

An Investigation of Users' Continuance Intention toward Mobile Banking Applications

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ABSTRACT

This research study examines users' continuance intention, adapting satisfaction, trust, and various dimensions of the Technology Acceptance Model. The study's results show that perceived usefulness influences trust, satisfaction, and continuance intention toward mobile banking applications. Perceived ease of use has a significant impact on customer satisfaction. In addition, trust impacts satisfaction, which, in turn, influences consumers' continuance intention.

Bankers should create favorable perceptions regarding usefulness and ease of use among mobile banking users. Providing clear, precise, and concise content is crucial. To build long-term mobile banking relationships, the bank's staff should focus on both direct and indirect influences on continuance intentions. The research extends the Technology Acceptance Model by incorporating two additional factors, trust, and satisfaction, to investigate mobile banking applications. This study contributes to the research on information technology usage by addressing mobile banking applications' use in Tunisia.

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Keywords: Tunisia, mobile banking application, ease of use, usefulness, trust, satisfaction, continuance intention, partial least squares structural equation modelling

I. INTRODUCTION

Many information and communication technology initiatives are being deployed in this past decade (O'Connor et al., 2016). The rise of mobile technologies, the growth of mobile businesses, and the increasing number of smartphone users have led to rapid growth in the service market (Yadav et al., 2016; Alkhowaiter, 2020; Elhajjar and Ouaida, 2020; Ho et al., 2020; Karjaluo et al., 2021; Picoto and Pinto, 2021; Lin et al., 2022). Thanks to electronic banking, customers can complete banking tasks using mobile devices and a wireless network. According to Ho et al. (2020), "mobile banking (MB) has emerged as a dominating force in the world of e-banking". It is "the most recent and most popular and innovative system of banking" (KA and Subramanian, 2022) and is an important channel in recent years (Poromatikul et al., 2020; Sharma et al., 2022). Consumers can access their bank accounts and complete all transactions through MB applications (Apps). They can connect with the bank through their smartphones anytime and anywhere, without visiting the bank branch (Lee and Chung, 2009; Zhou, 2012a; Chen, 2013; Yuan et al., 2014; Foroughi et al., 2019; Kwateng et al., 2019; Alkhowaiter, 2020; Ho et al., 2020; Jadil et al., 2021; Picoto and Pinto, 2021; KA and Subramanian, 2022).

MB services have become increasingly important; however, the development of MB utilities depends on users' continuance of use. MB Apps have attracted numerous users; however, maintaining they are subject to competition from traditional banking services. Continuance has become a crucial issue in the MB context (Bouhleb et al., 2023). Understanding users' continuance intention to use MB applications is essential in both the academic and banking sectors. The objective of this study is to reveal the mechanisms associated with the intention to continue using MB Apps in Tunisia. We investigate consumers' continuance intention using different perspectives: a technology-oriented, a trust-oriented, and a satisfaction perspective. Technology, satisfaction, and trust issues are highly relevant to MB user behavior (Chung and Kwon, 2009; Lee and Chung, 2009; Koo and Wati, 2010; Zhou, 2011a; 2012a; 2012b; 2013a; Yuan et al., 2014); however, their inclusion in traditional consumer behavior frameworks is limited.

The Technology Acceptance Model (TAM) is the best-known and most influential model of user acceptance of technology, despite alternative models. It is a robust, powerful, and parsimonious framework for explaining and predicting users' acceptance or rejection of technology (Wang et al., 2003; Mortimer et al., 2015; Venkatesh, 2000). Perceived usefulness and ease of use are believed to influence continuance intention (Hong et al., 2006; Shin, 2007; Chang et al., 2013; Yuan et al., 2014). Many studies extended the TAM by including external variables to explain and predict users' continuance intention toward MB App usage, and many addressed the relationship between external and TAM variables. Bhattacharjee (2001) and Yuan et al. (2014) stated that satisfaction is the 'major factor' and 'the strongest predictor' of consumers' continuance intention. Therefore, we extend the TAM to incorporate satisfaction. In addition, we include trust, a direct variable affecting users' continuance intention toward MB App usage. Limited research has been conducted on the importance of trust as a prerequisite for MB services. However, building trust is an essential component for banks to succeed in a mobile environment, where transactions are risky (Brown et al., 2003; Chung and Kwon, 2009; Lee and Chung, 2009; Cruz et al., 2010; Luo et al., 2010; Chen, 2012; 2013; Hanafizadeh et al., 2014; Lu et al., 2014; Mortimer et al., 2015; Elhajjar and

Ouaida, 2020). Hence, trust is expected to affect customers' continuance intentions, being a prerequisite for mobile transactions. This study contends that interactions with MB Apps depend on trust in the mobile system. Lack of trust is one of the most common reasons for consumers not using or stop using MB (Kim et al., 2009; Lee and Chung, 2009; Masrek et al., 2012).

This study considers MB's continuous use from the multi-channel perspective. MB is one of the main elements of banks' multichannel banking strategy due to the proliferation of portable devices and the growing use of cell phones for banking and payment applications. It develops a theoretical model of continuous use regarding the technology adoption of MB services, with the financial services sector as the empirical context. This study aims to evaluate whether perceived ease of use and perceived usefulness influence continuance intention. Furthermore, we explore how satisfaction and trust impact the adoption of MB services. To achieve these objectives, this research addresses the following research questions:

1. How do perceived ease of use and perceived usefulness (TAM variables) influence customers' continuance intention toward using MB Apps?
2. How do trust and satisfaction influence customers' continuance intention towards using MB Apps?

This research contributes to building a better understanding of the perceptions of MB applications in Tunisia, in the hope to stimulate further research in the banking sector. The outcomes provide insights into the banking industry. Hence, the results guide the banking sector in how to apply their established Apps in boosting the adoption of MB services.

Several types of research have been developed across the world to study the different aspects of mobile banking (KA and Subramanian, 2022). Therefore, there has been little research on MB Apps in Tunisia. Most existing works deal with MB as an opportunity to reduce financial exclusion and resistance to adoption (Laukkanen et al., 2007; Laukkanen et al., 2008; Laukkanen and Kiviniemi, 2010; Laukkanen, 2016; Chaoualia and Souiden, 2019).

Tunisian mobile technology, which began rapidly growing over the last few years, rocketed to over 14.8 million subscribers in December 2019 (INT, 2019) and is gearing up for further growth. The mobile user population has been increasing at a remarkable 'mobile phone penetration rate' of 125.8 % in December 2020 (INT, 2020), with four mobile companies operating in Tunisia (Tunisie Telecom, Ooredoo, Orange Telecom, and Lycamobile). The number of Tunisian mobile users is steadily growing. Currently, these mobile service providers offer services in partnership with large banks. The MB service is accessible 24/7 from anywhere in Tunisia.

