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CONSUMERS' INTENTION TO USE MOBILE BANKING APPLICATIONS AS A MARKETING TOOL, AN INTEGRATED TPB AND TAM MODEL

İsmail YILDIRIM
Prof. Dr., Hitit Üniversitesi, Çorum, Türkiye, ismailyildirim@hitit.edu.tr
ORCID: 0000-0002-6408-0332

İlknur AYAR
Dr. Öğr. Üyesi, Çankırı Karatekin Üniversitesi, Çankırı, Türkiye, ilknurkilic@karatekin.edu.tr
ORCID: 0000-0002-6870-5571

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ABSTRACT

Electronic commerce (e-commerce) has a significant impact on the global business environment. Mobile banking has emerged as a vital distribution channel and there is extensive research into its adoption. Mobile banking has rightly gained popularity in recent years. This is because with the increasing use of smartphones and other mobile devices, mobile banking offers people a practical way to deal with their money. Mobile banking users can access their accounts anytime and anywhere. In this study, the Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM) are integrated with Trust Propensity to identify the factors affecting bank customers' intention to use mobile banking applications. The study was conducted with 393 participants through simple random sampling using an online survey. Structural equation modeling (SEM) technique was used to determine the effect of the research variables on mobile banking adoption intention. In order to motivate customers to use mobile banking services, banks need to know the drivers of customers' intentions to use mobile banking. The results of this study also revealed the changes in consumer behaviour towards mobile banking applications caused by changing consumption habits during the pandemic period. The study provides practitioners with information on the drivers of banking customers' intention to use mobile banking applications. The research results provide important insights into the key characteristics of m-banking that can help banks and application providers to improve their mobile banking products. The primary significance of this research for the banking sector is that banks ought to prioritise M-banking practices and highlight their benefits in their marketing campaigns. To summarise based on the research results, as m-banking becomes more widespread, banks should ensure that their applications are accessible, user-friendly and secure for all customers. They can create short training videos to show their customers how to get started with online banking and how to perform basic functions. Banks can promote m-banking application by creating informative posts and advertisements that showcase its capabilities and benefits.

Keywords: Mobile banking, intention, TPB, TAM, trust tendency

INTRODUCTION

The development of the Internet and digital technology offers opportunities to increase the impact and efficiency of marketing activities. The Internet has made it possible to establish one-to-one relationships with customers and provide services to customers with low budgets. Businesses have to make improvements in the services they provide to their customers in order to make their competitive advantage sustainable. Information Technology (IT) is widely used in a wide variety of ways in the banking sector as in every field (Rasheed & Latif, 2011). Increasing capital expenditure on service delivery technology is one of the primary ways that service businesses, including the banking industry, can serve customers better. Banks also have to invest in technology and systems to attract new customers and satisfy existing ones (Pyun et al., 2002; Joseph & Stone, 2003). In order for the banking sector to create a sustainable strategic advantage and gain competitive advantage, it has become a necessity to implement technology-based systems and services (Joseph & Stone, 2003). With the inclusion of new and advanced technologies in banking operations, customers have been enabled to perform their banking transactions anytime and anywhere (Kumar et al., Rawat, 2016). Mobile banking (MB) applications, one of the most recent developments in e-banking services, show a rising trend today. The widespread use of smart phones has been an important factor in this. The widespread use of smart phones by the young and middle population has also increased the use of mobile applications. The development of mobile applications and technologies has increased the use of MB (Shaikh & Karjaluoto, 2015).

