BER www.berjournal.com ISSN: 2619-9491 BUSINESS AND ECONOMICS RESEARCH JOURNAL

Business and Economics Research Journal Vol. 13, No.3, 2022 pp. 465-482 doi: 10.20409/berj.2022.384

An Integrative Model on User Satisfaction and Continuance Intention for Using M-Banking*

Merve Ozecan[a], **Esra Arikan**[b]

Abstract: *This study aims to extend the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) by integrating the three quality dimensions adopted from DeLone and McLean's Information Systems (IS) Success Model and trust as additional constructs. In this respect, it also investigates the possible relationships among these constructs as new internal mechanisms that affect user satisfaction and continuance intention for using mobile banking. A total of 422 usable responses are collected from mobile banking users using an online survey. The empirical findings generally support the effect that the UTAUT2 constructs of effort expectancy, performance expectancy, hedonic motivation and facilitating conditions and the three quality dimensions of the IS Success Model have, along with trust, on user satisfaction and continuance intention, revealing the importance of extending UTAUT2 with these new constructs and new mechanisms proposed. In addition, the current study provides an enhanced insight by focusing on the post-adoption stage. The findings are important in terms of helping banks serve their customers better and achieve a competitive edge.*

Keywords: Mobile Banking, Continuance Intention, User Satisfaction, UTAUT2, IS Success Model

JEL: M30, M31, M39

Received : 31 March 2022
Revised : 20 May 2022
Accepted : 30 May 2022

Type : Research

1. Introduction

The momentous developments in the internet and information technologies have revolutionized every aspect of human life and become an indispensable part of it (Singh & Srivastava, 2018; Tamilmani, Rana, Wamba, & Dwivedi, 2021). As a result of these developments, competition in many industries has become very intense for firms and prompted them to search for alternative ways of gaining superiority over competitors (Mostafa, 2020). Specifically, the banking industry has been significantly affected by these developments. Thus, banks have started to vary and expand their distribution channels to provide customers with more value and achieve a competitive superiority (Souiden, Ladhari, & Chaouali, 2021). In this context, mobile banking (m-banking) has been introduced as an essential delivery channel option that might supplement traditional offline and phone banking and enhance the efficiency and effectiveness of banking services (Chaouali, Yahia, Lunardo, & Triki, 2019).

As m-banking is of significant importance for both customers and banks, researchers have been in a continuous quest to apprehend the potential drivers shaping the adoption and use of m-banking (e.g., Singh & Srivastava, 2018; Baabdullah, Alalwan, Rana, Patil, & Dwivedi, 2019a). Yet, the analysis of the extant studies reveals that research on m-banking is fragmented in that differing theoretical models have been used. The Technology Acceptance Model (TAM) is the most popular among them, followed by the Unified Theory of

Cite this article as: Ozecan, M., & Arikan, E. (2022). An integrative model on user satisfaction and continuance intention for using M-Banking. *Business and Economics Research Journal,* 13(3), 465-482. http://dx.doi.org/10.20409/berj.2022.384

The current issue and archive of this Journal is available at: ***www.berjournal.com***

[a] Graduate of MA in Marketing, Istanbul Bilgi University, Institute of Graduate Programs, Istanbul, Turkiye, merveozecan@gmail.com

[b] Asst. Prof., PhD., Istanbul Bilgi University, Faculty of Business, Department of Business Administration, Istanbul, Turkiye, esra.arikan@bilgi.edu.tr (Corresponding Author)

Acceptance and Use of Technology (UTAUT) (Souiden et al., 2021). Nevertheless, other theoretical models are still within the domain of researchers as they highlight some other critical factors for the adoption and use of m-banking. Lately, an upsurge in the number of studies using the extended version of UTAUT, UTAUT2, has been observed (e.g., Samsudeen, Selvaratnam, & Mohamed, 2022) as this model is considered more comprehensive and has more predictive ability than others (Tamilmani et al., 2021). Few studies have taken it one step further and integrated the UTAUT2 model either entirely or partly with other models to provide a broader picture (e.g., Baabdullah, Alalwan, Rana, Kizgin, & Patil, 2019b). The systematic literature reviews and meta-analyses recently conducted on this stream also support this need for integration and suggest the further extension of these theoretical models. For instance, in their recent study, Tamitmani et al. (2021) state that the extension of UTAUT2 through new constructs and mechanisms is very promising for future studies and thus highly needed.

The current study intends to fulfill this need in literature by focusing on such new constructs and mechanisms and thus enhance the body of knowledge on m-banking. The study first integrates the three quality dimensions of the Information Systems (IS) Success Model- information, system and service- as new antecedents to the existing UTAUT2 constructs of effort expectancy and performance expectancy. This model is widely applied across various IS contexts, yet relatively few studies have used this model in m-banking (Jeyaraj, 2020). Building on the studies by Baabdullah et al. (2019b) and Albashrawi and Motiwalla (2020), this study reinforces the importance of integrating the IS Success Model and its quality dimensions with UTAUT2 to improve understanding of factors influencing customers' responses toward m-banking. Second, the study further extends UTAUT2 by investigating some new path relationships among existing UTAUT2 constructs of effort expectancy, performance expectancy, facilitating conditions and hedonic motivation as new internal mechanisms, as suggested by Tamitmani et al. (2021). In addition, even if prior studies have extended TAM, UTAUT/UTAUT2 or the IS Success Model via trust, in most studies, only the direct effects of trust on users' satisfaction or use of m-banking have been investigated (e.g., Farah, Hasni, & Abbas, 2018; Sharma & Sharma, 2019). This study takes it one step further and investigates the relationship trust has with constructs from the IS Success Model and UTAUT2 as new mechanisms. It is believed that acknowledging the importance of these new mechanisms and empirically supporting their positive effect will significantly provide value to m-banking literature.

Moreover, despite the growth of m-banking, prior studies have mainly focused on adoption, and there is still a relative scarcity of studies on post-adoption (Tam & Oliveira, 2017a). In some recent studies, researchers especially acknowledge the need to conduct post-adoption studies (e.g., Mostafa, 2020; Geebren, Jabbar, & Luo, 2021) as the relative significance of each factor and mechanism might differ depending on the stage in which customers are. Based on this need, this study focuses on the post-adoption stage, looking into the drivers that shape the post-adoption behaviors of m-banking users, particularly their satisfaction and continuance intention for using m-banking. The findings will be of significant interest to not only academicians but also various stakeholders in the m-banking industry, including bank managers and marketers.

The remainder of this study is organized as follows. First, a literature review comprising the theoretical background is presented, and then the proposed model and the hypotheses are introduced. This part is followed by a discussion on the research methodology, including questionnaire design, measures, data collection and sampling. The data analyses and empirical findings are then presented. Finally, the findings are discussed, along with the theoretical and practical implications, and suggestions for further research are provided.

2. Literature Review

2.1. M-Banking

M-banking is defined as "a product or service offered by a bank or a microfinance institute (bank-led model) or MNO (non-bank-led model) for conducting financial and non-financial transactions using a mobile device, namely a mobile phone, smartphone, or tablet" (Shaikh & Karjaluoto, 2015: 131). The advantage of

m-banking is that it enables people to control their account balances, transfer money in-between accounts, realize payments and stock investments or conduct other financial transactions without any time or place restrictions, eliminating the physical distance amid banks and customers (Singh & Srivastava, 2018; Baabdullah et al., 2019b). Thus, m-banking is considered a revolutionary innovation for the banking sector (Alalwan, Dwivedi, & Rana, 2017). M-banking also offers significant advantages to banks, like extending their client reach, reducing operating costs and increasing profitability (Hassan & Wood, 2020).