The first MB experience traces back to 2006–2007 with SMS banking. Asynchronous and raw, this service ensured a low value to users. The idea of developing a solution that integrates transactional operations was initiated by Zitouna Bank in November 2010. Currently, most banks offer MB services, which include both informational and transactional services. Such services have full access to the details and transactions of bank accounts and check account details, receive customer feedback, transfer funds between bank accounts (often instantly), request checkbooks, check exchange rates, and perform stock exchange transactions.

The remainder of the study is organized as follows. First, section 2 describes the study's theoretical background, addressing the MB technology, satisfaction, and trust-oriented perspectives of MB user behavior. Then, we present the hypothesized relationships in section 3. The fourth one describes the empirical study. Section 5 offers a summary of the findings. We conclude, in the sixth section, with a discussion of the study's results, limitations, and directions for future research.

II. LITERATURE REVIEW

A. Definitions

MB is a type of electronic commerce (Kim et al., 2009; Moser, 2015; Shaikh and Karjaluo, 2015) and mobile commerce (Kim et al., 2009). It may also be described as a subsector of banking (Suoranta and Mattila, 2004; Laforet and Li, 2005; Laukkanen, 2007; Khraim et al., 2011; Moser, 2015), a type of electronic banking (Riquelme and Rios, 2010; Wessels and Drennan, 2010; Munir et al., 2013; Moser, 2015), or an extension of Internet banking (Brown et al., 2003). Moser (2015) explains that MB is "a banking channel that allows customers to interact with their bank through non-voice applications like mobile devices."

In this study, MB is defined as mobile devices used as a remote delivery channel for banking system services. Mobile devices must be equipped with the features required by the bank. Consumers must register for an MB account, allowing clients to have direct access to their financial information and carry out financial transactions 24/7 without going to the bank. According to Lin et al. (2022), "the trademark is: "banking everywhere, never at a bank".

Consumers may perceive the MB experience as user-friendly, enjoyable, and valuable (Luarn and Lin, 2005; Foroughi et al., 2019). Mobility, flexibility, convenience, efficiency, immediacy, and ubiquity are the most valuable features of MB App usage (Suoranta and Mattila, 2004; Laukkanen and Lauronen, 2005; Luarn and Lin, 2005; Laukkanen, 2007; Farquhar and Panther, 2007; Laukkanen and Pasanen, 2008; Riquelme and Rios, 2010; Wessels and Drennan, 2010; Zhou, 2012a; 2012b; Chen, 2013; Munir et al., 2013; Yuan et al., 2014; Foroughi et al., 2019). The use of MB services may also increase consumer satisfaction (Munir et al., 2013).

MB is used to make simpler banking operations and decrease costs (Lin et al., 2022). Banks, in order to maintain their competitiveness (Lin et al., 2022), offer four ways of accessing their services (Shaikh and Karjaluo, 2015); however, only the first type of access does not require an Internet connection on a mobile device: short messaging services notifications, Tablet/PC banking browsers, MB browsers, and MB Apps.

B. Justification for the Constructs' Selection

The primary goal of this study is to address the continuance intention toward MB. Several researchers have studied continuance intention (e.g., Bhattacharjee, 2001; Chen et al., 2009; Kim, 2011; Zhou, 2011d; Chang et al., 2013; Zhou, 2013a; 2013b); however, various aspects of MB remain largely unexplored. Consumers' continuance intention to adopt MB is critical for banks to plan their marketing strategies better, thus enhancing

MB usage in the future.

We identify two primary differences between mobile and ‘branch’ bank clients’ behavior. First, MB customers need to use mobile technology to conduct banking transactions. The bank branch environment is replaced by a mobile environment or, in other words, by an information system (IS). In this framework, technology refers to a bank’s mobile application used to market and sell the bank services. Second, a greater trust level is needed in an MB environment than in a banking branch. Trust and satisfaction are critical issues for those who engage in MB activities. Research on MB services benefits is based on models dealing with technology. Therefore, the two main variables of the TAM, namely, perceived usefulness and perceived ease of use, together with trust and satisfaction, were employed as antecedents of continuance intention in this study.

The TAM is used to investigate users’ adoption (Davis, 1989) and continuance intentions (Hong et al., 2006; Chang et al., 2013; Yuan et al., 2014; Foroughi et al., 2019) toward the information system. The TAM is suitable for addressing technologies of different natures (Hong et al., 2006; Picoto and Pinto, 2021) and has been the most widely used in the MB context (KA and Subramanian, 2022). It is typically used to identify the predictors of continuance intention, satisfaction, and trust in MB. Hence, we employ perceived usefulness and perceived ease of use, in line with the TAM (Davis, 1989) ‘as it has been recurrently found to be good predictors in the adoption of technology’ (Riquelme and Rios, 2010). Some studies have been conducted on the TAM in this field (Alkhowaiter, 2020). The TAM considers usefulness perceived by potential users as an essential determinant of their intentions regarding MB use. Perceived usefulness refers to customers’ subjective probability that MB will improve their performance. The TAM allows the inclusion of various external variables in its basic framework (Davis et al., 1989) to clarify customers’ continuance intention. Hence, satisfaction and initial trust have been integrated into the model to increase its explanatory power.

According to the expectation-confirmation theory, satisfaction is the crucial determinant of continuance intention (Bhattacharjee, 2001). Satisfaction is an ex-post assessment of consumers’ experience with the MB service and can be assessed as a negative feeling (dissatisfaction), a positive sentiment (satisfaction), or indifference. Satisfied consumers continue using MB services, while dissatisfied clients discontinue them and/or switch to alternative services, such as Internet banking and traditional banking.

Trust has a direct effect on continuance intentions and is a prerequisite for MB success. Researchers have been mostly concerned with interpersonal trust, inter-organizational trust, and online trust (Yoon, 2002; Feng et al., 2004). Trust has been extensively studied and confirmed to be an essential factor in predicting consumer’s perception and intention toward MB Apps (Luo et al., 2010; Zhou, 2012b; Hanafizadeh et al., 2014). In this study, trust is considered in the context of an unfamiliar MB App, with which the consumer has limited experience. We posit that credible and meaningful information about the MB App is gathered only after the user has engaged in a trust-related behavior (e.g., banking transaction) and has the opportunity to evaluate the trustworthiness of the bank by observing the consequences of such actions.

C. Continuance Intention toward MB Apps

“The success of an enterprise IS usually goes beyond its initial adoption and largely depends on whether users are willing to continue using the system” (Mirkovski et al., 2018). According to Bhattacharjee (2001), intention is “the strongest and most immediate predictor of individual behavior.” In the MB context, only a limited number of studies addressed continued use (Chen, 2012; Poromatikul et al., 2020), defined as “the strength of consumers’ continuous intention to perform MB usage behavior via various mobile devices” (Chen, 2012).