These technologies, which provide convenience to customers, also positively affect the consumer value for banks. It is very important for banks to reveal the behaviors of adopting these technologies that improve consumer value. People's adoption of information systems is different. Many studies have been conducted to explain user acceptance of information systems and information technologies (Venkatesh & Davis, 2000). Qualitative and quantitative methods have been used in previous studies to explain consumers' adaptation to MB applications (Venkatesh & Davis, 2000; Riquelme & Rios, 2010; Wu et al., 2014; Shaikh & Karjaluoto, 2015; Shankar et al., 2020). The reasons people use MB apps vary. They can use these applications for many reasons. For this reason, it is important to determine the factors that affect their intention to use MB applications. In order to explain the behavior of customers to adopt MB applications, the integrated model of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) has been applied in this study. TAM has been used in many studies as a model explaining the intention to use a technology (Taylor & Todd, 1995a; Luarn & Lin, 2005; Wu & Chen, 2005; Teo & Noyes, 2011; Siyal et al., 2019; Suhartanto et al., 2020). However, TAM alone may exclude significant sources of variance in the factors affecting MB usage (Luarn & Lin, 2005). Both models accept that behaviors result from the intentions of the individual. Although they are similar in this respect, they differ in terms of the variables behind behavioral intentions (Moták et al., 2017). According to the TPB, attitude (ATT), perceived behavioral control (PBC) and subjective norm (SN) are effective in the emergence of intention towards a behavior (BI). TAM is based on perceived usefulness (PU) and perceived ease of use (PEU). TPB which includes additional factors not found in the TAM, such as the influence of important people SN and PBC which have been shown to be important determinants of BI, will provide a more complete understanding of the use of MB applications (Taylor & Todd, 1995b). Therefore, in this research, the model has

been expanded with the TPB, which has been used in many studies (Ajzen, 1991; Ajzen, 2002; Wu & Chen, 2005; Ayar & Gürbüz, 2021) in predicting behavioral intentions and behaviors.

The aim of this study is to explain the intention of banking customers to use MB applications. Especially with the COVID-19 pandemic, digital channels offered to customers by banks are known benefits, as well as reducing the density in bank branches, ATM, etc. reducing the risk of contamination in the channels, etc. provided pluses. In fact, the necessity of using digital applications has emerged during the period of full closures with the COVID-19 pandemic. Thus, consumer intentions for the use of mobile applications in banking services will also change (Shahid et al., 2022). In this study, which was conducted after the pandemic period, the model created by expanding the TPB and TAM variables of banking customers' intention to use MB applications was used. The importance and interest of a topic can be determined by several factors, including its relevance, significance, and potential impact. Here are some reasons why a topic is important and interesting: A topic that is relevant to current events or issues can be important and interesting because it has practical applications and implications. Mobile banking adoption is a relevant topic because it affects how people manage their finances in today's digital age. Although there are many studies on this subject, the subject is still new for the technologically developing sample of Turkey. A topic that has the potential to make a difference or create change can be important and interesting because it has the power to shape the future. For example, research on mobile banking adoption can inform policy decisions and industry practices, leading to better outcomes for customers and banks.

The results of the research are especially important in terms of revealing the behavior of using MB applications that have changed after the pandemic. In addition, research results are effective for the following reasons. MB applications save money for banks by eliminating both time and physical space costs. It also eliminates the personnel cost required for many banking transactions (Shahid et al., 2022).

In the next section, the MB concept, TPB and TAM are defined and research hypotheses are given. The next section includes the research model, methodology, analysis and findings. Finally, research results and recommendations are given.

THEORETICAL FRAMEWORK and HYPOTHESES

This study investigates the intention of banking customers to use MB applications by integrating the trust propensity to the TAM and the extended TPB (Figure 1). In this section, first of all, MB applications will be defined, then the TAM and TPB variables, as well as the effect of trust tendency variable on banking customers' intention to use MB applications will be formed.

Mobile Banking

With electronic commerce, which is expressed as the transition of payment transactions to digital environment, it has established a virtual connection that provides significant convenience to both the seller and the customer. With the development of electronic commerce technologies, mobile commerce applications have

emerged. Mobile commerce has enabled the use of portable devices like cell phones, which everyone uses today, to buy products and services without the constraints of time and place (Alafeef et al., 2011). MB is defined as a mobile commerce application that allows customers to access their bank accounts with the help of mobile telecommunication devices to check their account status, transfer money, make payments and sell stocks (Tiwari & Buse, 2007; Alafeef et al., 2011; Söylemez & Taşkın, 2020; Jebarajakirthy & Shankar, 2021). MB applications, the usage of which has increased with the development of internet technologies, continues to rise as a strong retail channel for banks. MB applications provide significant savings to both users and banks in terms of time and cost. It provides advantages for users from the cost of reaching the bank. For banks, it helps to save on physical space and personnel costs (Shadid et al., 2022). Banks can reach customers more effectively by developing new products and services with the advantages of developing mobile technologies.

