

## FACTORS AFFECTING THE ADOPTION OF MOBILE BANKING IN THE BANKING SYSTEM

HAMID ASAYESH<sup>1</sup>, MOHAMMADREZA MOHAMMADI<sup>2</sup>,  
VAHID MIRZAEI<sup>3</sup> & FATEMEH KIAIE NEJAD<sup>4</sup>

<sup>1</sup>Lecturer Faculty of Humanities, University of Ayatollah Arozma Boroujerdi (RA), Iran

<sup>2</sup>Imam Khomeini Naval University of Noshahr, Iran

<sup>3</sup>Master of Accounting, Iran

<sup>4</sup>Expert Supreme Audit Court, Iran

### ABSTRACT

Profitable operation of a new technology, particularly innovation in services, depend on its acceptance by society. So in this study are specific to the banking system customers springing forth can be considered a potential client, mobile banking, the study population included customers in the banking system and the sample is 400 customers. And modified technology acceptance model mobile banking adoption factors affecting the banking system and is used by customers using Likert questionnaire and structural equation models was examined. Based on the results positive relationship between perceived ease of adoption of mobile banking, the negative relationship between perceived risk customers with adoption of mobile banking, positive relationship between the perceived influences the adoption of mobile banking customers to make confirmed. There is also a positive relationship between perceived usefulness customers to an adoption of mobile banking has been confirmed.

**KEYWORDS:** Mobile Banking, Banking System, Internet Banking

### INTRODUCTION

Technologies such as internet banking, phone banking and mobile banking in recent years, as methods for maintaining customer loyalty and increase market share are rampant. Banks of technology to reduce the cost of providing services that were once exclusively done by a bank employee is used.

In these circumstances, innovation and the emergence of new tools such as mobile banking will have a significant impact on the development of electronic banking. According to statistics, the mobile penetration rate is higher than any other technology.

In the application of information technology systems in organizations, efficiency and lack of demand is the problem. So one of the critical factors affecting the Bank's competitive strategy, customer behavior, so it is very important to study factors influencing his behavior. Because the development of new technologies is subject to its acceptance by the customer. Customer demand plays an important role in the company's decision to adopt an innovation.

Profitable exploitation of an innovation, particularly innovation in services, depend on its acceptance by society. Hence, when the demand of non-uniform, firm in the decision to use the technology needs assessment of user interest in the use of technology, products, or services are new, so the main question of this study is what factors Surfing the adoption

of mobile banking customers by the banking system? The main objective of this study was to investigate the factors influencing the adoption of customer acceptance of mobile banking is the banking system.

## **THEORETICAL AND LITERATURE**

### **Mobile Banking**

Mobile banking as a channel for wireless communications for the production of value by customer banking transactions came into existence. Bank Mobile banking can be done through mobile devices like the mobile phones called. As well as a new method to access banking services through the channel whereby the customer to interact with the bank via a mobile device. Through mobile banking, customers can bank accounts and financial services are highly available. Currently, most banks in the world to offer mobile banking services to customers. The main motivation of the banks to provide mobile banking services, having a distribution channel and the other is more efficient and reduce operating costs.

The most important system services in the following order, they are:

- The possibility of receiving a variety of information related to customer accounts
- The possibility of purchasing from stores, shopping centers and paid expenses Hotel
- Observation of the market, buying and selling of securities and transfer them via mobile internet
- Check and replace it
- The possibility of payment of bills via mobile phones in the form of mobile banking

### **Technology Adoption Models**

Several theoretical models for understanding the behavior and attitudes of consumers towards new technologies is presented. Acceptance by customers as soon as: 1- Theory of Reasoned Action 2- The Theory of reasoned Action 3- Technology Acceptance Model 4- Theory of Theory of Reasoned Action 5- The Theory of reasoned Action 6- Technology Acceptance Model 7- Theory of planned behavior 8- Model of Combining the technology acceptance model and the theory of planned behavior 9- Model of PC Utilization. Despite the differences between these models, the special structure and relations between them are given in each common.

So that all the models and their perceptions of consumers believe technology has a significant impact on consumer behavior in using these services. The most famous version Technology Acceptance Model (T AM) is, This model is based on the theory of the cause of action (TRA)) is designed. Davis et al (1989) using different variables, behaviors, people have with the theory of design practice. TRA based on the theory of individual behavior and intentions of his intentions is also a function of attitudes and norms within them. This theory is one of the most comprehensive models in studying the adoption of information technologies and associated systems.

## **LITERATURE**

The present study, the effects of various factors on the acceptance of mobile banking customers are studied. And models provide more comprehensive than previous studies, some research on the following table

Table 1

Researcher	Year	The Factors Influencing Technology Adoption
Legzian & yagma	2010	facilitator conditions, performance expectations, effort expectancy and social impact
Taghavi & torabi	2010	compatibility, cost of test functionality and usefulness
Yaghoobi & et al	2011	Expectations about performance, performance expectations, expectations of working conditions and facilitating social impact
Sun & et al	2012	community
Yu	2012	Expected performance, an effort expected, social influence, facilitating conditions, perceived reputation, financial costs and perceived self-perceived ability
Kazi & Muhammad	2013	Social influence, perceived risk, perceived usefulness, and perceived ease of use
Fen Lin	2013	Social influence, perceived risk, perceived usefulness, and perceived ease of use
Liébana-Cabanillas & et al	2013	Strategic variables of social, economic, financial
Hanafizadeh & et al	2014	Social influence, perceived risk, perceived usefulness, and perceived ease of use
Ijaz & et al	2015	Compatibility (lifestyle and devices), perceived usefulness and attitude

### Development of a Conceptual Model and Research Hypothesis

- In this study, factors affecting the adoption of mobile banking, using the Technology Acceptance Model (TAM) with the addition of risk factors and perceived social influence by Cooper and Schindler (2011) has been introduced, so the relationship between perceived ease of use, perceived usefulness, perceived risk, social influence, and customer acceptance of mobile banking customers to make the banking system. The main assumptions of the study are as follows:
- Perceived ease of use in customers' acceptance of mobile banking customers' banking system to make a significant impact.
- Perceived usefulness customers, the acceptance of mobile banking customers' banking system to make a significant impact.
- Customers' perceived risk in the banking system to adopt mobile banking customer acceptance was significant.
- Perceived social influence on the adoption of mobile banking customers' banking system to make a significant impact.