D. Perceived Usefulness of MB Apps

Perceived usefulness is the ‘degree to which a person believes that using a particular technology will enhance his/her job performance’ (Davis, 1989). It is one of the most relevant factors that induce customers to adopt a new technology (Wang et al., 2003), especially in the TAM (Davis, 1989; Venkatesh and Davis, 2000). Several researchers have suggested that perceived usefulness is crucial for accepting mobile services (Wang et al., 2006). In MB, perceived usefulness represents the extent to which an individual believes that MB App usage generates benefits and is useful. It can be described as whether consumers believe that mobile services could be integrated into their daily routines. Perceived usefulness depends on customers’ expectations about how the MB App can improve and simplify their lives (Luarn and Lin, 2005; Tan et al., 2010; Wessels and Drennan, 2010; Zhou, 2011a; Hanafizadeh et al., 2014; Yuan et al., 2014; Mortimer et al., 2015; Foroughi et al., 2019; Elhajjar and Ouaida, 2020). Another advantage for MB App users is their ability to access their accounts from any place. They can save effort, money, and time for traveling, parking and waiting in queues. In addition, consumers can check the status of their accounts and monitor and accomplish their financial transactions regardless of their physical location.

E. Perceived Ease of Use of MB Apps

The perceived ease of use is the ‘degree to which a person believes that using a particular system would be free of effort’ (Davis, 1989). MB requires users to download and configure the application based on the type of mobile phone. If the configuration process is complex, consumers cannot perceive the utility of the new banking channel. They may also doubt the bank’s ability and benevolence to provide quality services. Therefore, the interface must be user-friendly (Sohail and Al-Jabri, 2014), easy to use (Lee and Benbasat, 2004; Zhou, 2011b), and must have a simple layout and effective navigation.

Perceived ease of use reflects the difficulty of understanding and using the MB App. It ‘refers to the extent to which MB is perceived as easy to understand and operate’ (Sohail and Al-Jabri, 2014). If customers believe that the MB App is too hard to use and/or the benefits are outweighed by the effort, they simply avoid it. MB systems must be easy to learn to prevent the ‘under-used’ system problem (Luarn and Lin, 2005).

F. Trust in MB Apps

Trust is the “willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor” (Mayer et al., 1995). It involves “not only people but also IT artefacts - hardware and

software that enables tasks” (Koo and Wati, 2010). Technology trust is defined as ‘an individual’s willingness to be vulnerable to an information technology based on expectations of technology predictability, reliability, and utility and influenced by the individual’s predilection to trust technology’ (Lippert and Davis, 2006). In addition, a distinction needs to be made between trusting beliefs and trusting behaviors (e.g., usage of an MB application). It is also necessary to distinguish between trust beliefs about a bank and trust in the wireless Internet as a platform for financial transactions (Luo et al., 2010).

In this research, trust is viewed as a set of trusting beliefs about the MB App. It is defined as ‘the belief that allows individuals to willingly become vulnerable either to the bank or MB technology after having taken the bank’s characteristic embedded in its technology artifact’ (Koo and Wati, 2010). Trust is the willingness of a customer to be vulnerable when using the MB App, which should meet the customer’s expectations regardless of environmental disorder, human user, operator errors, and attacks by hostile parties.

G. Satisfaction with MB Apps

Satisfaction is an essential variable for evaluating and controlling bank marketing (Moutinho and Smith, 2000). However, research on satisfaction with MB Apps is minimal. Satisfaction is defined as the client’s fulfilment response, which is an overall evaluation of MB services. It captures a cumulative feeling established through interactions with the MB App. Customers are likely to be satisfied if the performance of a new banking service meets or exceeds their expectations. According to the expectation-confirmation theory, satisfaction with an MB App depends on customers' initial expectations and whether they are confirmed or disconfirmed. Satisfied consumers have a higher usage level of MB Apps than those who are not satisfied (Chung and Kwon, 2009). “Low satisfaction levels can even cause banks to lose customers” (Chung and Kwon, 2009).

III. RESEARCH HYPOTHESES

The proposed research model integrates perceived usefulness, perceived ease of use, trust, and satisfaction as antecedents of continuance intention toward MB (Figure 1).

A. Relationship between Perceived Ease of Use and Trust

In an MB environment, the primary interaction between consumers and the bank is through the MB App. Thus, an easy-to-understand App fosters trust. As mentioned before, an MB App interface should be easy to understand (Lee and Benbasat, 2004; Zhou, 2011b) and have a clear layout and effective navigation (Zhou, 2011b). Otherwise, consumers cannot perceive the utility of the MB App. If more effort is placed into configuring the MB App, users may conclude the bank is investing in the relationship. In contrast, an MB App that is hard to use does not connote ability or caring, nor benevolence. A hard-to-use MB App might even suggest that the bank is not being may detract from the trust. Perceived ease of use should increase trust through the perception that the MB App is contributing to the customer-bank relationship and, in doing so, signals the bank’s

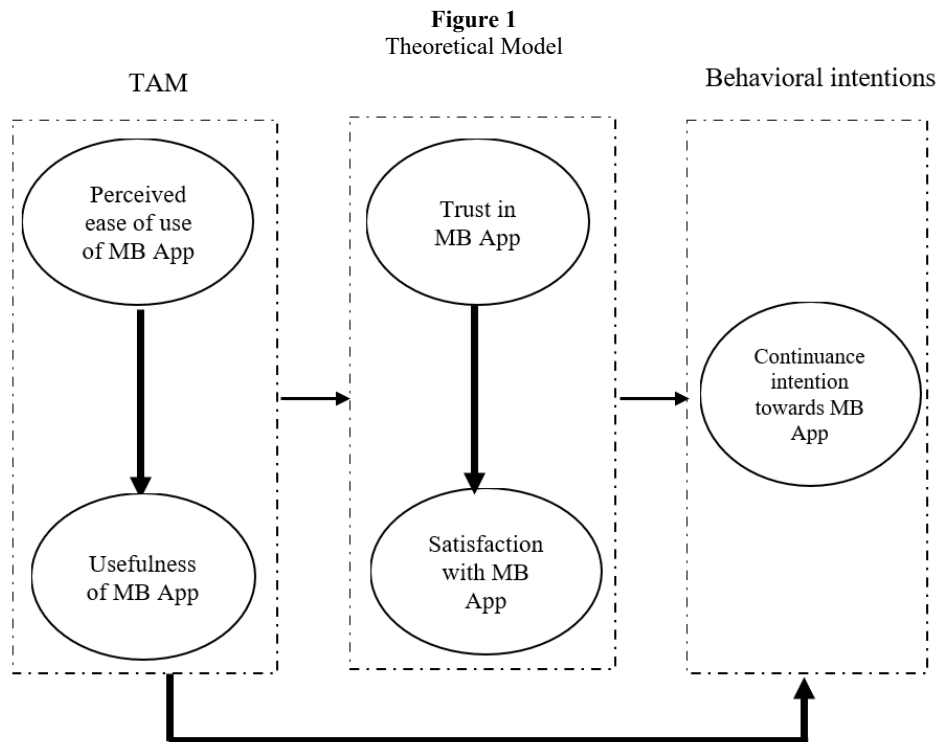
commitment to the relationship. Consequently, although perceived ease of use is not the sole determinant of trust, it can be posited that it contributes to trust. Hence, we propose the following hypothesis:

H1: Perceived ease of use of MB Apps is positively related to trust in MB Apps.