Despite the benefits and potential value that m-banking offers, customers have generally shown some initial reluctance to adopt and use m-banking services (Chaouali et al., 2019; Souiden et al., 2021). Accordingly, studies conducted within this research stream have mainly concentrated on investigating the drivers that shape customers' intention to adopt m-banking, especially in developing countries where adoption is even lower (e.g., Koksal, 2016; Makanyeza, 2017). Although m-banking has not garnered the mass acceptance and adoption that it longed for, at least for some time, customers are now more willing to adopt and use m-banking, facilitating its long-standing acceptance (Farah et al., 2018). This increase in interest is mainly attributed to the proliferation of mobile phone subscribers and the ubiquitous connectivity enabled, particularly after smartphones (Sharma & Sharma, 2019; Tam & Oliveira, 2019). M-banking is a pervasive channel for banking services, especially amid the coronavirus pandemic (Phaneuf, 2021). Thus, the global m-banking market is expected to grow further with a compound annual growth rate (CAGR) of 12.2 and reach a market value of $1,824.7 million by 2026 (Manjrekar & Sumant, 2020). Such growth has already been observed in Turkey, where the total number of active m-banking users increased eightfold from 2014 to 2019, reaching 49.3 users (Statista, 2020).

2.2. Theoretical Models Used in M-Banking Literature

The academic interest in m-banking has given rise to many studies scrutinizing the drivers that shape individual acceptance and use of m-banking. An analysis of the extant literature on m-banking discloses that different competing theoretical models such as TAM (e.g., Singh & Srivastava, 2018), UTAUT/UTAUT2 (e.g., Farah et al., 2018), and IS Success Model (e.g., Tam & Oliveira, 2017a) have been employed in these studies. TAM is one of the prevalent theoretical models used in m-banking literature due to its simplicity and robustness (Anouze & Alamro, 2020). Developed by Davis (1989), TAM is extensively used to understand customers' attitudes and intentions towards adopting and using technology (Malaquias & Hwang, 2019). This model emphasizes the importance of perceived usefulness and ease of use as the vital constructs determining attitude towards use and consequently affecting intention and behavior towards using a specific technology (Mostafa, 2020). Despite its popularity, TAM has been criticized heavily by some researchers because it is a model that was initially developed for organizational context and, thus, did not give enough consideration to individual characteristics (Patil, Tamilmani, Rana, & Raghavan, 2020).

Concerned that existing models were inadequate to explain customers' adoption and use of technology, Venkatesh, Morris, Davis, and Davis (2003: 467) introduced UTAUT with the claim that there exist "three direct determinants of intention to use (performance expectancy, effort expectancy, and social influence) and two direct determinants of usage behavior (intention and facilitating conditions)." Compared to the models it is built upon, UTAUT is deemed to have greater explanatory power, allowing for an enhanced understanding of technology adoption and use (Sharma, Singh, & Sharma, 2020). Venkatesh, Thong, and Xu (2012) later proposed an extended version of UTAUT, popularly named UTAUT2, which was better tailored to understand individuals' behavioral intentions and use behavior toward new technology in a consumer context (Alalwan, 2020). UTAUT2 integrated three new constructs- habit, hedonic motivation, and price value- to fit the consumer context better (Singh & Srivastava, 2018). UTAUT and UTAUT2 have been utilized considerably as the theoretical model in numerous studies across distinct research contexts, including m-banking (e.g., Alalwan et al., 2017).

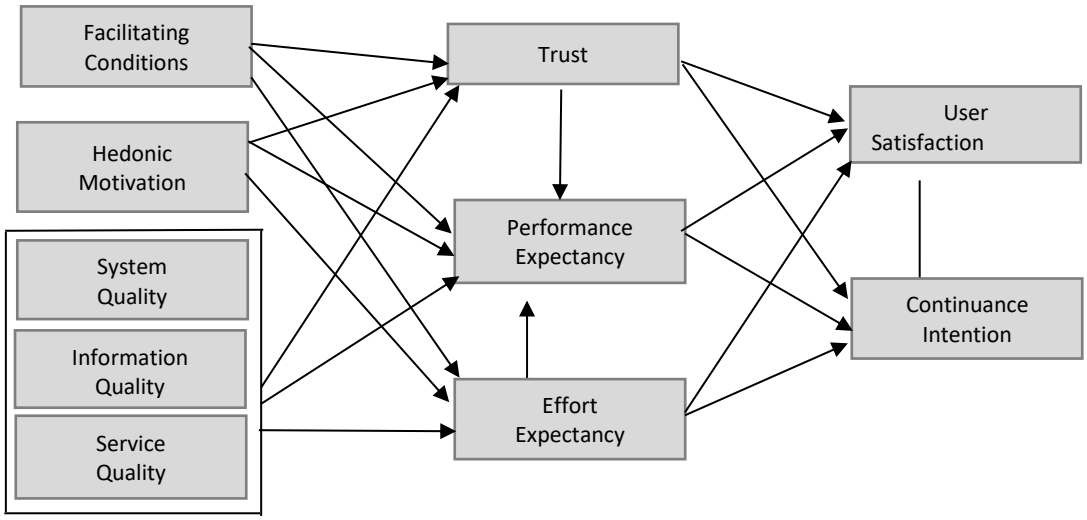
Another important model utilized to apprehend customers' adoption and use of m-banking is the IS Success Model. The original model defined the six dimensions to be considered for the success of IS as "system quality, information quality, use, user satisfaction, individual impact and organizational impact" (DeLone & McLean, 1992: 62). DeLone and McLean (2003) later revised the model by including service quality

as an additional quality dimension and merging the organizational impact and individual impact variables into the "net benefits" variable. This model is significant for IS research as it distinguishes the three quality dimensions and discusses the effect of each on use and user satisfaction separately. This model's original and revised versions have been utilized in numerous studies conducted in separate settings, such as e-shopping or e-learning (Jeyaraj, 2020). However, the IS Success Model has recently become one of the popular theoretical models used in the m-banking context (e.g., Albashrawi & Motiwalla, 2020; Geebren et al., 2021). M-banking customers might face some quality related-problems, and these problems need to be mitigated by assuring quality so that user satisfaction and continued use are enhanced (Tam & Oliveira, 2017b). Thus, apprehending the impact of different quality dimensions on the success of m-banking is very important.

2.3. Proposed Model and Hypotheses Development

This study scrutinizes the range of factors influencing user satisfaction and continuance intention for using m-banking by integrating UTAUT2 with the IS Success Model. The integration of these two models that have distinct underlying theoretical perspectives for the success of m-banking is important in that while the former model is concerned with the "behavior-based influences" that cover the "instrumental beliefs of user behavioral characteristics", the latter model is concerned with the "object-based influences" that concentrate on the qualities within m-banking system (Albashrawi & Motiwalla, 2020: 19). Integrating these two distinct yet complementary perspectives can enhance the apprehension of the factors that affect the success of m-banking, particularly in terms of user satisfaction and continuance intention. Building on the proposed internal mechanisms, the proposed model (Figure 1) argues that the three quality dimensions, facilitating conditions and hedonic motivation affect performance expectancy, effort expectancy, and trust, which, in turn, influence user satisfaction and continuance intention for using m-banking. In this context, the effect of effort expectancy and trust on performance expectancy is also considered.

Figure 1. Proposed Model



2.3.1. Performance Expectancy and Effort Expectancy

Performance expectancy is "the degree to which an individual believes that using the system will help him or her to attain gains in job performance" (Venkatesh et al., 2003: 447). In other words, performance expectancy reflects customers' awareness that using a particular technology will cause improvements in the performance of the service delivered (Farah et al., 2018). In this respect, it is analogous to the perceived usefulness construct in TAM. Performance expectancy is deemed the most vital determinant of customers' behavioral intentions and use of new technology (Patil et al., 2020). Customers who use mobile services usually perceive that their performance is enhanced as mobile services increase flexibility, support

customization, provide more effective access to information and help save time (Baabdullah et al., 2019a). This increase in performance expectancy increases the likelihood that customers will adopt and continue using these mobile services. This effect is particularly valid in m-banking settings. M-banking is considered advantageous as it is a more convenient channel that permits customers to access these services without facing any restrictions related to time or place (Alalwan et al., 2017). It is expected that when customers perceive that m-banking is useful and thus, improves their performance, they will have an enhanced intention to continue using it. Extant literature also supports the favorable effect of performance expectancy and perceived usefulness on customers' behavioral intention for using m-banking (e.g., Farah et al., 2018; Baabdullah et al., 2019a; Elhajjar & Ouaida, 2020). Based on these findings, it is hypothesized that:

H_1: Performance expectancy positively influences continuance intention.