Since taking into account all factors regarding the use of mobile banking services are difficult, the index theory reforms presented in this field, and Observations on psychological characteristics, demographic and personal users of mobile banking services and features technical services, a conceptual model for this study was obtained. The important thing is to use a lot of different research model. This model, according to various studies conducted in this area and the pattern has been extracted from the papers.

### RESEARCH METHODOLOGY

The Likert scale questionnaire used in this study and taking notes from the library is also involved. Methods of data analysis in this research, regression is generally partial regression methods of structural equation modeling (SEM) is. The research community, customers' banking system of mobile banking does not use, and to involve the community in the sample, and to increase the similarity of the community and increase the accuracy of sampling statistical sample required for this study and hypothesis testing for selective considered. The main advantage of this method is that it can ensure that the characteristics of the selected samples. So in this study, the selective sampling method is used. The realm of time,

place, topic research, so that customers of Mobile Bank do not use during the first week of May of 1396 branches during office hours (8 to 12) refer, among bank branches in Tehran and Boroujerd cover is each branch according to the number of users on the number of samples to be chosen.

## DATA ANALYSIS AND RESULTS

### The Results of the Research Models

After importing the raw data for analysis of the questionnaires, the software SPSS, data analysis software to analyze structural equation EQS entered.

The next step was included in software research model and the model output was extracted Dnrm

Based on the results obtained relationships between latent variables is as follows:

**Table 2: Results of Structural Equation Modeling**

Path Coefficients			
Description of the	Estimating	Standard Deviation	T Statistic
Education> perceived ease	0/161	0/033	*7/85
Terms facilities> perceived ease	1/1	0/047	*223/29
Ease of felt -> perceived ease	5/304	1/72	3/084
Usefulness -> perceived usefulness	0/64	0/019	*33/46
Perceived costs -> perceived usefulness	-0/485	0/023	*-21/083
Experience dating -> perceived usefulness	0/321	0/027	*12/036
Social influence -> perceived influence	0/401	0/016	*24/885
Satisfaction -> perceived influence	0/387	0/013	*30/114
Notifications -> perceived influence	0/102	0/006	*16/556
Reputation felt -> perceived influence	0/138	0/005	*26/119
Awareness persons -> perceived risk	-0/087	0/011	*-8/048
Anxiety -> perceived risk	0/310	0/014	*22/393
Feel risk -> perceived risk	0/393	0/031	*12/562
Trust is perceived -> perceived risk	-0/421	0/057	*-7/328
Ease perceived -> Reception	0/259	0/066	*3/925
Perceived usefulness -> admit	0/036	0/014	2/57*
Perceived influence -> Reception	0/47	0/064	*7/405
Perceived risk -> Reception	-0/409	0/071	*-5/797

\*Parameters marked with an asterisk are significant at the 5% level. (confidence interval of 95 percent)

## THE TEST RESEARCH HYPOTHESIS

### The Final Research Model

The hypothesis according to statistics confirm or deny t have been as follows:

**Table 3**

Effective Factors	Dependent Factor	Approve or Reject the Hypothesis Based on the T-Statistic
Perceived ease of use in customers	customers Acceptance of mobile banking to adopt	Verification
Perceived usefulness customers		Verification
Perceived risk in customers		Verification
Perceived social influence		Verification
Training customers to use the perceived ease	Perceived ease of use in customers	Verification
Facilitating conditions of use		Verification
Perceived usefulness	Perceived usefulness in customer	Verification
Experience acquaintances		Verification

Effective Factors	Dependent Factor	Approve or Reject the Hypothesis Based on the T-Statistic
Perceived costs		Verification
Personal anxiety on perceived risk	Perceived risk	Verification
BankTrust		Verification
Awareness persons		Verification
Perceived satisfaction	Perceived social influence	Verification
Reputation felt		Verification
Reputation felt		Verification

With regard to significant variations in the acceptance of mobile banking customers the ultimate model research is to develop the banking system is low.

## CONCLUSIONS AND SUGGESTIONS

The results showed that consumer education, facilitating conditions of use, notification of the adoption of mobile banking services have a significant effect. Credit feel a sense of confidence in the bank and an important factor in accepting risks have been assessed, a significant correlation was also beneficial. Intervening variables into two categories: the variables under the control of banks and stimulus variables are divided. Stimulus variables, including customer training, facilitating conditions of use, notification of service

These variables all have a high impact on adoption. On the other hand, confidence in the bank and bank credit as control variables affect the bank's acceptance and satisfaction and can have a significant positive effect on driving variables. The bank's policymaking to develop a relationship with customers to gain the trust of the bank, credit can increase the acceptance and customer satisfaction to be had. So, thanks to the significant adoption of mobile banking and variables in the final model, this research suggests is that banks take the necessary measures to increase adoption of mobile banking in this area do. For example, it is suggested banks in the field of consumer education and awareness of, the plan.

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