B. Relationship between Perceived Usefulness and Trust

Perceived usefulness is one of the determinants of trust in e-commerce (e.g. Zhou, 2011b; 2012b) and mobile commerce (e.g. Liu et al., 2009). However, the effect of perceived usefulness on trust in an MB context has not been extensively addressed. Useful and easily understood information on MB Apps reduces asymmetric information, helps process information, and enhances the degree of trust. Consequently, we expect perceived usefulness to have a positive effect on consumers' trust in MB Apps.

H2: Perceived usefulness of MB Apps positively affects trust in MB Apps.



C. Relationship between Perceived Ease of Use and Satisfaction

Several studies have shown the effect of perceived ease of use on satisfaction in different environments: self-service technologies (e.g. Chen et al., 2009), social-networking services (e.g. Hsu et al., 2014), mobile Internet (e.g. Lee et al., 2007), and mobile services

(e.g. Zhou, 2011c). However, the effect of perceived ease of use on satisfaction in the MB App context has not been investigated. Consumers expect MB Apps to be easy to use. Hence, we hypothesize the following:

H3: Perceived ease of use has a positive impact on satisfaction.

D. Relationship between Perceived Usefulness and Satisfaction

Perceived usefulness is a predictor of satisfaction in electronic commerce (e.g. Bhattacharjee, 2001), self-service technologies (e.g. Chen et al., 2009), social-networking services (e.g. Kim, 2011; Hsu et al., 2014), mobile services (e.g. Zhou, 2011c), mobile Internet (e.g. Lee et al., 2007), and MB (e.g. Yuan et al., 2014; Bouhlel et al., 2023). Customers expect MB Apps to help them achieve their goals. People mostly use mobile service systems because they find them convenient and useful for their transactions (Wang et al., 2006). Hence, we hypothesize the following:

H4: Perceived usefulness positively influences users' satisfaction.

E. Relationship between Perceived Ease of Use and Continuance Intention

The perceived ease of use has been widely validated to be one of the antecedents of consumers' continuance intention in contexts like mobile Internet (e.g. Hong et al., 2006), mobile learning (e.g. Chang et al., 2013), and MB (e.g. Yuan et al., 2014). The influence of perceived ease of use on continuance intention may be direct or indirect via its effect on perceived usefulness (Shin, 2007; Chang et al., 2013). In a MB context, if banks cannot present a good interface, conducting MB transactions may be complicated, thus hindering customers' willingness to continue using MB services (Yuan et al., 2014). Hence, we propose the following hypothesis:

H5: Perceived ease of use has a positive influence on user continuance intention.

F. Relationship between Perceived Usefulness and Continuance Intention

An MB App is useful when customers' delivery expectations are met, particularly in terms of ubiquity and immediacy. The MB App frees them from temporal and spatial constraints. Therefore, if a bank offers ubiquitous and timely information and services to consumers, they will not switch to another bank. In addition, when customers form positive expectations toward MB usefulness, they may continue their usage, even if they are dissatisfied with their prior use experience. A useful MB service makes clients more likely to continue using it (Gu et al., 2009; Jadir et al., 2021; Bouhlel et al., 2023). Hence, we propose the following hypothesis:

H6: Users' perceived usefulness is positively related to their continuance intention.

G. Relationship between Perceived Ease of Use and Perceived Usefulness

Several studies have pointed out the effect of perceived ease of use on perceived

usefulness (Davis, 1989; Davis et al., 1989; Venkatesh and Davis, 2000; Venkatesh, 2000; Wang et al., 2003; Luarn and Lin, 2005; Zhou, 2011b; Hsu et al., 2014). The general causalities found in the TAM may be applied to the MB environment. However, only a few studies have shown the effect of perceived ease of use on perceived usefulness in this context (e.g. Luarn and Lin, 2005; Riquelme and Rios, 2010; Yuan et al., 2014).

To prevent an underutilized MB system, an MB App must be easy to learn and use (Luarn and Lin, 2005). If MB Apps are difficult to use, consumers will consider them not useful and of low relevance. Consumers may not feel MB App useful if it cannot offer good navigation, helpful guides, and a straightforward layout. In contrast, if the MB App is perceived as easy to use, the effort spent by customers is low, consequently increasing their feelings of perceived usefulness. Hence, we hypothesize that the perceived ease of use of the MB App positively affects its perceived usefulness.

H7: Perceived ease of use positively influences perceived usefulness.

H. Relationship between Trust and Satisfaction

Trust has been found to be a key determinant of customer behavior, particularly the acceptance of new technology (Lee and Chung, 2009; Koo and Wati, 2010). It is considered an antecedent of consumer satisfaction (Koo and Wati, 2010). This relationship has been demonstrated in several contexts: electronic commerce (e.g., Brown and Jayakody, 2008), mobile commerce (e.g., Zhou, 2011c), and MB (e.g., Lee and Chung, 2009).

According to Lee and Chung (2009), trust is one of the most important factors in the low adoption of mobile banking and is the factor ‘that most impacts customer satisfaction’ with this banking channel. Improving customer satisfaction may be more challenging in the MB context than in the traditional banking context. A customer who trusts MB services expects the bank’s mobile system to confirm his/her expectations. In other words, consumers who trust the MB App will display a high satisfaction level, whereas consumers who do not trust the MB App will show a low level of satisfaction (Chung and Kwon, 2009). Customers’ trust in the MB App will help reduce their’ hesitation and uncertainty as well as the perceived risk of using the MB App. Hence, trust in MB positively influences customer satisfaction. Hence, we hypothesize the following:

H8: In the MB context, customer trust positively affects customer satisfaction.