Nevertheless, effort expectancy is "the degree of ease associated with the use of the system" (Venkatesh et al., 2003: 450). It is analogous to the perceived ease of use construct in TAM. Effort expectancy is significant in m-banking since m-banking, due to its nature, necessitates a particular level of knowledge and skills (Alalwan et al., 2017). Thus, the m-banking technology used must be easy and simple for customers because otherwise, customers will not be willing to adopt and use this technology (Koksal, 2016; Singh & Srivastava, 2018). Especially the ease of navigation is essential in m-banking services since the easier it is to use these services, the less effort is required of customers; thus, customers are more willing to use m-banking (Farah et al., 2018). The ease of accessibility and use of services motivate continued usage (Baabdullah et al., 2019b). Several researchers have empirically validated the role that effort expectancy or perceived ease of use play on customers' adoption and use of m-banking (e.g., Singh & Srivastava, 2018; Baabdullah et al., 2019a; Malaquias & Hwang, 2019). Accordingly, it is hypothesized that:

H_2: Effort expectancy positively influences continuance intention.

User satisfaction is very closely related to expectations as it is the fulfillment of expectations itself that produces this feeling of satisfaction (Torres & Kline, 2013). Thus, new technologies must fulfill their customers' effort and performance expectations to create user satisfaction. The positive impact of effort expectancy and performance expectancy on user satisfaction has been studied in different IS contexts, including mobile payment (e.g., Mouakket, 2020) and mobile applications (e.g., Alalwan, 2020). Although most of these studies provide strong evidence for these effects, there exist few, if any, studies within the context of m-banking. A recent meta-analysis on IS by Franque, Oliveira, Tam, and de Oliveira Santini (2021) reveals that effort expectancy and performance expectancy positively influence user satisfaction. Therefore, this study posits that:

H_3: Performance expectancy positively influences user satisfaction.

H_4: Effort expectancy positively influences user satisfaction.

Lately, the relationship between these two forms of expectancies has also started attracting the attention of researchers. Even if still limited in number, some studies specifically investigate the effect of effort expectancy on performance expectancy. For instance, Alalwan et al. (2017) argue that when customers consider that using a specific technology is not hard and necessitates less effort, they are more inclined to perceive this technology as of use. This finding is empirically supported by other research conducted in m-banking (e.g., Elhajjar & Ouaida, 2020; Malaquias & Silva, 2020). It is, thus, posited that:

H_5: Effort expectancy positively influences performance expectancy.

2.3.2. Trust

Customers are primarily afraid of risks associated with their security or privacy and possible deceitful acts faced during m-banking transactions (Singh & Srivastava, 2018). Thus, banks need to overcome customers' fears, and in this respect, building trust in m-banking plays a critical role. Despite its importance, trust was not included as a factor in the earlier versions of theoretical models like TAM, UTAUT/UTAUT2, or IS Success Model. Nevertheless, researchers later extended their theoretical frameworks by including trust as they acknowledged its critical role in adopting and using new technologies. The extant literature provides

examples in which these popular models have been extended with the trust factor (e.g., Farah et al., 2018; Sharma & Sharma, 2019; Malaquias & Silva, 2020). In these studies, trust has been established as an antecedent for users' satisfaction and behavioral intentions. Based on these studies, it is hypothesized that:

H_6: Trust positively influences user satisfaction.

H_7: Trust positively influences continuance intention.

The relationship between trust and performance expectancy has also been an issue of interest for researchers. However, a review of the extant literature reveals no consensus among researchers regarding the direction of this relationship. Some researchers claim that performance expectancy or perceived usefulness positively affects customers' trust in a system. For example, Oliveira, Faria, Thomas, and Popovič (2014) report that the performance gains from the use of m-banking determine the level of trust in m-banking services. On the contrary, others claim that trust has a favorable influence on performance expectancy, as customers will consider a system that they trust as more secure and problem-free in terms of performance (Hajiheydari & Ashkani, 2018), providing supportive evidence for this relationship (e.g., Chaouali, Yahia, & Souiden, 2016; Alalwan et al., 2017). As such, this study hypothesizes that:

H_8: Trust positively influences performance expectancy.

2.3.3. Facilitating Conditions

To use m-banking, customers are entailed to have some skills and resources, along with technical infrastructure (Alalwan et al., 2017). Facilitating conditions relate to "the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system" (Venkatesh et al., 2003: 453). A review of the extant literature suggests that researchers are notably concerned with the effect of such conditions on behavioral intentions. In these studies, it is generally argued that when customers believe that they have the necessary resources and support available, they will have a higher intention of adopting and using m-banking (e.g., Oliveira et al., 2014; Baabdullah et al., 2019b).

Nonetheless, with the recent shift of academic interest to the relationships among existing UTAUT2 constructs as a new internal mechanism, some researchers have started investigating the effect of facilitating conditions on existing UTAUT2 constructs such as effort expectancy and performance expectancy. For instance, Patil et al. (2020) examine the effect of facilitating conditions on effort expectancy in mobile payment systems. They conclude that the availability of operational infrastructures that facilitate the use of transactions helps customers quickly understand the system and make their payments. In another study, Chawla and Joshi (2019) investigate the factors that shape customers' attitudes and intention for using mobile wallets and find that facilitating conditions enhance perceived usefulness, a surrogate construct for performance expectancy. Likewise, as such new mechanisms have become an exciting venue for future research, researchers have also started investigating the effect of facilitating conditions on trust. Even if the number of these studies is still minimal, the findings support the positive effect facilitating conditions have on trust (e.g., Gu, Wei, & Xu, 2016). To that extent, Tamilmani et al. (2021), in their systematic literature review on UTAUT2, introduce trust as a new mechanism, expecting that facilitating conditions will positively affect trust, which in turn will positively affect behavioral intentions. Thus, this study hypothesizes that:

H_9: Facilitating conditions positively influence a) performance expectancy, b) effort expectancy and c) trust.

2.3.4. Hedonic Motivation

Expressed as "the fun or pleasure derived from using a technology" (Venkatesh et al., 2012: 161), hedonic motivation has a significant impact on shaping customers' acceptance and use of new technologies. Theoretically, hedonic motivation is the essential add-on to UTAUT2 as it fills the highly necessitated, yet missing, affective element of the previous UTAUT, which is mainly cognition-based (Tamilmani, Rana, Prakasam, & Dwivedi, 2019). Due to mobile or internet-based applications' interactive nature, their usage is based on not only functional but also hedonic motives (Malaquias & Hwang, 2017). Mobile devices are readily associated with hedonic aspects such as fun and enjoyment (Arcand, PromTep, Brun, & Rajaobelina, 2017).

Thus, the impact of hedonic motivation on behavioral intention to adopt and use new technologies is extensively investigated and supported in different contexts, including m-banking (e.g., Farah et al., 2018; Baabdullah et al., 2019b).