MB was initially applied in European countries (Shaikh & Karjaluoto, 2015). When considered as a definition, MB is a banking service that provides convenience in banking activities and is used for customers to perform various transactions. With MB applications, banks offer their customers the opportunity to transact more freely and benefit from banking services. MB offers the ability to carry out banking operations anytime and anywhere, while at the same time being a requirement in places where it is not possible to reach bank offices. For this reason, MB is widely used in rural areas far from the city (Söylemez &Taşkın, 2020). This situation actually offers an advantage for banks. Namely, they can deliver their products to potential customers residing in rural areas where there is no internet infrastructure and it is difficult to open a bank branch. Especially the widespread use of smartphones has driven the demand for MB services. With the rapid increase in the use of mobile phones, mobile services are no longer a luxury, but a compulsive need. In addition, the tendency of the young population to mobile phones and mobile technologies has increased the rate of use of MB applications, especially by young people. The use of digital banking channels, which provide the opportunity to carry out activities with the motive of avoiding contact without going to a bank branch in Turkey, has increased significantly after the implementation of Covid-19 (Beybur & Çetinkaya, 2020). The total number of customers registered in the system and logged in at least once to do MB was 75.141 as of October-December 2019 and 112.106 as of October-December 2021. As of 2022, there are 135 million 905 thousand people in Turkey who have logged into the MB system at least once. Money transfers accounted for 63 percent of the financial transaction volume. In the July-September 2022 period, the number of instant loans extended through MB was 4 million 562 thousand, with a volume of 103 billion TL (The Banks Association of Turkey, 2022). With the adoption of MB applications by consumers, change in retail banking is facilitated and costs are reduced (Laukkanen &Lauronen, 2005). For this reason, banks need to apply the latest technologies to keep their customers' satisfaction at a high level (Mohanraj & Jaganathan, 2017).

There are many studies in the literature that analyze MB and related factors that affect consumer adoption (Laukkanen & Kiviniemi, 2010; Yousafzai et al., 2010; Zhou, 2011; Akturan & Tezcan, 2012; Aboelmaged & Gebba, 2013; Baptista & Oliveira, 2015; Shaikh & Karjaluoto, 2015; Munoz-Leiva et al., 2018; Baabdullah et al., 2019; Hamidi & Safareeyeh, 2019; Sharma et al., 2020; Kamdjoug et al., 2021). Söylemez and Taşkın (2020)

found that PU, perceived trust and compatibility towards MB are effective on ATT towards MB. Paçan Özcan et al. (2019) concluded that ATT, PU, SN, perceived risk variables affect the intention to use MB. The researchers also found a significant effect of PEU on PU. PEU also influences ATT. Erdoğan and Eti (2021) stated that the attitude towards MB is affected by PEU and PU and perceived trust. Yılmaz and Kinaş (2021) concluded that PU and ATT affect BI, they concluded that PEU does not affect attitude. Er and Karagöz (2022) in their research on university students, found that facilitating use, hedonic motivation, and habit variable affect BI.

Technology Acceptance Model (TAM)

TAM, which was developed to predict individuals' intentions to accept and voluntarily use information technologies, is a model used in many studies (Brusch & Rappel, 2020). It provides important implications in terms of explaining the behaviour of individuals to use or not to use a technological system. The original TAM reveals the individual's behavioral intention to use a technological system by the variables of PU and PEU (Davis, 1989; Baptista & Oliveira, 2015). People tend to use a mobile app when they believe it will help them make their banking operations easier and better. This is defined as PU. Individuals' perceptions of how easy the systems are to use will also affect the same people's perceptions of how useful the systems are (Davis, 1989; Brusch & Rappel, 2020). But even if people believe an app is useful, the difficulty of using the systems and the effort it takes to use the app can outweigh the difficulty. In a sense, it is a person's belief that he or she will not struggle and tire when using a mobile system. It is the person's belief that it will not be difficult to learn to use the system. This situation is also expressed as PEU (Davis, 1989). TAM provides opportunities to easily extend the theory by adding new variables in the adoption of a particular system by users. It is therefore suitable for investigating individuals' adaptation to using a technology.