I. Relationship between Satisfaction and Continuance Intention

Satisfaction is the “major factor” (Yuan et al., 2014), the “most vital parameter” (Foroughi et al., 2019), and “the strongest predictor” (Bhattacharjee, 2001) of consumers’ continuance intention. According to Chen et al. (2012), “continuance intention is a manifestation of customer satisfaction.” In the MB context, satisfaction reflects the evaluation of the MB App regarding customers’ interactions. When clients’ perceived performance meets or exceeds their expectations, they are likely to be satisfied, facilitating their continuance intention to use the MB App. Following a period of initial consumption, satisfied clients continue using the MB App, while dissatisfied users discontinue it and/or switch to Internet banking or traditional banking services. The

centrality of dissatisfaction in MB continuance intention is observed, where MB App users cite negative experiences and discontent resulting from slow access and other technical problems as their primary reasons for service termination. User satisfaction from using the MB App is a salient factor in shaping continuance intention (Poromatikul et al., 2020). Hence, we propose the following hypothesis:

H9: Satisfaction positively affects continuance intention.

J. Relationship between Trust and Continuance Intention

Previous research has shown that trust is the key factor in the adoption of new technologies. It is an essential construct in offline, online, and mobile transactions (Chung and Kwon, 2009). It has become increasingly recognized for its essential role in encouraging consumers to use all forms of digital banking, especially MB (Chung and Kwon, 2009; Poromatikul et al., 2020). According to Lee and Chung (2009), it is one of the most important factors in the low adoption of mobile banking. Customers' trust in a MB App plays a vital role in its adoption (Kim et al., 2009). It is a critical factor that may maintain customers in the relationship with the bank. Users are willing to continue using an MB App if they trust it (Zhou, 2013a; Poromatikul et al., 2020). An MB transaction makes the client vulnerable and dependent on the action of the mobile device. Consumers expect a MB system to be trustworthy. Only when these expectations are met, consumers may continue using the MB App; otherwise, they will use similar systems. Accordingly, this study proposes the following hypothesis:

H10: Trust in an MB App positively affects its continuance intention.

IV. METHODOLOGY

Therefore, this study investigates the role of trust and satisfaction in the MB context, thus extending the TAM. We conduct a survey to collect the relevant data and employ Partial Least Squares Structural Equation Modeling (PLS-SEM) to estimate the proposed model.

A. Development of the Survey Instrument

In this study, various scales were adapted from previous research to ascertain content validity. First, a group of experts and senior academic lecturers translated them into French. To ensure consistency, another group of researchers performed a back-translation to English. Both groups had knowledge of marketing, banking, and expertise in English/French translation. The double-blind translation process aimed to obtain the equivalence of the construct as well as the vocabulary. Item responses were assessed on a five-point Likert scale, ranging from 1 ('strongly disagree') to 5 ('strongly agree'). The questionnaire was tested among twelve users with MB usage experience. Feedback served as a basis for correcting, refining, and enhancing the scales. Three items were revised. The questionnaire consisted of twenty-one items measuring six constructs (perceived ease of use, perceived usefulness, trust, satisfaction, and continuance intention). The scale sources are presented in Table 1.

Table 1
Scales and Sources

Scales	Sources
Trust in MB App	Zhou and Lu (2011)
Perceived ease of use of MB App	Yuan et al. (2014)
Perceived usefulness of MB App	Yuan et al. (2014)
Satisfaction with MB App	Lee and Chung (2009)
Continuance intention towards MB App	Yuan et al. (2014)

B. Sample and Data Collection Procedure

The relevant data were collected through an online survey conducted during the period January–March 2019. The target population was all bank clients with MB experience, aged 18 and above, and residing in Tunisia. Survey participants had to have already downloaded the MB App on their smartphones and used it. A hyperlink connecting to Google Forms was sent, requesting participants to fill up a questionnaire. Respondents were selected using convenience sampling. The sample comprised 151 individuals, but only 110 responses were validated as 10 questionnaires presented a repetitive pattern, and 31 outliers were detected. Stevens (2012) recommends that, in social science research, the sample size should be greater than 15 times the number of predictors. Since the model includes five predictors, this sample size should be larger than 75.

V. RESULTS AND DISCUSSION

The research hypotheses were tested using partial least squares structural equation modeling (PLS-SEM). This technique ‘works efficiently with small sample sizes and complex models and makes practically no assumptions about the underlying data’ (Hair Jr. et al., 2014). We used SmartPLS version 3.2.7 to validate the measurement approach and test the structural model.

A. Respondents’ Demographic Profile

Among the 110 respondents involved in this research, 82 (74.5 %) were men, 93.6 % of interviewees are 21 to 40 years old, and 85.5% reported having a professional activity.

B. Measurement Model Assessment

Construct reliability, content validity, convergent validity, and discriminant validity tests were carried out. Content validity was assessed based on the results of the previous literature. The measures were chosen by adopting constructs already validated by other researchers, as a result of the pre-tests that we conducted with experts in MB, and from the pilot test data gathered in Tunisia.

1. Reliability

We first assessed the composite scale reliability (CR) and Cronbach’s alpha (Fornell and Larcker, 1981; Chin, 1998). The lowest CR value is 0.777, which satisfies the benchmark of 0.7 (Fornell and Larcker, 1981; Hair Jr. et al., 1998). The Cronbach’s α values of the

three constructs (perceived usefulness, trust, satisfaction, and continuance intention) range between 0.770 and 0.910, higher than the minimum cut-off score of 0.7, as suggested by (Chin, 1998; Hair Jr. et al., 1998). Cronbach's α value of perceived ease of use (0.610) was considered acceptable. Cronbach's α values of 0.60 to 0.70 are acceptable in exploratory research (Hair Jr. et al., 1998). These results show adequate reliability of the items in question (Table 2).

Table 2
Composite Reliability and Cronbach's alpha

	Composite reliability	Cronbach's α
Perceived ease of use	0.777	0.610
Perceived usefulness	0.925	0.893
Trust	0.922	0.874
Satisfaction	0.933	0.910
Continuance intention	0.896	0.770

2. Convergent validity

We proceeded by checking item loadings and the average variance extracted (AVE). All item loadings for the respective constructs exceed the recommended threshold of 0.7 (Hair Jr. et al., 2014), except for the third item of continuance intention (0.585), and the first and the third items of the perceived ease of use (0.697 and 0.663, respectively). Deleting these two items leads to a decrease in the CR and AVE. Consequently, they were retained in the analysis according to the recommendations of (Hair Jr. et al., 2014) related to indicators with outer loadings between 0.40 and 0.70. Deleting the third indicator of continuance intention leads to an increase in CR and AVE above the suggested threshold value (Hair Jr. et al., 2014). Furthermore, the AVE values should exceed 0.5 (Fornell and Larcker, 1981; Hair Jr. et al., 1998). Overall, the results show satisfactory convergent validity of the measurement model (Table 3).

3. Discriminant validity

Discriminant validity was assessed both at the item and the construct levels. Concerning the item discriminant validity, the cross-loadings of all the items were tested. All indicators should load more positively on their respective constructs in the cross-loading matrix than on other constructs (Table 4). This result indicates an adequate item discriminant validity (Chin, 1998).

