constructs: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value. A quantitative approach was employed using a structured questionnaire administered to 400 mobile banking users. Data were analysed using Spearman's correlation to assess the strength and direction of relationships between the UTAUT2 constructs and continuance intention. The findings indicate that all six constructs are positively and significantly associated with continuance intention, with effort expectancy and performance expectancy showing the strongest relationships. The study demonstrates the applicability of UTAUT2 in a regional Malaysian context and offers practical insights for banks aiming to support sustained mobile banking usage through enhanced system usability, user support, and value provision.

## 1. INTRODUCTION

The digital transformation has substantially reshaped the global financial environment, with mobile banking emerging as one of the most prominent innovations in recent years. Advances in mobile technology, wider internet access, and increased smartphone penetration have enabled banks to deliver services beyond conventional branch-based operations. Mobile banking allows users to conduct real-time transactions, pay bills, transfer funds, and monitor accounts at their convenience. It has also become an important tool for financial inclusion, particularly in developing economies, by providing convenient and affordable services to previously underserved communities (Ramadhan et al., 2025). In Malaysia, the financial sector has actively embraced digitalisation in line with national efforts to promote financial technology adoption. According to Bank Negara Malaysia (2023), the number of mobile banking users has continued to increase alongside improvements in telecommunication infrastructure and growing public confidence in digital financial services. Despite this growth in adoption, sustaining users' continued engagement with mobile banking remains a challenge for both researchers and practitioners.

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Mobile banking offers substantial benefits to both consumers and financial institutions. For consumers, it provides flexibility, convenience, and efficiency, while for banks it contributes to lower operational costs and improved customer interaction (Becker, 2023). However, the long-term success of mobile banking depends not only on initial adoption but also on users' willingness to continue using the service over time. Research shows that users often discontinue mobile banking after initial adoption due to issues related to usability, dissatisfaction, or security concerns (Mefoute Badiang & Nkwei, 2024). This points to the importance of examining factors that determine continuance intention, defined as a user's intention to maintain ongoing use of a digital service. Sustained usage is critical in digital finance because it supports system viability and long-term technological sustainability within the banking sector (Kelly & Palaniappan, 2023). From an institutional perspective, retaining mobile banking users enhances cost efficiency, operational sustainability, and digital engagement. Despite its importance, research on post-adoption behaviour remains more limited than studies that focus on initial adoption.

These behavioural patterns can be well discussed in the Malaysian context. Though cities such as Kuala Lumpur and Penang show high levels of mobile banking usage, smaller regions such as Bintulu, Sarawak, are characterised by more heterogeneous patterns of technology acceptance due to differences in digital infrastructure, education level, and socio-economic conditions. Prior research has consistently reported that performance expectancy, effort expectancy, social influence, and price value are closely associated with users' continuance intention in mobile banking contexts. These constructs reflect how users evaluate system functionality, reliability, and perceived benefits. When users perceive mobile banking as efficient, convenient, and beneficial, these perceptions are commonly associated with higher levels of continuance intention. Nevertheless, challenges such as limited network coverage, lower levels of digital literacy, and system-related concerns may reduce users' confidence and willingness to sustain usage. In smaller towns such as Bintulu, where digital readiness is still emerging, these behavioural and contextual factors may operate differently. Hence, mobile banking presents both opportunities and challenges, which call for further empirical examination of continuance intention within a smaller regional context.

Most previous research has concentrated on identifying aspects related to initial adoption rather than examining users' post-adoption behaviour (Jain, 2025; Yin & Lin, 2022). Consequently, behavioural patterns related with continued engagement in mobile banking applications remain less understood, particularly outside major urban areas. In practice, although many users initially adopt mobile banking services, sustained engagement is not consistently observed, as continued use is closely associated with users' ongoing evaluations of system performance, usability, and service experience. This suggests that challenges related to mobile banking retention are not limited to technological availability but are also associated with users' perceptions and experiences during use. As Malaysia's financial ecosystem continues to digitalise, it becomes increasingly important to examine aspects associated with sustained mobile banking usage among consumers in smaller towns, where infrastructure, education, and awareness levels differ from those in metropolitan regions.