There are similar studies in the literature to determine the intention to use MB with TAM. Abu-Taieh et al. (2022) stated in their study that facilitating conditions have no effect on MB usage. Kumar et al. (2020) in their research, they measured the intention to use MB applications with TAM. The research was done in India. According to the research results, the effect of PU and PEU is significant. There is also an influence of SN and personal innovativeness, trust and self-efficacy. Differently from other studies, Albort-Morant et al. (2022) aimed to measure the differences in the tendencies to use online banking in towns and cities. The effect of all TAM variables was found for both towns and cities. The researchers noted that the effects differed between cities and towns, which was not great. The study concluded, it is necessary to provide support such as internet access in more rural areas, digital education and information, especially for the uneducated and elderly population.

Attitudes towards MB usage intention are influenced by PU and PEU (Taylor & Todd, 1995b; Akturan & Tezcan, 2012). The PU factor refers to the usefulness of MB applications by consumers. With MB applications, banking services can be performed effortlessly and in a short time. PEU is related to the ease of use of MB applications. Individuals expect the system to be effortless before using a technological system. PEU affects PU. Because

when people perceive the system as easy to use, they will consider that the system is useful (Gu et al., 2009). In this respect, this research suggests the following hypotheses:

H1: There is a significant relationship between PEU and PU.

H2: There is a significant relationship between PU and ATT towards MB usege.

H3: There is a significant relationship between PEU and ATT towards MB usage.

H8: There is a significant relationship between PU and BI towards MB usage.

In this study, it is aimed to provide a comprehensive theoretical perspective to explain the technology acceptance of individuals towards MB applications. For this purpose, in addition to the TPB variables, an extended integrated model with the trust tendency variable has been proposed. In the research, 7 factors that deal with the PU, PEU, SN, ATT and PBC, BI and trust disposition related to MB are discussed.

Theory of Planned Behavior

TPB is widely used in research to predict individuals' intention to perform a behavior (Ayar & Gürbüz, 2021). TPB suggests that a person's behavior is influenced by the BI towards that behavior. BI is determined by ATT and SN. ATT is a person's feelings, beliefs or tendencies to performing a behavior. These are felt positively or negatively. It is a fictional construct that represents a person's degree of liking or disliking towards a particular attitude object. ATT is the main determinant of behavior, but it alone is not sufficient to explain a behavior. SN is defined as the social pressure applied by others on whether or not to engage in a behavior that a person considers important for him or herself. In particular, it can be understood as a person's expectation of how other people will react when he or she performs a certain behavior. The expectations of the environment or social groups are also important in a person's behavior (Fishbein & Ajzen, 1975). One of the determinants of intention is PBC. Constraints that an individual feel about a behavior while performing it. It is the belief about whether it is within one's control to perform a behavior. Information, resources and opportunities that the individual thinks he/she has or does not have in order to perform a behavior. The relationship between the perceived difficulties of performing the behavior will affect the person's intention and the successful accomplishment of that behavior. In other words, a person will perform a behavior if he/she perceives that he/she has control over the current circumstances in order to perform that behavior. There are many studies that use TPB to analyze the factors affecting the use of MB applications (Liao et al., 1999; Hsu et al., 2011; Safeena et al., 2013). Hsu et al. (2011) showed that SN, PU explained 74% of mobile financial service use. According to Akturan & Tezcan (2012), ATT is one of the key drivers of MB adoption. Previous studies have proven a positive relationship between ATT and BI to adopt MB (Alam et al., 2018). Intention to adopt MB can be influenced by the SN (Riquelme & Rios, 2010; Aboelmaged & Gebba, 2013). According to Khasawneh & Irshaidat (2017), both ATT and PBC influence BI and jointly explain 62% of the total variance in BI to adopt MB. In this study, besides the TPB variables, trust tendency was also analyzed. Trust tendency refers to the enduring individual difference of an individual's trust or distrust in others or in something. It is the tendency to interpret something as good or bad. While low-confidence consumers are reluctant to try new things, high-confidence

consumers tend to accept risks at first sight (Chen et al., 2015). According to Kumar et al. (2017) consumers with high trust tendencies will have more confidence in MB applications. Thus, it will have a positive effect on the intention to use MB applications. In light of all this, this research proposes the following hypotheses:

H4: There is a significant relationship between ATT and BI towards MB usage.

H5: There is a significant relationship between SN and BI towards MB usage.

H6: There is a significant relationship between PBC and BI to use MB.