Since hedonic motivation plays a vital role in m-banking, it is also essential to examine its effect on other constructs within the proposed model, such as performance expectancy, effort expectancy, and trust. As Tamilmani et al. (2021) highlight, exploring such new mechanisms is highly needed, especially in this research stream. Thus, some researchers have empirically tested these mechanisms in their studies. For example, Alalwan, Dwivedi, Rana, and Algharabat (2018) confirm that hedonic motivation helps customers perceive new technologies in a more constructive manner that requires less effort and contributes positively to performance expectancy. Moreover, in the meta-analysis by Tamilmani et al. (2019) on hedonic motivation in UTAUT2, the researchers reveal that hedonic motivation significantly and positively influences performance and effort expectancy. Likewise, since trust is a significant factor influencing customers' behavioral intentions to adopt and use new technologies, the effect of hedonic motivation on trust needs to be considered a new mechanism. It is anticipated that whilst customers are motivated by hedonic factors, they are more likely to grow trust in the technology used, and some studies support this expectation (e.g., Alalwan, Dwivedi, Rana, Lal, & Williams, 2015; Baabdullah, 2018). It is, therefore, hypothesized that:

H_{10}: Hedonic motivation positively influences a) performance expectancy, b) effort expectancy and c) trust.

2.3.5. System, Information and Service Qualities

M-banking offers its customers different and advanced levels of quality in comparison to previous e-banking options (Tam & Oliveira, 2017b; Baabdullah et al., 2019b). Hence, it is essential to scrutinize the effect of each quality dimension in the m-banking setting. The analysis of the extant literature reveals that customers feel more motivated for adopting and using m-banking services that offer higher system, information or service qualities (Sharma & Sharma, 2019). Nevertheless, one research area that has become a particular point of interest to researchers is the new mechanisms between these quality constructs and the constructs of other theoretical models, including UTAUT2.

System quality measures the wanted features of a system from a technical perspective (DeLone & McLean, 2003). These characteristics include the technical aspects of the system, such as "convenience of access, system functionality, reliability, response time, sophistication, navigation ease, and flexibility" (Petter, DeLone, & McLean, 2013: 29). As these are all important characteristics that customers look for in IS, offering a high system quality is crucial to the success of an IS (Cheng, 2014). Prior research has highlighted the favorable impact of system quality on perceived usefulness and ease of use in different IS settings, such as mobile payment (e.g., Mouakket, 2020) or mobile commerce (e.g., Akram, Ansari, Fu, & Junaid, 2020). In these studies, it is generally argued that providing a technically sound system enhances customers' perceptions regarding its usefulness and ease of use, fulfilling customers' performance and effort expectations, respectively. For example, Hajiheydari and Askhani (2018) hypothesize that when customers perceive a mobile application system to be of high quality, the perceived usefulness is increased, and their findings support this hypothesis. In her study on mobile payment, Moukkat (2020) also finds that system quality positively affects customers' expectations of performance and effort. Moreover, Akram et al. (2020) highlight that systems quality positively influences perceived usefulness and ease of use in a fast-food mobile commerce setting, along with the other two quality dimensions.

System quality also plays a vital role in enhancing customers' trust in a system. Prior studies indicate that when customers perceive the system to be of high quality, they are more inclined to foster higher levels of trust, which motivates them to spend more time and money on this system (e.g., Sarkar, Chauhan, & Khare, 2020; Yuan, Liu, Su, & Zhang, 2020). In their recent study on mobile eco-systems, Geebren et al. (2021) examine the role of trust, and their findings reveal that system quality positively affects trust, which positively affects user satisfaction. Based on these findings, this study posits that:

H_{11}: System quality positively influences a) performance expectancy, b) effort expectancy and c) trust.

Information quality is related to the desired characteristics of the outputs of a system that include "accuracy, precision, currency, timeliness, sufficiency, understandability, conciseness, among others" (Petter et al., 2013: 30). Just as system quality, information quality is essential for fulfilling customers' expectations for performance and effort. The findings reported in recent studies reinforce the positive effect that information quality has on perceived usefulness and ease of use (e.g., Akram et al., 2020; Mouakket, 2020). Information quality is also predicted to be essential for enhancing trust. No customer will trust a system unless it provides accurate, sufficient and timely information. There are studies that specifically highlight the value of information quality on trust across different contexts, including m-banking (e.g., Geebren et al., 2021). It is, therefore, posited that:

H_{12}: Information quality positively influences a) performance expectancy, b) effort expectancy and c) trust.

Finally, service quality is concerned with the quality of the complete support received from a service provider and points out the importance of assurance, empathy and responsiveness of service providers for customers, especially when customers require help regarding the system (DeLone & McLean, 2003; Petter et al., 2013). Studies confirm the effect of service quality on customers' expectations related to performance and effort. Raman and Aashish (2021) report that service quality has made it easier for customers to learn technology easily and quickly and thus improved the effort expectancy of customers for mobile payment services. In a similar context, Mouakket (2020) also claims that when customers find a system dependable and responsive to their needs, they consider the system easy to use, matching their effort expectations. In their study on fast-food mobile commerce, Akram et al. (2020) feature the critical role of service quality as the quality dimension that most decisively shapes perceived usefulness and ease of use.

Like other quality dimensions, service quality is also considered important for building trust among customers. Extant literature has revealed service quality as a critical determinant for customers' trust in mobile systems (e.g., Sarkar et al., 2020; Yuan et al., 2020; Raman & Aashish, 2021). When customers get a reliable and responsive service, this assures a sense of high quality that prompts customers to feel trust in the system (Wang, Ou, & Chen, 2019). However, when the service quality is poor, this may destroy customers' trust and frustrate them (Tam & Oliveira, 2017b). Therefore, it is hypothesized that:

H_{13}: Service quality positively influences a) performance expectancy, b) effort expectancy and c) trust.

2.3.6. User Satisfaction and Continuance Intention

Satisfaction from using a service is vital as users decide on their future responses regarding their continuance intention to use it based on their experience (Raman & Aashish, 2021). As DeLone and McLean (2003) emphasize, user satisfaction and usage are closely interrelated, and this relationship is rigorously researched in IS literature. The meta-analysis conducted by Franque et al. (2021) highlights user satisfaction as one of the critical determinants of continuance intention for using an IS system. This effect of user satisfaction has been studied in different IS contexts, including but not limited to e-commerce (e.g., Tam, Loureiro, & Oliveira, 2020) and mobile payment systems (e.g., Mouakket, 2020). There also exist studies explicitly conducted in m-banking settings. For instance, in their studies investigating the impact of m-banking on individual performance, Tam and Oliveira (2016; 2017b) report that greater user satisfaction leads to greater intention for use. Similarly, Sharma and Sharma (2019) reveal that customers will be motivated to continue using m-banking if satisfied. As such, this study hypothesizes that:

H_{14}: User satisfaction positively influences continuance intention.

3. Methodology

3.1. Questionnaire Design and Measures

The questionnaire was comprised of three sections. The first section started with a screening question to identify the respondents who were actual users of m-banking, followed by questions about their use of m-banking services (e.g., frequency of use in the last month and transactions for which m-banking was used most). There were questions for measuring the constructs within the proposed model in the second

section. In the last section, there were questions on demographics. All items were derived from existing scales validated in previous studies. The items measuring the constructs extracted from UTAUT2 were taken from Baptista and Oliveira (2017). Four-item scales were used to measure performance expectancy, effort expectancy and facilitating conditions, while three-item scales were used to measure hedonic motivation. The items measuring the three quality constructs were adopted from Tam and Oliveira (2016). A six-item scale measured information quality, while system quality and service quality were measured by five and four-item scales, respectively. Trust was measured by six items, and continuance intention was measured by four items adapted from Alalwan et al. (2017). Finally, user satisfaction was measured by the four items taken from Susanto, Chang, and Ha (2016). These items were measured with five-point Likert scales anchored from 1 ("strongly disagree") to 5 ("strongly agree"). A pilot study was also performed among a convenience sample of 15 graduate students who were m-banking users to certify the clarity and completeness of these items. Some slight changes were made on the wording of a few questions after respondents' feedback.