From a managerial perspective, inconsistency in users' continuous engagement with mobile banking presents both financial and operational implications for banks. Financial institutions invest substantial resources in developing mobile platforms, maintaining cybersecurity, and improving user experience, yet the effectiveness of these investments is closely linked to sustained user participation (Balogun et al., 2024). When customers discontinue the use of mobile banking applications, banks may experience inefficiencies in digital investment returns, reduced transaction volumes, and lower uptake of complementary online services. Moreover, the underutilisation of mobile banking services may weaken broader efforts to enhance financial inclusion and digital transformation, particularly among rural and semi-urban populations (Ramadhan et al., 2025). In smaller areas such as Bintulu, where physical bank branches are limited, continued use of mobile banking is commonly associated with improved access to financial services. Therefore, examining behavioural aspects related to long-term user engagement is important for both banks and policymakers seeking to strengthen Malaysia's digital economy agenda.

From an academic standpoint, several theoretical models have been used to explain mobile banking behaviour, including the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), and Expectation-Confirmation Model (ECM) (Bhattacharjee, 2001; Venkatesh et al., 2012). However, existing research often focuses on adoption and satisfaction without comprehensively examining post-adoption behavioural relationships, particularly in relation to users' continued engagement with mobile banking services (Chawla & Joshi, 2021). Moreover, most studies have been conducted in urban settings or based on national-level samples, which limits their relevance to smaller and developing regions. Differences in technological access, user literacy, and socio-economic conditions may influence how users perceive and engage with mobile banking services. Consequently, a more context-specific study is required to examine associations between established technology acceptance constructs and continuance intention in Bintulu, Sarawak, thereby addressing both theoretical and practical gaps. Such understanding contributes to extending post-adoption research to a regional context and provides insights relevant to digital banking implementation in smaller communities.

This study addresses whether performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value are significantly related to continuance intention of mobile banking among users in Bintulu, Sarawak. Accordingly, the main objective of this study is to examine the relationships between these Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) constructs and continuance intention of mobile banking in a regional Malaysian context. By focusing on these relationships, the study clarifies how post-adoption behaviour differs from initial acceptance and provides empirical evidence on the association between technology acceptance constructs and sustained usage of digital financial platforms. Based on the research question and the correlational focus of the study, the following hypotheses are formulated to examine the relationships between the UTAUT2 constructs and continuance intention of mobile banking.

- H1: There is a significant relationship between performance expectancy and continuance intention of mobile banking.
- H2: There is a significant relationship between effort expectancy and continuance intention of mobile banking.
- H3: There is a significant relationship between social influence and continuance intention of mobile banking.
- H4: There is a significant relationship between facilitating conditions and continuance intention of mobile banking.
- H5: There is a significant relationship between hedonic motivation and continuance intention of mobile banking.
- H6: There is a significant relationship between price value and continuance intention of mobile banking.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Background**

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) is an extension of the original Unified Theory of Acceptance and Use of Technology (UTAUT), introduced by Venkatesh et al. (2012). UTAUT2 was designed to better explain technology acceptance and use in consumer contexts, where individual choice rather than organisational mandate guides behaviour. This theoretical extension recognises that technology use in everyday life involves a broader set of psychological and contextual determinants than those originally proposed for organisational settings (Venkatesh et al., 2012; Tamilmani et al., 2021).

UTAUT2 retains the core constructs of the original model performance expectancy, effort expectancy, social influence, and facilitating conditions but adds elements that are especially relevant to individual consumers: hedonic motivation, price value, and habit. Performance expectancy refers to the degree to which an individual believes that technology use will improve task performance, while effort expectancy captures perceptions of ease of use. Social influence reflects the perceived expectations of others regarding technology use, and facilitating conditions relate to the availability of organisational and technical resources to support use. These additional constructs recognise that technology adoption and continued use are influenced not only by functional considerations, but also by enjoyment during use, perceptions of value relative to cost, and habitual behaviour formed through repeated usage.

UTAUT2 is grounded in several established behavioural theories, including the Technology Acceptance Model (TAM) and the Theory of Planned Behaviour, while integrating these frameworks to account for both cognitive and affective determinants of technology acceptance. By doing so, it provides a more comprehensive explanation of behavioural intention and use behaviour in consumer settings, where motivational and experiential factors may exert substantial influence. This comprehensive structure has been applied in diverse domains, including studies of artificial intelligence adoption in education and other digital technologies, demonstrating the model's broad relevance beyond its original organisational focus (Acosta-Enriquez et al., 2024; Strzelecki, 2024).