Table 3
Factor Loadings and Average Variance Extracted

	Items	Item loadings	AVE
Perceived ease of use	PEOU-1	0.697	0.540
	PEOU-2	0.834	
	PEOU-3	0.664	
Perceived usefulness	PU-1	0.914	0.756
	PU-2	0.893	
	PU-3	0.843	
	PU-4	0.825	
Trust	T-1	0.918	0.798
	T-2	0.858	
	T-3	0.902	
Satisfaction	S-1	0.758	0.738
	S-2	0.861	
	S-3	0.883	
	S-4	0.873	
	S-5	0.912	
Continuance intention	CI-1	0.919	0.812
	CI-2	0.883	

Table 4
Items Cross-loadings

	PEOU	PU	T	S	CI
PEOU					
PEOU-1	0.697	0.314	0.174	0.222	0.230
PEOU-2	0.834	0.475	0.376	0.515	0.313
PEOU-3	0.664	0.241	0.174	0.232	0.210
PU					
PU-1	0.428	0.914	0.390	0.468	0.540
PU-2	0.483	0.893	0.456	0.510	0.494
PU-3	0.395	0.843	0.254	0.424	0.440
PU-4	0.410	0.825	0.264	0.340	0.297
T					
T-1	0.309	0.404	0.918	0.495	0.365
T-2	0.301	0.332	0.858	0.497	0.275
T-3	0.352	0.346	0.902	0.591	0.427
S					
S-1	0.398	0.438	0.515	0.758	0.620
S-2	0.424	0.535	0.504	0.861	0.694
S-3	0.369	0.414	0.570	0.883	0.551
S-4	0.486	0.389	0.450	0.873	0.495
S-5	0.407	0.384	0.498	0.912	0.562
CI					
CI-1	0.351	0.464	0.366	0.687	0.919
CI-2	0.276	0.477	0.361	0.542	0.883

Note: PEOU: Perceived ease of use, PU: Perceived usefulness, T: Trust, S: Satisfaction, CI: Continuance intention

With respect to construct discriminant validity, the square root of AVE for each construct should be greater than the inter-construct correlations, that is, the correlations between that construct and any other constructs (Fornell and Larcker, 1981; Chin, 1998). The correlations among the constructs are shown in Table 5. The diagonal terms are the square roots of the AVE. Square-rooted AVEs are greater than all other correlation coefficients, thus verifying the discriminant validity of the measurement model.

Table 5
Latent Variable Correlations based on Fornell-Larcker Criterion

	CI	S	T	PU	PEOU
CI	0.901				
S	0.688	0.859			
T	0.404	0.594	0.893		
PU	0.521	0.509	0.404	0.869	
PEOU	0.351	0.485	0.360	0.495	0.735

C. Structural Model Assessment

Path coefficients and their significance levels were tested. Bootstrapping (with 5000 re-samples) was employed to test the statistical significance of path coefficients using t-tests.

1. Hypothesis testing

T-statistics showed significant relationships, with values above 1.96, in the path coefficients produced and P-values less than 0.05 (Table 6). Seven hypotheses, namely H2, H3, H4, H6, H7, H8, and H9, were supported. In contrast, H1, H5, and H10 were rejected.

Table 6
Path Coefficients of the Research Hypotheses

Hypotheses	Relationship	T statistics	P values	Path coefficients	Test results
H1	Perceived ease of use → trust	1.859	0.063 ^{ns}	0.212	Not supported
H2	Perceived usefulness → trust	3.197	0.001 ^{***}	0.299	Supported
H3	Perceived ease of use → satisfaction	2.590	0.010 ^{**}	0.220	Supported
H4	Perceived usefulness → satisfaction	2.420	0.016 [*]	0.230	Supported
H5	Perceived ease of use → continuance intention	0.569	0.570 ^{ns}	-0.056	Not supported
H6	Perceived usefulness → continuance intention	2.424	0.015 [*]	0.255	Supported
H7	Perceived ease of use → perceived usefulness	5.553	0.000 ^{***}	0.495	Supported
H8	Trust → satisfaction	4.895	0.000 ^{***}	0.422	Supported
H9	Satisfaction → continuance intention	6.450	0.000 ^{***}	0.610	Supported
H10	Trust → continuance intention	0.410	0.682 ^{ns}	-0.041	Not supported

Note: Path coefficients are the standardised beta coefficients from the PLS analysis.
Significant at p^{***} ≤ 0.001, p^{**} ≤ 0.01, p^{*} ≤ 0.05 ns: not significant

2. Model's predictive relevance

The squared multiple correlations (R^2) for the dependent variables, Cohen's f^2 (effect size), and Stone-Geisser test for predictive relevance (Q^2) were used to assess the model's predictiveness.

To evaluate the structural models' predictive power, we first calculated the R^2 . The R^2 values for the endogenous constructs are presented in Table 7. Chin (1998) suggested that R^2 above 0.67 should be considered high, while values ranging from 0.33 to 0.67 are moderate, and values from 0.19 to 0.33 are weak. R^2 values lower than 0.19 are unacceptable.

Table 7
Results of Analysis

Dependent variable	Independent variable	f^2	Result	R^2	Result	Q^2
Continuance intention	Perceived usefulness	0.087	Small	0.516	Moderate	0.384
	Satisfaction	0.405	Large			
Trust	Perceived usefulness	0.084	Small	0.197	Weak	0.133
	Perceived ease of use	0.066	Small			
	Perceived usefulness	0.070	Small			
Satisfaction	Trust	0.271	Large	0.474	Moderate	0.320
Perceived Usefulness	Perceived ease of use	0.325	Large	0.245	Weak	0.170

In terms of R^2 , the model shows that 51.6% of the variance in continuance intention is explained by perceived usefulness (H6) and satisfaction (H9). Furthermore, the research model explains 47.4% of the variance in satisfaction. This result is explained by perceived ease of use (H3), perceived usefulness (H4), and trust (H8). Perceived ease of use (H7) explains 24.5% of the perceived usefulness variance. In contrast, 19.7% of trust variance is justified by perceived usefulness (H2). Hence, the proposed model describes reasonably well the amount of variance explained for each endogenous construct.

Effects size (f^2) analysis was conducted on the dependent variable for multiple independent variables. For each of the effects through the path model (H2, H3, H4, H6, H7, H8, H9), one can evaluate the effect size using f^2 . To interpret the impact of f^2 at the structural level, Cohen (1988) suggested that the effect is large when f^2 is above 0.35, medium when f^2 ranges between 0.15 and 0.35, and small when f^2 is between 0.02 and 0.15, while f^2 values lower than 0.02 indicate no effect size. The results in Table 7 show that perceived usefulness has a small effect on continuance intention, trust, and satisfaction. In addition, perceived ease of use has a marginal impact on satisfaction. The structural model explains a satisfactory amount of variance of the continuance intention, with high R^2 values.