H7: There is a significant relationship between trust tendency and BI to use MB.

Based on the literature review above, the conceptual model established for the research is given in Figure1.

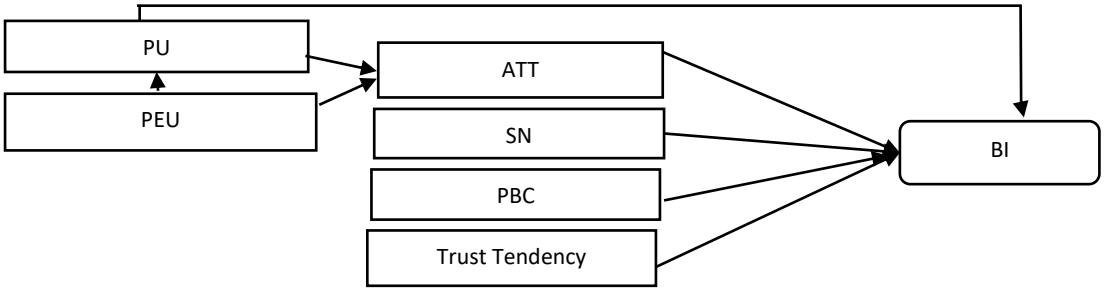

Figure 1. Suggested Conceptual Model

METHODOLOGY

Universe and Sample

The population of this research is individuals who use and have the potential to use MB applications in Turkey. The sample of the research was determined by purposeful sampling from MB application users. In the purposeful sampling method, a sample group is determined from the population by using the random method. Then, a small subgroup that is thought to contribute the most to the research is selected from this group (Tashakkori &Teddlie, 2010). In the study, data collection was conducted online for ease of access. Consumers who instantly download and effectively use all kinds of mobile applications are likely to download and use MB applications. A significant portion of consumers who use MB applications also use social media accounts. In order to provide ease of access to consumers using MB applications, the research questionnaire was shared on social media, blogs and forum pages.

According to Sekaran & Bougie (2016), according to the sampling calculation table for a certain population, the number of samples that can represent a population of 1 million or more is 384. In order to perform the structural equation model analysis, 10 (ten) times the number of variables should participate in the research (Kline, 2011). When calculations are made based on these rules, it should be 24*10=240 for a total of 24 items belonging to 6 variables. In the study, a total of 409 questionnaires were collected according to the sample table and appropriate sample sizes for structural equation modeling qualification references. From this, 16 outliers were excluded. Therefore, 393 samples were used for data analysis. With the decision of the Çankırı

Karatekin University Ethics Committee meeting dated 25.10.2022 and numbered 28, the research complies with scientific research ethics.

Data Collection Method and Tool

In this study, a survey was used to test the research hypotheses. In this section, the development of questionnaires and data collection method are mentioned. The questionnaire used in the research contains scale items that have been validated in previous studies. Among the research variables, PU and trust tendency variables were taken from the scales by Kumar et al. (2017), and PEU, SN, PBC, ATT and BI adapted from scales by Wu & Chen (2005). A five-point Likert scale with 1 being "strongly disagree" and 5 being "strongly agree" was used to rate the items. In this study, data were collected between December 2021 and March 2022.

Analysis of Data

The data of the study were analyzed with SPSS and AMOS software. The reliability of the measurement items was evaluated. As Cronbach's alpha values were greater than .70, it was confirmed that all constructs had a high level of reliability (Nunnally, 1978). In this study, confirmatory factor analysis (CFA) and structural equation modeling (SEM) were used to implement integrated TPB and TAM. First, CFA was performed to verify the validity of the observed indicators (items) constituting the latent variable.

FINDINGS

Descriptive Statistics

Demographic variables of the participants are given in Table 1.