The theoretical utility of UTAUT2 is relevant to research on continuance intention, which concerns users' decision to maintain use after initial adoption. Unlike models that focus primarily on first-time adoption, UTAUT2's constructs remain meaningful after initial encounters with technology, as they capture ongoing evaluations of performance, effort, social context, and experiential value. For example, performance and effort expectancy continue to be relevant as users assess whether a technology remains useful and easy to use over time. At the same time, hedonic motivation and price value can influence sustained engagement by reflecting ongoing enjoyment and cost-benefit assessments. This theoretical orientation makes UTAUT2 particularly suitable for understanding post-adoption behaviour in digital services such as mobile banking, where long-term engagement is critical.

## **2.2 Continuous Usage Intention**

Continuous usage intention refers to users' willingness to continue using a technology after initial adoption. It represents the post-adoption stage of user behaviour, during which previous experience with the system becomes central to decisions about continued use. Bhattacherjee (2001) conceptualised continuance intention as a form of psychological commitment that develops when users evaluate system performance relative to their expectations. In digital financial services, continuance intention reflects users' assessment of whether a system consistently supports their needs and delivers perceived benefits over time.

In the context of mobile banking, continuous usage intention is commonly regarded as an indicator of long-term engagement with the service. Sustained intention to use mobile banking is particularly important, as user retention is considered as critical as initial adoption in ensuring the long-term viability of digital financial platforms. Recent studies suggest that continuance intention is associated with users' perceptions of value, convenience, reliability, and service experience, which are commonly linked to sustained engagement with mobile banking applications (Che et al., 2023; Habib et al., 2025). While these studies highlight the importance of service-related evaluations, more recent research has sought to explain continuance intention using broader technology acceptance frameworks rather than relying solely on satisfaction-based explanations. Within this stream of research, studies grounded in UTAUT2 indicate that constructs such as performance expectancy, hedonic motivation, and habit are closely associated with users' intention to continue using mobile banking services (Lee et al., 2023; Dinh et al., 2025). These findings suggest that continuance intention in mobile banking reflects a multidimensional concept associated with both functional considerations, such as perceived usefulness and efficiency, and experiential aspects, including enjoyment and routine usage.

### **2.3 Performance Expectancy**

Performance expectancy refers to the extent to which users perceive that the use of a technology is associated with improved performance or effectiveness. It is one of the primary constructs in the UTAUT2 and is conceptually similar to perceived usefulness in the earlier Technology Acceptance Model (Venkatesh et al., 2012). This construct captures users' cognitive assessments of how technology supports their daily activities and work performance. Applied to mobile banking, performance expectancy relates to users' perceptions that the application enables financial transactions to be conducted more efficiently and accurately. This construct is particularly relevant in the banking industry, where efficiency, accessibility, and reliability are important considerations in users' evaluation of digital services. When users perceive that mobile banking simplifies transaction processes, allows timely access to financial information, and reduces the need for physical branch visits, they tend to evaluate the system more favourably.

Research in digital financial services has reported that performance expectancy is strongly correlated with both initial adoption and continuance intention of mobile services (McCollum et al., 2023; Laradi et al., 2025). When users perceive that mobile banking continues to support their financial management activities, they tend to report a stronger intention to maintain its use in their daily routines. As users gain more experience with mobile banking, performance expectancy becomes increasingly relevant, as continued usage is more closely associated with expectations regarding service consistency, reliability, and quality (Yin & Lin, 2022). When users perceive that mobile banking continues to perform reliably and supports their financial activities effectively, performance expectancy is closely related to their perceptions of value. These value perceptions are, in turn, associated with longer-term engagement with digital services, as users are more likely to maintain usage when they perceive sustained functional benefits over time (Sijabat, 2024).

### **2.4 Effort Expectancy**

Effort expectancy refers to the degree of ease associated with using a specific technology. It is conceptually equivalent to perceived ease of use in the Technology Acceptance Model and reflects users' perceptions of how simple, clear, and easy a system is to use (Venkatesh et al., 2012). This construct relates to the level of physical and mental effort required to use a technology effectively. When applied to mobile banking, effort expectancy is associated with ease of navigation, simplicity of transaction steps, and clarity in understanding financial services offered through the application. When a system requires minimal learning and limited technical knowledge, users tend to perceive it more favourably. Higher effort expectancy is associated with greater user confidence in performing transactions, as users perceive the system as easier to operate and less prone to errors during use.