3.2. Data Collection and Sampling

Data were collected from m-banking users in Turkey at least 18 years of age using an online survey distributed through email and popular social networking platforms. On average, the completion of a questionnaire took approximately 10 minutes. Through convenience sampling, a total of 422 usable responses were gathered in three weeks in October 2017. The sample was evenly divided by gender. The age distribution shows that the young customers (18-33) constituted a significant portion of the sample. This distribution aligns with the profile of m-banking users in Turkey, as m-banking is used actively by young customers (The Banks Association of Turkey, 2020). Further information on the sample profile is exhibited in Table 1.

Table 1. Sample Profile

	Frequency	*%*		*Frequency*	*%*
Gender			*Marital Status*		
Female	214	50.7	Married	182	43.1
Male	208	49.3	Single	240	56.9
Education			*Age*		
Primary School	2	0.5	18-25	67	15.9
Secondary School	10	2.4	26-33	201	47.6
High school	34	8.1	34-41	98	23.2
University	225	53.3	42-49	36	8.5
Master	138	32.7	50 and above	20	4.7
PhD	13	3.1	*Frequency of m-banking usage (times in last month)*		
Working status			1-5	80	19.0
Public sector	43	10.2	6-10	114	27.0
Private sector	287	68.0	11-15	90	21.3
Own business	35	8.3	16-20	74	17.5
Housewife	8	1.9	21-25	32	7.6
Retired	16	3.8	Over 25	32	7.6
Student	24	5.7	*Transactions for which m-banking was used most* [a]		
Unemployed	9	2.1	Money transfer	374	88.6
Personal monthly income			Monitoring current situation	324	76.8
Less than 2000 ₺	48	11.4	Payments	317	75.1
2000-3999 ₺	96	22.7	Investment	105	24.9
4000-5999 ₺	83	19.7	Loan application	44	10.4
6000-7999 ₺	93	22.0	Credit card application	22	5.2
8000-9999 ₺	59	14.0	Tracking campaigns	83	19.7
10000 ₺ and above	43	10.2	Other	9	2.1
Note: [a] Percentage exceeds 100 percent due to multiple responses					

4. Findings

The partial least squares (PLS) technique was applied with SmartPLS 3. First, the measurement model was evaluated for its reliability and validity of the scales. Then the structural model was evaluated with the purpose of hypothesis testing.

4.1. Measurement Model and Psychometric Properties

For evaluating the measurement model, first, the factor loadings were examined. Ideally, the standardized factor loadings are expected to be above 0.70, but values above 0.50 are also acceptable (Hair, Black, Babin, & Anderson, 2014). One item related to facilitating conditions was removed from the initial measurement model as it had a low loading (less than 0.50). The final list of items and their factor loadings is presented in Table 2.

Table 2. Results for the Measurement Model

Construct and items	Loadings	α	CR	AVE	Construct and items	Loadings	α	CR	AVE
Performance expectancy		0.864	0.908	0.713	*Information quality*		0.877	0.908	0.626
PEE1	0.820				INF1	0.838			
PEE2	0.902				INF2	0.859			
PEE3	0.898				INF3	0.745			
PEE4	0.750				INF4	0.905			
Effort expectancy		0.948	0.962	0.864	INF5	0.755			
EFE1	0.946				INF6	0.611			
EFE2	0.924				*Service quality*		0.871	0.913	0.726
EFE3	0.920				SER1	0.899			
EFE4	0.929				SER2	0.930			
Facilitating conditions		0.911	0.944	0.849	SER3	0.819			
FCC1	0.910				SER4	0.747			
FCC2	0.945				*System quality*		0.948	0.960	0.829
FCC3	0.908				SYS1	0.904			
Hedonic motivation		0.949	0.967	0.907	SYS2	0.909			
HEM1	0.958				SYS3	0.889			
HEM2	0.971				SYS4	0.919			
HEM3	0.928				SYS5	0.931			
Trust		0.905	0.929	0.688	User satisfaction		0.887	0.922	0.748
TRS1	0.892				UST1	0.827			
TRS2	0.915				UST2	0.862			
TRS3	0.896				UST3	0.881			
TRS4	0.806				UST4	0.887			
TRS5	0.595								
TRS6	0.830								
Continuance intention		0.904	0.934	0.781					
COI1	0.915								
COI2	0.754								
COI3	0.939								
COI4	0.915								

Cronbach's alpha (α) and composite reliability (CR) were considered for the reliability of constructs. It is strongly suggested that both reliability criteria be higher than 0.70 (Hair, Howard, & Nitzl, 2020). As presented in Table 2, for each construct, the associated values exceeded the suggested threshold of 0.70, indicating a high level of reliability. The average variance extracted (AVE) was computed for each construct for convergent validity. The generally accepted rule is that the AVE should be 0.50 or above (Hair et al., 2014). The convergent validity was achieved as the AVE values varied from 0.626 to 0.907, exceeding the suggested threshold of 0.50. Finally, the discriminant validity was assessed using the criterion of Fornell and Larcker (1981). As presented in Table 3, the AVE value was higher for each construct than the square of its correlations with other constructs, supporting discriminant validity. The measurement model generally meets the criteria required for reliability and validity.

Table 3. Results for Discriminant Validity

	COI	EFE	FCC	HEM	INF	PEE	UST	SER	SYS	TRS
COI	*0.781*									
EFE	0.204	*0.864*								
FCC	0.245	0.480	*0.849*							
HEM	0.167	0.257	0.228	*0.907*						
INF	0.371	0.300	0.284	0.272	*0.626*					
PEE	0.244	0.627	0.426	0.278	0.246	*0.713*				
UST	0.686	0.283	0.301	0.289	0.527	0.287	*0.748*			
SER	0.158	0.090	0.084	0.222	0.286	0.130	0.207	*0.726*		
SYS	0.336	0.401	0.396	0.335	0.560	0.287	0.473	0.166	*0.829*	
TRS	0.305	0.282	0.310	0.284	0.523	0.209	0.420	0.270	0.573	*0.688*

Note: COI, continuance intention; EFE, effort expectancy; FCC, facilitating conditions; HEM, hedonic motivation; INF, information quality; PEE, performance expectancy; UST, user satisfaction; SER, service quality; SYS, system quality; TRS, trust. The AVE is provided in italics on the diagonal.

Since this study adopted a self-reported survey and was cross-sectional, the possibility of common method bias (CMB) needs to be taken into account. For that, Harman's single-factor test was used (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). A total of eight factors with Eigenvalues greater than one were generated, and the first factor explained less than 50% of the variance, which is the recommended cut-off point. Thus, CMB is not likely to be a severe concern for the study.

4.2. Structural Model and Hypotheses Testing

The proposed structural relationships were tested in the next step by applying a bootstrapping procedure based on 5000 bootstrap samples. The path coefficients and p-values are presented in Table 4. The results revealed that performance expectancy significantly impacted both continuance intention for using m-banking (β=0.116) and user satisfaction (β=0.261), supporting H_1 and H_3. On the contrary, the effect of effort expectancy was not significant either on user satisfaction or on continuance intention, failing to support H_2 and H_4. One of the essential findings was that effort expectancy was observed to have a robust favorable impact on performance expectancy (β=0.626), so H_5 was supported. Regarding the effects of trust, trust was observed to have a significant and favorable impact only on user satisfaction (β=0.498). Contrary to the expectations, the effect of trust on neither continuance intention nor performance expectancy was significant. Thus, while H_6 was supported, H_7 and H_8 were not. As the effect of facilitating conditions on performance expectancy (β=0.197), effort expectancy (β=0.456) and trust (β=0.095) was found to be significant and positive, H_{9a}, H_{9b} and H_{9c} were all supported. Hedonic motivation was also observed to significantly affect performance expectancy (β=0.128) and effort expectancy (β=0.132), and thus, H_{10a} and H_{10b} were supported. However, contrary to expectations, it was found to have no significant effect on trust, failing to support H_{10c}.