Table 1. Sample Demographics

VARIABLES		N	%
Gender	Woman	250	63,6
	Male	143	36,4
Marital Status	Married	218	55,5
	Single	175	44,5
Educational Status	Primary Education	2	,5
	High School	13	3,3
	Associate Degree	131	33,3
	Bachelor	107	27,2
	Graduate	140	35,6
Age	25 and Below	99	25,2
	26-54	278	70,7
	55 and Above	16	4,1
Income Status	0-5000	89	22,6
	5001-10.000	77	19,6
	10,001-20,000	179	45,5
	20.001-30.000	39	9,9
	Over 30,001	9	2,3
		n= 393	

63.6% of the participants are women and 36% are men. When the marital status variable was examined, it was concluded that 55.5% of the participants were married. The vast majority of the participants, 96%, are higher education graduates. Again, 96% of the participants are under the age of 55. When the income level distribution is examined, 22.6% of those with an income of 5000 TL and below, 19.6% of those with 5001-10.000 TL, 45.5% of those with an income of 10,001-20,000 TL, and 20,001-30,000 TL. It is seen that the group of 9.9% and finally 30.001 TL and above constitutes 2.3% of the group.

Measurement Model Evaluation

Indicators of a latent variable should be loaded with an item load of 0.6 or higher on the related latent variables, and the AVE value of the latent variable should exceed 0.50. Thus, convergent validity is ensured. The fact that the explained mean square root of variance value calculated for the scale structure is greater than the correlation values between other scales indicates that discriminant validity is provided. Thus, the Fornell-Larcker criterion is satisfied (Hair et al., 2014). Table 2 gives the intercorrelations of the latent variables in the integrated model. When the standardized values were examined, it was observed that the factor loads of the latent variables ranged from 0.677 to 0.952 (PEU was excluded from the analysis because the factor load of item 2 was less than 0.6 (0.581). PEU was continued on the 3 items.) According to Fornell & Larcker (1981), there should be composite reliability (CR>0.70) for each construct. In addition, the average variance value of each construct should be AVE>0.50. AVE is calculated by dividing the sum of the squares of the covariances of the statements related to the factor by the number of statements. AVE value of 0.50 and above is considered as a sufficient level of convergence and indicates that validity is provided.

As can be seen in Table 3, values higher than the acceptable minimum CR level were obtained in the range of 0.792-0.928 for all variables. AVE ≥ 0.50 provides acceptable convergent validity. All variables provide acceptable convergent validity in the range of 0.559-0.811. The CR and Cronbach's alpha values of the research variables are within the acceptable range (table 3). According to Fornell & Larcker (1981) an AVE value higher than the correlation coefficient between factors explains discriminant validity. Table 2 shows that, these criteria are not satisfied between ATT variable and PBC (square roots of AVE are 0.869 and 0.748; both of these values are lower than 0.950, which is the correlation between factors) and BI (square roots of AVE are 0.869 and 0.901; both of these values are lower than 0.918, which is the correlation between factors). Between PEU and PBC (the square roots of the AVE are 0.765 and 0.748; both of these values are less than the correlation value of 0.801). In terms of the distinction between PBC and BI (the square roots of the AVE are 0.748 and 0.901; both of these values are less than the correlation value of 0.932), these criteria is not satisfied. However, it was satisfied for many other variables in the model. For example, by ATT and PU (square roots of AVE were 0.869 and 0.830, correlation of factors was 0.621), by ATT and trust tendency (√AVE = 0.869 and 0.853, respectively; r= 0.445), PEU and SN (√AVE = 0.765 and 0.848; r= 0.445, respectively), PBC and PU (√AVE = 0.748 and 0.830, r= 0.685, respectively) and other variables. As seen in Table 2, the √AVE of all constructs is higher than most of the inter-factor correlations. Thus, evidence for discriminant validity is provided (Nunes et al., 2018). The 23-item model with no 2nd item of the PEU variable and correlation between the error terms of the

AT1-AT2 (r=0.33) items shows an acceptable fit (χ2/df= 2.551; p<0.01; GFI=0.897; CFI=0.956, AGFI=0.864, RMSEA=0.063).

Table 2. Correlations for the Measurement Model

	AT	PU	TT	PEU	SN	PBC	BI
AT	**(0.869)**						
PU	0.621	**(0.830)**					
TT	0.445	0.367	**(0,853)**				
PEU	0.753	0,559	0,529	**(0,765)**			
SN	0.452	0,319	0,356	0,445	**(0,848)**		
PBC	0,950	0,685	0,493	0,801	0,487	**(0,748)**	
BI	0,918	0,616	0,374	0,698	0,419	0,932	**(0,901)**

Square roots of AVE are given in parentheses.