Several studies have reported that higher levels of effort expectancy are associated with more positive usage experiences and a stronger tendency toward continued engagement with digital financial services (Radiyana, 2025; Anagreh et al., 2024). When users perceive that transactions can be completed with minimal difficulty, they tend to develop greater confidence in the technology and a stronger inclination to reuse it. This relationship is particularly apparent among mobile banking users with less experience using digital financial tools. Perceived convenience, as indicated by smooth navigation, responsive interface design, and clear instructions, is closely associated with users' intention to continue using mobile banking services (Margareth & Pertiwi, 2025; Sharma et al., 2022).

### **2.5 Social Influence**

Social influence refers to the degree to which individuals perceive that important people in their lives believe they should use a particular technology. Within the UTAUT2 framework, social influence reflects the role of social pressure, support, and shared norms in forming behavioural intention (Venkatesh et al., 2012). This construct encompasses not only the opinions of friends and family but also those of colleagues, community members, and broader societal expectations. Social influence in mobile banking can be

observed when peers discuss their use of digital banking services or when financial institutions (Addula, 2025). In such situations, individuals often rely on peer experiences and social endorsement before developing confidence in financial technologies (Handarkho, 2021). Meanwhile, Tamilmani et al. (2021) indicate that social influence is closely associated with both technology adoption and continued use, and that this relationship appears particularly relevant in collectivist-oriented cultures.

Accordingly, in mobile banking usage, the relationship between social influence and continuance intention is associated with users' perceptions of social acceptance and approval. When users observe that trusted individuals regularly use and support mobile banking services, they tend to report stronger intention to continue their own usage (Yin & Lin, 2022). This pattern is especially evident in developing markets, where social validation plays an important role in decisions related to adopting and maintaining digital services. Social influence may also be associated with habit formation, as repeated exposure to others' usage can contribute to the normalisation of mobile banking within daily routines (Laradi et al., 2025). In addition, Firmansyah et al. (2023) have indicated that word-of-mouth recommendations and exposure through social media platforms are related to higher levels of trust and satisfaction with digital banking services.

## **2.6 Facilitating Conditions**

Facilitating conditions refer to the availability of technical and organisational support that assists users in interacting with a system effectively. Within the UTAUT2 framework, this construct reflects users' perceptions of the resources and infrastructure required to use a technology with confidence (Venkatesh et al., 2012). These conditions include access to a stable network connection, appropriate hardware, user guidance, and institutional support such as bank assistance or help centre services. Facilitating conditions in mobile banking reflect users' perceptions that sufficient technical and organisational support is available to ensure smooth transaction processes and reduce the likelihood of technical disruptions. When users perceive that adequate support and infrastructure are in place, they tend to evaluate the system as more reliable and user-friendly. A plethora of studies have also suggested that facilitating conditions are closely related to the effective functioning of other behavioural constructs, such as effort expectancy and performance expectancy (Huang, 2023; Mkilia et al., 2025).

Facilitating conditions are also closely associated with continuance intention, as they contribute to users' confidence in the ongoing functionality of mobile banking systems. When users perceive the infrastructure as reliable and customer support as responsive, they tend to report a stronger inclination to continue using mobile banking services over time. This association is particularly relevant in regions with moderate levels of digital literacy, where users often rely on institutional support and system reliability to remain engaged. Research indicates that users who perceive mobile banking services as offering dependable technical support are less likely to discontinue use during early stages of experience (Jain, 2025; Yin & Lin, 2022; Liébana-Cabanillas et al., 2021).