Regarding the effect of the three quality dimensions on performance expectancy, it was found that only service quality (β=0.107) had a favorable impact on performance expectancy, and the effect of the two quality dimensions (system quality and information quality) was not significant. Thus, while H_{13a} was

supported, H_{11a} and H_{12a} were not. When their effect on effort expectancy was examined, only system quality (β=0.210) had a significant favorable impact on effort expectancy. In contrast, the effect of information quality and service quality was not significant, supporting only H_{11b} but not H_{12b} and H_{13b}. In addition, all three quality dimensions were observed to have a favorable effect on trust, supporting H_{11c}, H_{12c} and H_{13c}. Of these quality dimensions, system quality had the most substantial effect (β=0.427), followed by information quality (β=0.245) and service quality (β=0.173). As expected, user satisfaction strongly and positively affected continuance intention for m-banking (β=0.788), supporting H_{14}.

Table 4. Results of Hypotheses Testing

		Path coefficient	*p-value*	*Conclusion*
H_1	Performance expectancy → Continuance intention	0.116	0.025	Supported
H_2	Effort expectancy → Continuance intention	-0.073	0.208	Not supported
H_3	Performance expectancy→ User satisfaction	0.261	0.002	Supported
H_4	Effort expectancy→ User satisfaction	0.060	0.391	Not supported
H_5	Effort expectancy→ Performance expectancy	0.626	0.000	Supported
H_6	Trust→ User satisfaction	0.498	0.000	Supported
H_7	Trust → Continuance intention	0.027	0.433	Not supported
H_8	Trust → Performance expectancy	-0.085	0.060	Not supported
H_{9a}	Facilitating conditions →Performance expectancy	0.197	0.023	Supported
H_{9b}	Facilitating conditions →Effort expectancy	0.456	0.000	Supported
H_{9c}	Facilitating conditions →Trust	0.095	0.013	Supported
H_{10a}	Hedonic motivation →Performance expectancy	0.128	0.004	Supported
H_{10b}	Hedonic motivation→ Effort expectancy	0.132	0.001	Supported
H_{10c}	Hedonic motivation →Trust	0.031	0.501	Not supported
H_{11a}	System quality→ Performance expectancy	-0.061	0.364	Not supported
H_{11b}	System quality →Effort expectancy	0.210	0.000	Supported
H_{11c}	System quality →Trust	0.427	0.000	Supported
H_{12a}	Information quality →Performance expectancy	0.030	0.577	Not supported
H_{12b}	Information quality →Effort expectancy	0.096	0.063	Not supported
H_{12c}	Information quality→ Trust	0.245	0.000	Supported
H_{13a}	Service quality →Performance expectancy	0.107	0.001	Supported
H_{13b}	Service quality →Effort expectancy	-0.031	0.353	Not supported
H_{13c}	Service quality→ Trust	0.173	0.000	Supported
H_{14}	User satisfaction →Continuance intention	0.788	0.000	Supported
R^2 (effort expectancy) = 0.554, R^2 (performance expectancy)= 0.669, R^2 (trust)= 0 .653, R^2 (user satisfaction) = 0.494, and R^2 (continuance intention)= 0.687				

5. Discussion

Addressing the need for further research by Tamilmani et al. (2021), this study extends the UTAUT2 model by incorporating the three quality dimensions from the IS Success Model and trust as additional constructs and investigates the possible relationships among these constructs as new internal mechanisms that impact user satisfaction and continuance intention for using m-banking. The integration of these new constructs and mechanisms addresses an important gap in the research on m-banking.

The study results support the positive effect of performance expectancy on user satisfaction and continuance intention. These align with those of other researchers, arguing that when customers perceive m-banking as useful and believe that it leads to improvements in the performance of the service delivered, they are more likely to be satisfied with this service (e.g., Franque et al., 2021) and more likely to continue using it (e.g., Baabdullah et al., 2019a). Surprisingly, this study also reveals that effort expectancy significantly affects neither user satisfaction nor continuance intention. This finding contradicts prior research claiming that when a new technology is easier to use and requires less effort, people will be more inclined to adopt it (e.g., Farah et al., 2018). However, in this study, this impact of effort expectancy turns out to be not significant for actual users of m-banking. In other words, prospective customers emphasize the easiness of use in the

adoption stage. Yet, once they start using m-banking, they gain some level of experience, and thus they are less bothered with the complexities associated with its use (Baabdullah et al., 2019a). Still, effort expectancy might indirectly affect these two outcome variables through performance expectancy, as effort expectancy has a significant and positive impact on performance expectancy. This finding aligns with previous literature, implying that the more customers observe m-banking as easy to use, the more they will perceive it to be useful, positively affecting their satisfaction and continuance intention for using m-banking (e.g., Alalwan et al., 2017; Elhajjar & Ouaida, 2020).

In line with past studies, the results also support the favorable effect of trust on user satisfaction (e.g., Sharma& Sharma, 2019; Geebren et al., 2021). However, even if trust is acknowledged as a vital force driving behavior intentions in the literature on relationship marketing, in this study, in contrast to the expectations, the impact of trust on continuance intention was observed as not significant. This finding is interesting and needs further investigation, yet some other studies similarly report that trust has no significant effect on behavioral intentions (e.g., Koksal, 2016; Farah et al., 2018). It is argued that as banks are considered to be trustworthy institutions by nature, the effect of trust might be insignificant in this context (Singh & Srivastava, 2018). Furthermore, the effect of trust on performance expectancy is also insignificant.

Performance expectancy and effort expectancy are considered the two critical predictors of individual technology acceptance and use (Tamilmani et al., 2019). Thus, this study explicitly investigates some new path relationships these two constructs have with the other UTAUT2 constructs of hedonic motivation and facilitating conditions and the three quality dimensions as new internal mechanisms. Concerning the effects of the three quality dimensions on performance expectancy and effort expectancy, it is found that only the effect that service quality has on performance expectancy and the effect that system quality has on effort expectancy is significantly positive. These findings suggest that when users perceive the quality of the overall support received from a service provider and the technical aspects of the system as high, their expectancy of performance and effort increase, respectively. Contrary to expectations, information quality is observed to have no significant impact on either effort expectancy or performance expectancy. It is essential to note that prior studies conducted in different contexts on these relationships also report inconsistent findings, suggesting that further research is needed (Moukket, 2020). The results also reveal the significance of hedonic motivation as an antecedent to performance and effort expectancy, which coincides with prior research claiming that the more enjoyable a technology is, the more useful and easier it is to use (Tamilmani et al., 2019). Similar findings are also reported for facilitating conditions as these affect both effort expectancy and performance expectancy positively. In line with previous research, facilitating conditions are particularly decisive on effort expectancy; the better the operational infrastructure that mobile service providers make available to their users, the easier it will be for users to understand and perform these mobile operations (Patil et al., 2020).

When the effect of the quality dimensions on trust is examined, it is observed that all three quality dimensions positively affect trust, which then enhances user satisfaction. This finding highlights the importance of continuous monitoring and enhancing the quality associated with these factors. From a comparative perspective, system quality is revealed to have a stronger impact on trust than the other two quality dimensions, showing that characteristics of a system from a technical perspective are especially of significant importance for enhancing the trust users feel towards m-banking. Moreover, facilitating conditions affect trust positively, as suggested by Gu et al. (2016). Unexpectedly, the results demonstrate that hedonic motivation has no significant impact on trust, and this is a finding that requires further investigation. Lastly, the results clearly reveal that user satisfaction is of paramount importance as it has a powerful impact on continuance intention for using m-banking. The prior research findings also support the importance of user satisfaction in this respect (e.g., Tam & Oliveira, 2017b).