Table 3. Results for the Measurement Model

Değişkenler	CR	AVE	Cronbach's alpha	Factor Loadings
ATT	0.925	0.755	0.929	0.837 – 0.903
PU	0.867	0.688	0.843	0.677 – 0.910
TT	0.914	0.727	0.909	0.721 – 0.925
PEU	0.808	0.584	0.796	0.697 – 0.810
SN	0.884	0.718	0.879	0.770 – 0.952
PBC	0.792	0.559	0.786	0,703 – 0.787
BI	0.928	0.811	0.927	0.880 – 0.914

CR: Combined Reliability, AVE: Average Variance Extracted

Evaluation of the Structural Model

Structural equation modeling was used to test the research hypotheses. All Structural Equation Model analysis values showed 'good fit between data and model (χ2/df = 2.609, p<0.01; GFI = 0.892, CFI = 0.953, AGFI = 0.860, RMSEA = 0.064).

Table 4.Hypothesis Test Results

Relationships	Std RW	CR	p-value	Support
H1: PEU → PU	0,683	8,974	***	Yes
H2: PU → ATT	-0,022	-0,408	0,683	No
H3: PEU → ATT	0,942	10,460	***	Yes
H4: ATT → BI	0,537	4,388	***	Yes
H5: SN → BI	-0,017	-0,528	0,597	No
H6: PBC → BI	0,465	3,335	***	Yes
H7: Trust tendency → BI	0,100	3,027	0,002	Yes
H8: PU → BI	0,010	0,233	0,816	No

***p<0.01

Table 4 shows that there are significant relations between variables of the five hypotheses, but three of them are insignificant. PEU was found to be effective on PU and ATT, respectively. Thus; H1 (β = 0.683) and H3 (β = 0.942) were supported. PU, on the other hand, had no effect on ATT. H2 (β = -0.022) is rejected. It was found

that ATT, PBC and trust tendency were effective on BI, while SN and PU were not. Thus, H4 (β = 0.537), H6 (β = 0.465) and H7 (β = 0.100) were supported, while H5 (β = -0.017) and H8 (0.010) were not.

CONCLUSION and DISCUSSION

This study investigates to reveal the intentions of banking customers to use MB applications. For this purpose, an integrated model was applied by including the trust tendency to the variables of TAM and TPB. Thus, the model of the study tests 7 variables. According to the results of the structural equation model, five hypotheses of the research were supported and three were not. The study suggests the effect of PEU on PU (H1) and ATT (H3). These hypotheses, which are accepted by the research results, are also supported by previous studies (Lee, 2009; Riquelme & Rios, 2010; Paçan Özcan et al., 2019). Consumers want to use mb applications with less effort. Banks should develop user-friendly interfaces. Thus, it can be deduced that customers who find the MB application easy to use perceive the MB application as beneficial. An application that is perceived as easier to use than the other is accepted by users (Davis, 1989). Riquelme and Rios (2010) found that PU is the most related factor in determining usage intention, following by social norms and risk perception. In another study, it was reported that people may decide not to use MB services because they do not have the required knowledge and skills (Luarn & Lin, 2005). The hypothesis (H2), which investigates the effect of PU on ATT, was rejected unlike previous studies (Ceylan et al., 2013; Lee, 2009). While the benefit of using the applications did not affect the consumer attitudes, the ease of use was the explanation for almost all of the attitudes. With the use of MB apps changing after the Covid 19 era, more research is needed to explore this relationship.

The study proposes the effect of customer attitudes on the intention to use MB applications (H4). The results show the effect of ATT on BI and these results have been supported by previous research (Lee, 2009; Yang, 2012; Paçan Özcan et al., 2019). It proposes the effect of the opinions of study families and others (subjective norm) on the intention of banking customers to use MB (H5). The results showed that the SN had no effect on MB adoption. This conclusion is supported by previous research (Laforet & Li, 2005; Kazemi et al., 2013). Gürsel and Yanartaş (2021) stated that MB users are less influenced by their social environment in terms of MB usage due to their high level of education. The results of Kazemi et al. (2013)'s study showed that ATT and PBC affect MB adoption. However, the effect of SN was not found in explaining the BI to adopt MB. Consumers may believe that the system is useful and easy to use. However, they may feel that they do not have the necessary resources, such as expertise and money, to use the system (Luarn & Lin, 2005). PBC is the variable that explains this factor that affects the intention to use MB applications (H6). According to the research results (H6) hypothesis is supported (Lee, 2009; Yang, 2012; Ceylan et al., 2013). The study suggests the effect of banking customers' trust tendency on their intention to use MB applications (H7). Research results support this proposition. Previous studies confirm the effect of trust on the intention to use MB applications (Chaouali et al., 2016; Kumar et al., 2017; Sharma & Sharma, 2019; Kumar et al., 2020). The relationship between PU and BI was rejected (H8). This result coincides with the study of (Ceylan et al., 2013; Gibreel et al., 2018).