## **2.7 Hedonic Motivation**

Hedonic motivation refers to the enjoyment or pleasure that individuals experience when using a technology. Within the UTAUT2 framework, it represents the affective response associated with technology use and is considered an important extension for explaining consumer behaviour in digital contexts (Venkatesh et al., 2012). While earlier technology acceptance models primarily emphasised usefulness and efficiency, hedonic motivation captures the emotional dimension of user experience. This construct reflects the extent to which users derive enjoyment and satisfaction from interacting with a digital system, particularly when the interaction is perceived as smooth, convenient, and visually appealing. When users perceive mobile banking applications as enjoyable or engaging, they tend to report a stronger inclination to continue using the service, even when similar functions are available through alternative

platforms. According to Akdim et al. (2022), enjoyment in technology use is associated with deeper user engagement and the development of habitual usage patterns.

The positive emotions associated with mobile banking usage are also related to users' continued engagement over time. Users who report higher enjoyment in using mobile banking applications tend to explore a wider range of features and rely on the service for various financial transactions. This emotional connection is often associated with more regular usage patterns and sustained engagement. Research across digital service contexts has shown that hedonic motivation is closely related to long-term usage intention, particularly among younger users who value convenience and novelty (Rawat, 2023; Nguyen & Dao, 2024; Dhingra & Gupta, 2020). When users perceive mobile banking not only as a functional tool but also as a pleasant and convenient service, continued usage is more likely to become part of their routine.

## **2.8 Price Value**

Price value refers to users' evaluation of the benefits obtained from using a service relative to the monetary and non-monetary costs involved. Within the UTAUT2 framework, price value reflects how users assess whether the advantages of a technology justify costs such as service charges, transaction fees, data usage, or time investment (Venkatesh et al., 2012). In the mobile banking context, price value represents users' perceptions of whether the convenience, accessibility, and efficiency offered by mobile banking applications are commensurate with any associated costs.

Recent studies indicate that price value remains closely associated with continuance intention in digital financial services across both developed and developing economies. Users tend to report higher intention to continue using mobile banking when they perceive the service as reasonably priced and offering tangible benefits, such as reduced transaction costs and time savings (Yin & Lin, 2022; Azzahra & Kusumawati, 2023). These findings suggest that price value is not limited to direct financial costs but also includes perceived efficiency and convenience derived from continued use.

Empirical evidence further shows that pricing-related perceptions play an important role in shaping users' evaluation of digital services. Kim (2023), applying a value-based adoption model in the context of overseas OTT services, found that perceived fee was negatively associated with perceived value, while perceived value was positively related to continuance intention. Although conducted in a non-banking context, the findings reinforce the importance of users' assessment of price relative to benefits in sustaining continued use of digital platforms. In mobile banking, similar pricing considerations, such as low transaction fees or value-added incentives, are commonly associated with higher perceived value and continued engagement (Yin & Lin, 2022).

## **3. RESEARCH METHODOLOGY**

### **3.1 Research Design and Model**

This study employed a quantitative correlational design to examine the relationships between performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and continuous usage intention of mobile banking. The research model was adapted from the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) developed by Venkatesh et al. (2012), which explains users' behavioural intention and technology usage based on cognitive, social, and motivational factors. The model was considered suitable for understanding how these predictors influence users' intention to continue using mobile banking services in the context of Bintulu, Sarawak. The proposed research framework is illustrated in Figure 1.

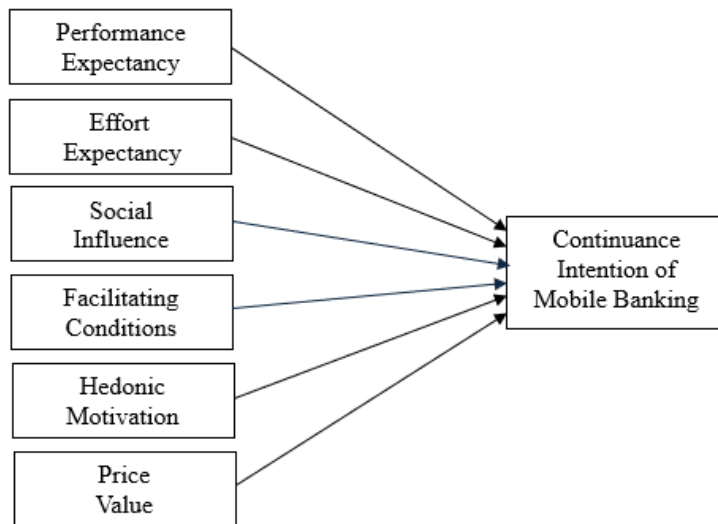


Figure 1. Research framework

### 3.2 Research Area and Population

The research was conducted in Bintulu, Sarawak, a developing urban area experiencing rapid growth in digital financial adoption. The study focused on residents aged 18 years and above who actively use mobile banking services. Bintulu was chosen as the study location because empirical evidence on mobile banking usage in this area is limited, despite its growing economic and technological development. The population size of Bintulu was estimated at 235,099 residents (Department of Statistics Malaysia, 2023).