In PLS models, the Stone-Geisser test of predictive relevance (Q^2) is often applied. Models with Q^2 above zero are considered to have adequate predictive relevance (Henseler et al., 2009). The higher Q^2 , the greater the model's predictive relevance. In this study, the Q^2 criterion suggests that all models have satisfactory predictive power. Using the blindfolding procedure (Tenenhaus et al., 2005), Q^2 for continuance intention, trust, satisfaction, and perceived usefulness is 0.384, 0.133, 0.32, and 0.17, respectively

(Table 7).

3. Model's predictive quality

In line with Tenenhaus et al. (2005), we calculated the global goodness of model fit (GoF). With a value of 0.510, exceeding the cut-off value of 0.36 suggested by (Wetzels et al., 2009), the proposed model guarantees a good fit for the data.

D. Discussion

This research's primary goal was to identify the antecedents of consumers' MB continuance intention in Tunisia and the interrelationships among these antecedents. The study highlighted two conceptual areas: (1) the TAM beliefs, such as perceived usefulness and perceived ease of use toward MB application characteristics, and (2) trust and satisfaction theories. The online field survey of MB App users validated most research hypotheses and suggested additional modifications. The model's findings confirm that perceived usefulness positively affects trust, satisfaction, and continuance intention. Perceived ease of use has a positive effect on satisfaction. However, satisfaction is influenced by trust and influences continuance intention toward the MB App.

1. Understanding Continuance Intention

The results of the factorial paths point out direct and indirect relationships with continuance intention. In line with previous studies (Davis, 1989; Venkatesh, 2000; Venkatesh and Davis, 2000), satisfaction and perceived usefulness are found to be strong predictors of customers' intention to continue MB services. Satisfaction is more influential in motivating individuals' continuance intention to use the MB App than perceived usefulness. Previous studies defined satisfaction as the 'major factor' (Yuan et al., 2014) and 'the strongest predictor' (Bhattacharjee, 2001) of consumers' continuance intention. The satisfaction-intention relationship has been validated in several contexts. Its revalidation in the MB App environment further confirms the robustness of this link. Given the higher effect size of satisfaction compared to perceived usefulness in explaining continuance intentions, banks should focus on improving customers' satisfaction with their MB services. Consequently, investment in consumer satisfaction benefits banks in the form of increased long-term usage intentions. When satisfaction is high, customers are more inclined to continue using an MB App, according to the post-acceptance model (Bhattacharjee, 2001). We were questioning if satisfaction is a full mediator in the model. Results, using SmartPLS 4, for the analysis of the mediated relationships are presented next. In this regard, mediation results for the sample are reported in Table 8.

Satisfaction is a key factor in the model. It mediates several relationships. Results show that the ease of use and the continuance intention is a fully mediated (H3 and H9 supported; H5 not supported) relationship through satisfaction ($\beta = 0.134$, $t = 2.228$, $p=0.026$). In addition, satisfaction partially mediates (H4, H9, H6 supported) the relationship between perceived usefulness and continuance intention ($\beta = 0.140$, $t = 2.455$, $p=0.014$). Furthermore, in the path "Perceived ease of use \rightarrow Perceived usefulness \rightarrow

Satisfaction → Continuance intention”, the mediation is a full mediation (H7, H4, H9 supported; H5 not supported; $\beta = 0.070$, $t = 2.186$, $p = 0.029$). Satisfaction is also a total mediator in the path of “Perceived ease of use → Perceived usefulness → Trust → Satisfaction → Continuance intention” (H7, H2, H8, H9 supported, H5 not supported; $\beta = 0.038$, $t=2.085$, $p=0.037$). The mediation is partial (H2, H8, H9, H6 supported) in the path of “Perceived usefulness → Trust → Satisfaction → Continuance intention” ($\beta = 0.077$, $t=2.602$, $p=0.009$). Finally, satisfaction is a total mediator (H8, H9 supported; H10 not supported) between trust and continuance intention ($\beta = 0.257$, $t=3.895$, $p=0.000$).

Table 8
Mediation Analysis

	Path coefficients	T statistics	P values
Perceived usefulness → Trust → Continuance intention	-0.012	0.374	0.709
Perceived ease of use → Perceived usefulness → Continuance intention	0.126	1.872	0.061
Perceived ease of use → Perceived usefulness → Trust	0.148	2.307	0.021
Perceived ease of use → Trust → Satisfaction	0.090	1.808	0.071
Perceived ease of use → Perceived usefulness → Satisfaction	0.114	2.017	0.044
Perceived ease of use → Trust → Satisfaction → Continuance intention	0.055	1.715	0.086
Perceived ease of use → Trust → Continuance intention	-0.009	0.353	0.724
Perceived ease of use → Satisfaction → Continuance intention	0.134	2.228	0.026
Perceived ease of use → Perceived usefulness → Trust → Satisfaction	0.062	2.091	0.037
Perceived usefulness → satisfaction → Continuance intention	0.140	2.455	0.014
Perceived ease of use → Perceived usefulness → Trust → Satisfaction → Continuance intention	0.038	2.085	0.037
Trust → Satisfaction → Continuance intention	0.257	3.895	0.000
Perceived usefulness → Trust → Satisfaction → Continuance intention	0.077	2.602	0.009
Perceived usefulness → Trust → Satisfaction	0.126	2.780	0.005
Perceived ease of use → Perceived usefulness → Trust → Continuance intention	-0.006	0.343	0.731
Perceived ease of use → Perceived usefulness → Satisfaction → Continuance intention	0.070	2.186	0.029

In line with Bhattacharjee (2001), perceived usefulness was identified in this study as a secondary determinant of continuance intention in the MB App context. The magnitude of the influence of perceived usefulness is smaller than in prior IT adoption studies. Hong et al. (2006) report that ‘the impact of perceived usefulness on user intention of continued usage in TAM is understandable.’ Since the TAM was not specifically developed to predict continued usage intention, a 0.25- β value for perceived usefulness can be considered a fair value. Interestingly, this result was found in several

studies (e.g. Bhattacharjee, 2001; Thong et al., 2006; Kim, 2011; Hsu et al., 2014). Customers continue using MB services only if they find them useful. Given MB services' innovative nature, bank clients realize the potential benefits of these services only after using them. A potential explanation may be due to the instrumental purposes of our research. Attracting and retaining users by providing an enjoyable and playful MB App has become vital. Perceived enjoyment is a significant predictor of a user's continuance intention (Thong et al., 2006; Kim, 2011). The usage purposes of the MB app include not only financial-oriented activities but also pleasure or fun-oriented ones. For example, MB App can help users gain instant access to their bank account; they also can provide users with self-fulfilling values; they are related to leisure activities, and they underline enjoyment features. Therefore, it is plausible why perceived enjoyment will be relevant.