5.1. Theoretical and Practical Implications

The current study adds to the literature on m-banking by offering an enhanced understanding of the factors that impact user satisfaction and continuance intention for using m-banking. In this vein, the study

extends UTAUT2 by integrating the three quality dimensions adopted from the IS Success Model and trust as additional constructs and simultaneously investigates the path relationships among them as new internal mechanisms. The results support that the integration of UTAUT2 with the IS Success Model, which is further extended by trust, is essential for providing a more comprehensive picture regarding m-banking users' satisfaction and continuance intention. Furthermore, prior studies have mainly concentrated on the adoption stage and assessed the factors that promote the adoption of m-banking, while others have studied current usage behavior. In this context, users' continuance intention for m-banking has rarely been investigated based on a solid theoretical framework (Baabdullah et al., 2019a). Hence, there is a need in the literature to identify the factors that directly or indirectly affect users' continuance intention for using m-banking, which might serve as a vital source of competitive advantage for banks. Based on this need, this study presents an enhanced insight by focusing on the post-adoption stage and investigates the factors that shape users' continuance intention for using m-banking.

This study's findings also have important implications for practitioners, particularly bank managers. Extending the UTAUT2 model with new constructs and identifying new path relationships, this study offers a novel insight for practitioners, which will be crucial for developing effective strategies for improving, directly or indirectly, users' satisfaction and continuance intention for using m-banking. This study recommends that banks pay significant attention to the factors identified in the model and promote them when designing their m-banking services. One of the crucial factors that need to be considered is performance expectancy. Banks should make sure that customers perceive m-banking as useful, understand its use and believe that it improves the performance of the service delivered. Hence, bank managers should identify the key features users consider useful and design their m-banking services accordingly. In addition, bank managers should design promotional campaigns that specifically highlight the benefits of using m-banking. In these campaigns, bank managers should also stress how easy it is to use m-banking, as effort expectancy is essential. The testimonials of satisfied customers related to the usefulness and easiness of m-banking should also be employed in these campaigns. Also, bank managers should ensure that their m-banking system is designed as easy for people to use for effort expectancy. To enhance people's trust in m-banking, banks need to ensure the security and the privacy of the transactions conducted via m-banking. Hence, bank managers need to invest in their technological infrastructures, adopt high-quality security certificates and protect their systems with legal frameworks.

When the effects of the three quality dimensions on trust, performance expectancy, and effort expectancy are considered, it is important to foster system, information and service qualities. In this vein, bank managers need to continuously monitor and initiate improvements in the associated aspect of quality. For example, for system quality, bank managers should emphasize the technical aspects of the system; at the same time, for information quality, they should focus on providing reliable, up-to-date, comprehensive information to users. Furthermore, they should ensure that users receive high-quality support from responsible service personnel, which is the key to high service quality. In this respect, banks should make the service personnel's assurance, empathy, and responsiveness their priority.

As hedonic motivation has a favorable impact on both performance expectancy and effort expectancy, practitioners should also consider ways of enhancing the hedonic motivation of their users on m-banking platforms. For that, visually appealing layouts might be designed, engaging screen savers or fun icons might be introduced, or various gamification elements might be integrated into these platforms (Farah et al., 2018; Tamilmani et al., 2019). Recently, there has been an apparent surge in the number of banks that utilize such elements in their mobile platforms. Likewise, facilitating conditions also play a critical role, given that these conditions positively affect effort expectancy, performance expectancy and trust. In this vein, it is recommended that banks provide a user-friendly interface that facilitates m-banking usage, with short informative videos and online help options and systems compatible with other technologies used. To sum up, all these findings shed light on the factors that enhance users' satisfaction and the continuance intention for using m-banking and provide bank managers a strategic roadmap for designing and promoting their services in this respect.

5.2. Limitations and Suggestions for Further Research

This study's findings need to be considered in light of some limitations that indeed serve as opportunities for further research. First, the respondents of this study were chosen using convenience sampling, limiting the generalizability of the findings. Thus, future studies should consider using a more representative, probability-based sampling technique. Second, the cross-sectional nature of the data also weakens the confidence in causal inferences as it was not possible to consider the effect of temporal changes in the constructs. Future longitudinal studies might be necessary for assessing the effect of these changes. Third, this study is conducted among m-banking users in Turkey. Since the study is specific to one particular country and one service context, it is recommended that the study be replicated in other countries and other service contexts (e.g., mobile payment or mobile commerce) to test the generalizability of the findings. Cross-cultural studies might also be conducted to see the differences due to culture. Fourth, for future research, other constructs from the UTAUT2 model might be included in the proposed model, along with some risk factors, so that the model's explanatory power might be enhanced further. Individual personality characteristics (e.g., innovativeness, novelty-seeking) and demographics might also be potential moderators. Their effect on the proposed relationships might be tested to understand better the factors contributing to user satisfaction and continuance intention for using m-banking. Finally, the data were collected before the outbreak of COVID-19. Indeed, the pandemic has significantly affected the attitudes and behavioral intentions towards m-banking. Thus, conducting similar studies in the current pandemic environment and comparing the results might provide practitioners and academics with valuable insights.

Declarations and Disclosures

Ethical Responsibilities of Authors: The authors of this article confirm that their work complies with the principles of research and publication ethics.

Conflicts of Interest: No potential conflict of interest was reported by the authors.

Funding: The authors received no financial support for the preparation and/or publication of this article.

Author Contributions: The authors confirm contribution to the article as follows: Conceptualization and design, M. Ozecan and E. Arikan; data collection, M. Ozecan; analysis of data and interpretation of results, M. Ozecan and E. Arikan; writing the first draft of the manuscript, M. Ozecan; review and editing, M. Ozecan and E. Arikan. The manuscript/article was read and approved by all the authors, and all authors accepted responsibility for their article.

Plagiarism Checking: This article was screened for potential plagiarism using a plagiarism screening program.

***Additional Disclosure (*)*:** This study is based on Merve Ozecan's master's thesis, which was completed in 2018 under the supervision of Asst. Prof. Esra Arikan and submitted to İstanbul Bilgi University, Institute of Graduate Programs, Marketing Graduate Program.

References

Akram, U., Ansari, A. R., Fu, G., & Junaid, M. (2020). Feeling hungry? Let's order through mobile! Examining the fast food mobile commerce in China. *Journal of Retailing and Consumer Services*, 56, 102142.

Alalwan, A. A. (2020). Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. *International Journal of Information Management*, 50, 28-44.

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., Lal, B., & Williams, M. D. (2015). Consumer adoption of Internet banking in Jordan: Examining the role of hedonic motivation, habit, self-efficacy and trust. *Journal of Financial Services Marketing*, 20(2), 145-157.

Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99-110.

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*, 40, 125-138.

Albashrawi, M., & Motiwalla, L. (2020). An integrative framework on mobile banking success. *Information Systems Management*, 37(1), 16-32.

Anouze, A. L. M., & Alamro, A. S. (2019). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing*, 38(1), 86-112.

Arcand, M., PromTep, S., Brun, I., & Rajaobelina, L. (2017). Mobile banking service quality and customer relationships. *International Journal of Bank Marketing*, 35(7), 1068-1089.

Baabdullah, A. M. (2018). Consumer adoption of Mobile Social Network Games (M-SNGs) in Saudi Arabia: The role of social influence, hedonic motivation and trust. *Technology in Society*, 53, 91-102.

Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Patil, P., & Dwivedi, Y. K. (2019a). An integrated model for m-banking adoption in Saudi Arabia. *International Journal of Bank Marketing*, 37(2), 452-478.

Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. (2019b). Consumer use of mobile banking (m-banking) in Saudi Arabia: Towards an integrated model. *International Journal of Information Management*, 44, 38-52.

Baptista, G., & Oliveira, T. (2017). Why so serious? Gamification impact in the acceptance of mobile banking services. *Internet Research*, 27(1), 118-139.

Chaouali, W., Yahia, I. B., & Souiden, N. (2016). The interplay of counter-conformity motivation, social influence, and trust in customers' intention to adopt Internet banking services: The case of an emerging country. *Journal of Retailing and Consumer Services*, 28, 209-218.

Chaouali, W., & El Hedhli, K. (2019). Toward a contagion-based model of mobile banking adoption. *International Journal of Bank Marketing*, 37(1), 69-96.