### 3.3 Sampling and Respondents

A convenience sampling technique was used to select respondents who met three inclusion criteria:

- (i) Being a mobile banking customer in Bintulu.
- (ii) Having installed a mobile banking application.
- (iii) Having prior experience using at least one mobile banking feature, such as fund transfers or bill payments.

Based on the Krejcie and Morgan (1970) sample size determination table, a minimum of 384 respondents was required to represent populations exceeding 100,000. This sample size ensured sufficient representation for correlational analysis and reliability of results.

### 3.4 Research Instrument

Data were collected using a structured self-administered questionnaire designed from established instruments. The questionnaire comprised three sections. Section A gathered demographic information, including gender, age, education, occupation, and income. Section B measured the six independent variables: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value, using 22 items adapted from Venkatesh et al. (2012). Section C measured the dependent variable, continuous usage intention, using five items adapted from Nguyen and Dao (2024).

All items were rated on a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). A pre-test involving 30 respondents was carried out to assess the clarity, reliability, and

appropriateness of the questionnaire. Feedback from academic experts and participants led to minor wording adjustments to improve readability.

### **3.5 Data collection Procedure**

Data were gathered through both online and offline channels to reach a diverse group of respondents in Bintulu. The questionnaire, created using Google Forms, was distributed via social media platforms such as WhatsApp, Telegram, Facebook, and Instagram. Participation was voluntary and anonymous. Respondents were informed about the purpose of the study, and consent was obtained prior to data submission. Data collection was conducted over four months.

### **3.6 Data Analysis**

Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 30. Descriptive statistics were first employed to summarise respondents' demographic characteristics. Reliability analysis was performed using Cronbach's alpha to assess the internal consistency of the measurement scales. To address the research questions and test the proposed hypotheses, Spearman's correlation analysis was used to examine the strength and direction of relationships between the UTAUT2 constructs and continuance intention of mobile banking. Spearman's correlation was selected due to its suitability for ordinal data and its ability to assess monotonic relationships between variables.

It is acknowledged that correlational analysis does not establish causal relationships or predictive effects. Instead, the analysis provides empirical evidence of associations between variables, which is appropriate given the exploratory and post-adoption focus of the study. The findings therefore offer a basis for understanding relational patterns between the constructs and may inform future studies employing more advanced analytical techniques.

## **4. RESULTS AND DISCUSSION**

### **4.1 Demographic Profile of Respondents**

A total of 400 mobile banking users in Bintulu, Sarawak, participated in this study. The sample consisted of 49.5 percent males and 50.5 percent females, showing a balanced gender distribution. This even representation suggests that both men and women are equally engaged in mobile banking activities in the area. The age distribution revealed that most users were between 18 and 24 years old (33 percent), followed by those aged 35 to 44 years (26.3 percent) and 25 to 34 years (24 percent). Respondents aged 45 years and above accounted for 16.8 percent. The dominance of younger and middle-aged participants reflects the growing reliance of these groups on digital financial platforms for convenience and accessibility.

Regarding education level, respondents had varied academic backgrounds. About 6.8 percent completed primary school, while 16.5 percent had secondary education and 16.3 percent had pre-university qualifications. A notable portion, 20.8 percent, held diploma-level qualifications, and 25 percent possessed bachelor's degrees. Meanwhile, 11.8 percent held master's degrees, and 2.8 percent had doctoral qualifications. This diverse distribution indicates that mobile banking is widely adopted across educational levels, with a stronger tendency among those with higher education. The income profile also varied, with 43.8 percent earning below RM 4,850 monthly, 38.5 percent earning between RM 4,851 and RM 10,970, and 17.8 percent earning above RM 10,971. The majority fall within the lower to middle-income categories, suggesting that mobile banking is valued as an efficient, low-cost method for financial transactions among these groups. The demographic data indicate that mobile banking in Bintulu is used across genders, income levels, and educational backgrounds, although usage is more prevalent among younger users with higher education and modest incomes.