THEORETICAL and PRACTICAL IMPLICATIONS

The Internet and technology have led to significant changes in the way people do business and interact. Almost everyone uses a cell phone. The use of mobile applications for both communication and business purposes has become a necessity for banks to benefit from the competitive advantage of the internet in order to survive. Mobile applications, which are developed day by day, can offer many banking services. The use of MB applications provides convenience to customers and meets customer needs. It also offers various benefits to banks in terms of reducing the cost and time on the customer while performing financial transactions in the bank.

Although much research has been done on mobile banking, this issue remains important for several reasons. The most important implication of this research for the banking sector is that banks should primarily reveal and increase the benefits of MB applications in their marketing efforts. The PEU of mobile applications was found to be effective on PU. PU has no effect on the ATT to use mobile applications. Ease of use has an indirect effect on the effect of PU on ATT. Based on this result, the obstacle to MB is the inability to understand the perceived benefits of MB. There is some uncertainty in the minds of users about the benefits and outcomes of the system. In this case, in order to encourage customers to use MB applications, the primary goal should be to ensure that the services provided by the mobile application are felt by the customers as beneficial. The reason why the most important variable explaining the usage intention of MB applications is the PEU can be evaluated as the changing consumption behaviors of the customers with the pandemic period. With the pandemic, people should not be in crowded environments, avoid contact, etc. Along with their behavior, their intention to use mobile applications has also changed. Although the customers were not aware of the benefits of mobile applications, they showed an intention to use them. This is due to the ease of use of mobile applications. The ease of use of mobile applications affects customers' belief that they can use the application and pushes them to use the mobile application. It is also necessary to establish a trusting relationship with customers. Banks should create a secure banking atmosphere in MB applications and increase the trust level of existing and potential MB customers. To adopt MB, consumers need to believe that it is safe to pay online and perceive that their data is secure. According to the results of the research, PBC significantly contributes to the prediction of intentions. The existence of appropriate opportunities or sufficient resources (time, money, skills, collaboration with other people, etc.) to use mobile applications explains PBC, the customer's belief that he has the ability to use the mobile application affects the intention to use the mobile application. PBC and PEU have similarities in this respect. However, PBC refers to more than ease of use (such as time, money, and other factors). It indicates a person's perception of how difficult or easier it will be to perform a behavior. Banks should turn to regulations that will enable customers to use mobile applications more easily. Customers tend towards the application that they perceive more easily. Competitive advantage can be gained by focusing on the development of mobile applications. The findings of this research are significant in that they can be used to develop strategies to attract more users to use MB.

In summary, although much research has been done on mobile banking, this issue remains important because of its continued growth, potential for financial inclusion, convenience, cost savings, and security. As mobile technology continues to advance, mobile banking is likely to become even more important in the future.

LIMITATIONS and FUTURE RESEARCH

In this study, the TAM and the TPB variables, as well as the integrated model of the trust tendency variable, were used. New factors may emerge to explain the intention to use MB in future research. The quantitative method was used in the study. The primary data were obtained with the questionnaire technique. For future research, further evaluations can be made by applying the mixed model supported by qualitative research methods. In particular, comparative studies on physical banking applications and MB applications will contribute to the evaluation of trust tendency. The influence of previous experience of use should also be examined. In future studies, a more representative sample may be preferred.

ETHICAL TEXT

"With the decision of Çankırı Karatekin University Ethics Committee dated 25.10.2022 and numbered 28, the research complies with scientific research ethics. The writing guidelines, publication standards, research and publication ethics guidelines, and journal ethical guidelines are all complied with by this paper. The author(s) is/are responsible for any violations that may occur in relation to the article. "

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