Unlike previous studies, we found that perceived ease of use does not affect continuance intention toward MB App usage in Tunisia. Consumers will not repeatedly use MB App simply because it is easy to use (Yuan et al., 2014). After several interactions with the MB App, consumers become quite familiar with it. Therefore, they no longer give importance to its ease of use or rather the opposite if it is difficult to use (Yuan et al., 2014). Even if the bank upgrades the MB App, customers will not be likely to discontinue use due to this reason. Consequently, the non-significance of the direct influence of ease of use on continuance intention can be accepted. However, it has a significant indirect effect on continuance intentions through satisfaction.

As for the role of trust, the results have been noticed in a different manner from what has been proposed in the conceptual model of the current research. Indeed, trust was not able to account for any statistical variance in the continuance intention toward MB Apps. In fact, the results exhibited regarding trust were found to be different in comparison with other studies that have used trust as a key factor in the adoption of new technologies such as Zhou (2013a) and Poromatikul et al. (2020); they all supported the role of trust on the continuance intention.

Trust's lack of any significant effect on continuance intention was particularly intriguing since it runs counter to the common logic that trust drives behavior and is a common business practice for several banks. Rationally speaking, bank consumers will want to continue using MB services only if they find them trustworthy. A closer examination of this unexpected finding suggested that consumers use MB Apps with misgivings. This might be explained by looking at the items used to measure trust in the questionnaire. Two of the three items measuring consumers' trust in MB Apps deal with risk concerns, i.e. T1 and T3. Risk concerns are always a key factor that deters consumers from using and continuing to use MB Apps. It is manifested in uncertainty and adverse consequences of involving following the use of the MB App. Consumers' risk concerns not only involve using MB Apps but also banks' use of data, for example, profiling and transferring user data to third parties. Improving consumers' trust would not reduce consumers' risk concerns. Furthermore, the clients' continuance intention indicated a subjective willingness to continue using MB Apps, showing that the overall benefits consumers received outweigh the cost they pay when adopting a mobile channel. For example, convenience, flexibility, immediacy, timesaving, ease of use, etc. are possible factors that influence consumers' continuance intentions. Consumers become more and more proficient in their technological interactions and are unable to pay close attention to m-banking security issues, as their advantages are obvious (Chen, 2012). This research does not address these advantages but still increases satisfaction and continuance

intentions. Therefore, the insignificant positive relationship between trust in the MB App and continuance intentions is meaningful. It reveals that clients like using the App even though they do have risk concerns and trust issues. With the increasing popularity of mobile applications, the inhibitors of technological readiness in consumer risk and trust perception are no longer noticeable (Chen, 2012).

2. Understanding the associations between antecedent constructs

The study examined, *inter alia*, the role of mobile applications in the development of trust. It investigated whether the experience with an MB application can affect trust in this innovative service. The theoretical model includes perceived ease of use and perceived usefulness as antecedents of trust. In this research, perceived usefulness is a unique determinant of trust. A less-functional MB App interface can discourage customers from engaging with it, even if it is easy to use (Davis, 1989). The more abundant the useful functions or information that MB Apps provide, the higher the trust. To improve customers' perceptions of trust, MB usefulness should be improved by providing informative content and carefully selected functionalities and focusing on target client requirements.

Despite expectations, we found no support for the hypothesis that perceived ease of use affects trust in MB Apps. Previous studies found that perceived ease of use is a significant antecedent of trust. One possible explanation for this study's finding may be that customers suppress their intrinsic trusting intentions (whether strong or weak), which may lead them to trust or not trust MB services. In contrast, they rely on evidence from the characteristics of the application to form trusting beliefs. Another possible explanation is that MB services are delivered by the existing banks whose trust has previously been set (Gu et al., 2009).

Perceived usefulness and perceived ease of use are both positive determinants of consumers' satisfaction with MB. The more useful and accessible an MB App is, the more satisfactory it is. When MB Apps are easy to use, customers can accomplish banking transactions efficiently. Banks can exploit useful techniques or informative content to encourage customers to feel benevolent and reduce consumers' utilization concerns about MB Apps.

Moreover, regarding the hypotheses related to links between the TAM variables, the research results show that perceived ease of use positively affects perceived usefulness, in line with Davis (1989).

VI. CONCLUSIONS

This research proposed an integrated model combining the TAM with trust and satisfaction to explain customers' continued use of MB services. An online survey of customers that had previously used MB Apps was employed to test the model empirically.

A. Contributions to Research

This work improves the understanding of the elements that support customers' MB usage intention. The study's results highlight the relevance of the direct and indirect impacts on continuance intention, which should be considered when developing any mobile

application for banks. The study's results contribute to the MB literature in numerous ways. First, it provides insights into the factors that can affect continuance intentions. Second, little research has been conducted on MB in the North African context. Third, this study confirms the appropriateness of the TAM in predicting MB acceptance levels among bank customers in Tunisia. This result is different from the technological systems previously examined. However, the study's findings are consistent with the results of Davis (1989), indicating perceived usefulness as a significant antecedent of the intention of customers to continue using MB Apps.

B. Managerial Implications

This research offers important insights for practitioners. It provides financial institutions with useful, helpful, and significant information regarding how to develop their MB Apps and marketing strategies. Bankers should create favorable perceptions regarding the usefulness and ease of use among MB users. Providing clear, precise, and brief content is crucial. This result highlights the leading role of MB App designers and bankers. They should pay attention to quality and informative text, which reflects usefulness and ease of use. To build long-term MB relationships, the bank's staff should focus on direct (perceived usefulness and satisfaction) and indirect (perceived ease of use) influences on continuance intentions. The more significant effect of perceived ease of use suggests that banks should prioritize this aspect. Furthermore, at all branches, banks should offer a guide presenting clear information about the efficiency, effectiveness, and risk-free attributes of their MB application system.

The study's results may also encourage customers to adopt an MB App as an alternative way to conduct several banking transactions.

C. Limitations and Further Research

The present study has two main limitations. First, the small size of the sample. Future studies should involve a higher number of interviewees. The second limitation is that antecedents' possible influence, such as an individual's internal trigger, mobile experience, perceived risk, perceived privacy, and security, was not considered. Future research may also examine other potential determinants affecting trust, such as system quality and levels of convenience (time-saving properties and speed of transaction processes).

VII. CONFLICT OF INTEREST

The authors state that they are free of any personal or business association that could represent a conflict of interests regarding the article submitted, and we have respected the research ethics principles.

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