## 4.2 Reliability Analysis

Before examining correlations, a reliability test was conducted to ensure the internal consistency of the study's constructs. Cronbach's alpha coefficients for all variables exceeded the recommended threshold of 0.7, indicating satisfactory reliability. As shown in Table 1, all items demonstrated high internal consistency, confirming that the questionnaire items were stable and measured the intended constructs effectively.

Table 1. Reliability Analysis

Variables	Factors	Number of items	Cronbach's Alpha
<b>Dependent variable</b>	Continuance Intention	5	0.971
<b>Independent variables</b>	Performance Expectancy	4	0.956
	Effort Expectancy	4	0.959
	Social Influence	4	0.954
	Facilitating Conditions	4	0.957
	Hedonic Motivation	3	0.943
	Price Value	3	0.946

## 4.3 Correlation Analysis

Spearman's correlation analysis was conducted to examine the relationships between performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value with continuance intention of mobile banking. As presented in Table 2, all six constructs demonstrate significant positive relationships with continuance intention. Among these, effort expectancy exhibits the strongest correlation ( $\rho = 0.874$ ), followed by performance expectancy ( $\rho = 0.864$ ), indicating that these constructs are most strongly associated with users' intention to continue using mobile banking services in Bintulu, Sarawak. Accordingly, Hypotheses H1 to H6 are supported, as all proposed relationships between the UTAUT2 constructs and continuance intention are statistically significant at the 0.01 level.

Table 2: Spearman Correlation Between Independent Variables and Continuance Intention of Mobile Banking (n = 400)

Items	Correlation Coefficient	Sig. (2-tailed)	Strength of Relationship	Hypotheses
Performance Expectancy	0.864	0.001	Strong	H1: Supported
Effort Expectancy	0.874	0.001	Strong	H2: Supported
Social Influence	0.851	0.001	Strong	H3: Supported
Facilitating Conditions	0.838	0.001	Strong	H4: Supported
Hedonic Motivation	0.809	0.001	Strong	H5: Supported
Price Value	0.851	0.001	Strong	H6: Supported

Performance expectancy shows a strong positive relationship with continuance intention ( $\rho = 0.864$ ), providing support for H1. This suggests that users who perceive mobile banking as useful in supporting their financial activities tend to report stronger intention to continue using the service. Similar associations between performance-related perceptions and post-adoption behaviour in digital financial services have been reported by Nguyen and Dao (2024) and Sharma et al. (2022). Effort expectancy exhibits the strongest correlation with continuance intention among all constructs examined ( $\rho = 0.874$ ), supporting H2. This indicates that perceived ease of use is strongly associated with users' intention to continue using mobile banking applications. The result is consistent with the UTAUT2 framework, which identifies effort expectancy as an important construct associated with continued technology use (Venkatesh et al., 2012), and aligns with empirical evidence reported in mobile banking studies (Margareth & Pertiwi, 2025; Sharma et al., 2022).

Social influence is also positively related to continuance intention ( $\rho = 0.851$ ), thereby supporting H3. This finding indicates that users' continued engagement with mobile banking is associated with the influence of peers, family members, and colleagues. This result supports earlier research highlighting the role of social norms and shared experiences in technology usage decisions, particularly in collectivist societies (Song & Liew, 2023). In this study, social influence is associated with continuance intention rather than functioning as a determining factor, which is consistent with the correlational design. Facilitating conditions show a significant positive relationship with continuance intention ( $\rho = 0.838$ ), providing support for H4. Evidence from recent digital banking studies similarly points to the relevance of supportive environments in sustaining users' engagement with technology-based services (Jain, 2025; Yin & Lin, 2022). In a regional context such as Bintulu, reliable connectivity and access to support services may be particularly relevant to users' sustained participation in mobile banking.