Chaouali, W., Yahia, I. B., Lunardo, R., & Triki, A. (2019). Reconsidering the "what is beautiful is good" effect: When and how design aesthetics affect intentions towards mobile banking applications. *International Journal of Bank Marketing*, 37(7), 1525-1546.

Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India-An empirical study. *International Journal of Bank Marketing*, 37(7), 1590-1618.

Cheng, Y. M. (2014). Extending the expectation-confirmation model with quality and flow to explore nurses' continued blended e-learning intention. *Information Technology & People*, 27(3), 230-258.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319-340.

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95.

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.

Elhajjar, S., & Ouaida, F. (2019). An analysis of factors affecting mobile banking adoption. *International Journal of Bank Marketing,* 38(2), 352-367.

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.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

Franque, F. B., Oliveira, T., Tam, C., & de Oliveira Santini, F. (2021). A meta-analysis of the quantitative studies in continuance intention to use an information system. *Internet Research*, 31(1), 123-158.

Geebren, A., Jabbar, A., & Luo, M. (2021). Examining the role of consumer satisfaction within mobile eco-systems: Evidence from mobile banking services. *Computers in Human Behavior*, 114, 106584.

Gu, Z., Wei, J., & Xu, F. (2016). An empirical study on factors influencing consumers' initial trust in wearable commerce. *Journal of Computer Information Systems*, 56(1), 79-85.

Hair, J.F., Black, W.C., Babin, B.J., &Anderson, R.E. (2014). *Multivariate data analysis* (New international ed.). Essex: Pearson Education Limited.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110.

Hajiheydari, N., & Ashkani, M. (2018). Mobile application user behavior in the developing countries: A survey in Iran. *Information Systems*, 77, 22-33.

Hassan, H. E., & Wood, V. R. (2020). Does country culture influence consumers' perceptions toward mobile banking? A comparison between Egypt and the United States. *Telematics and Informatics*, 46, 101312.

Jeyaraj, A. (2020). DeLone & McLean models of information system success: Critical meta-review and research directions. *International Journal of Information Management*, 54, 102139.

Koksal, M. H. (2016). The intentions of Lebanese consumers to adopt mobile banking. *International Journal of Bank Marketing*, 34(3), 327-346.

Makanyeza, C. (2017). Determinants of consumers' intention to adopt mobile banking services in Zimbabwe. *International Journal of Bank Marketing*, 35(6), 997-1017.

Malaquias, R. F., & Hwang, Y. (2017). Mixing business and pleasure: Empirical implications for trust in mobile banking. *Journal of Electronic Commerce Research*, 18(3), 212-224.

Malaquias, R. F., & Hwang, Y. (2019). Mobile banking use: A comparative study with Brazilian and US participants. *International Journal of Information Management*, 44, 132-140.

Malaquias, R. F., & Silva, A. F. (2020). Understanding the use of mobile banking in rural areas of Brazil. *Technology in Society*, 62, 101260.

Manjrekar, S., & Sumant, O. (2020). *Mobile banking market by transaction, and platform: Global opportunity analysis and industry forecast, 2019-2026*. Available from: https://www. alliedmarketresearch.com/mobile-banking-market (Access Date: 5 March 2022).

Mostafa, R. B. (2020). Mobile banking service quality: A new avenue for customer value co-creation. *International Journal of Bank Marketing*, 38 (5), 1107-1132.

Mouakket, S. (2020). Investigating the role of mobile payment quality characteristics in the United Arab Emirates: Implications for emerging economies. *International Journal of Bank Marketing*, 38(7), 1465-1490.

Oliveira, T., Faria, M., Thomas, M. A., & Popovič, A. (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34(5), 689-703.

Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, 54, 102144.

Petter, S., DeLone, W., & McLean, E. R. (2013). Information systems success: The quest for the independent variables. *Journal of Management Information Systems*, 29(4), 7-62.

Phaneuf, A. (2021). *State of mobile banking in 2021: Top apps, features, statistics and market trends*. Available from: https://www.businessinsider.com/mobile-banking-market-trends (Access Date: 5 March 2022).

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.

Raman, P., & Aashish, K. (2021). To continue or not to continue: A structural analysis of antecedents of mobile payment systems in India. *International Journal of Bank Marketing*, 39(2), 242-271.

Samsudeen, S. N., Selvaratnam, G., & Mohamed, A. H. H. (2022). Intention to use mobile banking services: An Islamic banking customers' perspective from Sri Lanka. *Journal of Islamic Marketing*, 13(2), 410-433.

Sarkar, S., Chauhan, S., & Khare, A. (2020). A meta-analysis of antecedents and consequences of trust in mobile commerce. *International Journal of Information Management*, 50, 286-301.

Shaikh, A. A., & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and Informatics*, 32(1), 129-142.

Sharma, S. K., & Sharma, M. (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.

Sharma, R., Singh, G., & Sharma, S. (2020). Modelling internet banking adoption in Fiji: A developing country perspective. *International Journal of Information Management*, 53, 102116.

Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing*, 36(2), 357-378.

Souiden, N., Ladhari, R., & Chaouali, W. (2021). Mobile banking adoption: A systematic review. *International Journal of Bank Marketing*, 39(2), 214-241.

Statista (2020). *Number of active mobile banking customers in Turkey 2014-2019*. Available from https://www.statista.com/statistics/888594/turkey-number-of-active-mobile-banking-customers/ (Access Date: 5 March 2022).

Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model. *Industrial Management & Data Systems*, 116(3), 508-525.

Tam, C., & Oliveira, T. (2016). Understanding the impact of m-banking on individual performance: DeLone & McLean and TTF perspective. *Computers in Human Behavior*, 61, 233-244.

Tam, C., & Oliveira, T. (2017a). Literature review of mobile banking and individual performance. *International Journal of Bank Marketing*, 35(7), 1044-1067.

Tam, C., & Oliveira, T. (2017b). Understanding mobile banking individual performance: The DeLone & McLean model and the moderating effects of individual culture. *Internet Research*, 27 (3), 538-562.

Tam, C., & Oliveira, T. (2019). Does culture influence m-banking use and individual performance?. *Information & Management*, 56(3), 356-363.

Tam, C., Loureiro, A., & Oliveira, T. (2020). The individual performance outcome behind e-commerce: Integrating information systems success and overall trust. *Internet Research*, 30(2), 439-462.

Tamilmani, K., Rana, N. P., Prakasam, N., & Dwivedi, Y. K. (2019). The battle of Brain vs. Heart: A literature review and meta-analysis of "hedonic motivation" use in UTAUT2. *International Journal of Information Management*, 46, 222-235.

Tamilmani, K., Rana, N. P., Wamba, S. F., & Dwivedi, R. (2021). The extended unified theory of acceptance and use of technology (UTAUT2): A systematic literature review and theory evaluation. *International Journal of Information Management*, 57, 102269.

The Banks Association of Turkey (2020). Digital, internet and mobile banking statistics. Available from https://www.tbb.org.tr/Content/Upload/istatistikiraporlar/ekler/1582/Dijital-Internet-Mobil_Bankacilik_Istatistikleri-Aralik_2020.pdf (Access Date: 7 March 2022).

Torres, E. N., & Kline, S. (2013). From customer satisfaction to customer delight: Creating a new standard of service for the hotel industry. *International Journal of Contemporary Hospitality Management*, 25(5), 642-659.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.

Wang, W. T., Ou, W. M., & Chen, W. Y. (2019). The impact of inertia and user satisfaction on the continuance intentions to use mobile communication applications: A mobile service quality perspective. *International Journal of Information Management*, 44, 178-193.

Yuan, S., Liu, L., Su, B., & Zhang, H. (2020). Determining the antecedents of mobile payment loyalty: Cognitive and affective perspectives. *Electronic Commerce Research and Applications*, 41, 100971.