Hedonic motivation demonstrates a positive relationship with continuance intention, although the strength of the relationship is comparatively weaker ( $\rho = 0.809$ ), supporting H5. This indicates that enjoyment and positive usage experiences are associated with continued use, but to a lesser extent than functional considerations such as effort expectancy and performance expectancy. This pattern is consistent with earlier studies that position hedonic motivation as a complementary aspect of post-adoption behaviour (Rawat, 2023; Nguyen & Dao, 2024; Dhingra & Gupta, 2020). Price value also shows a significant positive relationship with continuance intention ( $\rho = 0.851$ ), supporting H6. This finding indicates that users' perceptions of affordability and value are associated with their intention to continue using mobile banking services. Given that a substantial proportion of respondents belong to lower- and middle-income groups, perceptions of cost efficiency and value appear to be relevant to sustained usage. This observation is consistent with findings reported in studies conducted in comparable economic contexts (Qamar & Qureshi, 2022; Bouhlel & Mzoughi, 2024).

Overall, the findings indicate that all hypothesised relationships are supported. Effort expectancy exhibits the strongest association with continuance intention, while hedonic motivation shows the weakest. Although causal relationships cannot be inferred, the results provide empirical evidence of significant associations between UTAUT2 constructs and continuance intention of mobile banking in a regional Malaysian setting.

## 5. CONCLUSION

The findings of this study show that the six UTAUT2 constructs, namely performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value, are positively and significantly related to continuance intention of mobile banking among users in Bintulu, Sarawak. Among these constructs, effort expectancy demonstrates the strongest association with continuance intention, followed by performance expectancy. This indicates that perceptions related to ease of use and functional value are closely associated with users' intention to continue using mobile banking services. Social influence and price value also exhibit significant positive relationships, suggesting that social context and perceived value are relevant to sustained mobile banking usage.

The results suggest that both functional and experiential considerations are associated with mobile banking continuance intention in the regional context examined. Mobile banking usage in Bintulu appears to be common across different age and income groups, reflecting growing acceptance of digital financial services in smaller urban areas. The findings further support the applicability of the UTAUT2 framework in explaining post-adoption behaviour beyond major metropolitan settings and contribute to the understanding of mobile banking usage patterns in a regional Malaysian context.

## 6. IMPLICATION AND CONTRIBUTION

The findings contribute to the understanding of continued technology usage by demonstrating that performance expectancy and effort expectancy are closely associated with continuance intention among mobile banking users. Rather than focusing solely on adoption, this study highlights the relevance of these constructs in supporting users' ongoing engagement with digital financial services. By examining continuance intention, the study provides empirical support for the applicability of UTAUT2 in explaining post-adoption behaviour within everyday banking practices.

From a practical standpoint, the results provide clear implications for banks and financial service providers seeking to maintain user engagement with mobile banking platforms. The strong relationships observed between effort expectancy, performance expectancy, and continuance intention indicate that ease of interaction and consistent system performance remain central to users' continued use. In addition to technical functionality, the findings suggest the importance of providing clear instructions, responsive support, and stable service features that facilitate routine usage and reduce uncertainty over time.

At the policy level, the findings support digital finance strategies that focus on encouraging sustained participation rather than access alone. Continued use of mobile banking can be supported through basic digital guidance programmes, clear consumer information, and simple awareness initiatives that help users understand and use mobile banking services with greater confidence. In addition, integrating digital skills components into existing financial inclusion programmes may help users become more familiar with routine digital transactions, thereby supporting longer-term engagement with mobile banking services.

## 7. RECOMMENDATIONS FOR FUTURE RESEARCH

Future research may consider examining additional factors such as trust, perceived risk, and satisfaction to provide a broader understanding of continuance intention in mobile banking. Comparative studies involving users from urban and rural areas, or across different Malaysian states, may offer further insights into regional differences in mobile banking usage patterns. In addition, future studies may adopt mixed-method approaches by combining quantitative surveys with qualitative techniques, such as interviews or focus group discussions, to gain a more detailed understanding of users' experiences, motivations, and challenges related to mobile banking adoption and continued use.

## 8. ACKNOWLEDGEMENTS / FUNDING

The author would like to thank all individuals who contributed indirectly to this research. This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## 9. CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

## 10. AUTHORS' CONTRIBUTIONS

**Malisah Latip** wrote the manuscript, developed the conceptual framework, analysis and supervised the overall research process. **Muhammad Fadzlan Kamaruzaman** conducted the data collection, performed the statistical analysis using SPSS, and contributed to the methodology and results sections. Both authors reviewed and approved the final version of the manuscript.

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