

## THE FACTORS INFLUENCING CUSTOMER USAGE OF MOBILE BANKING SERVICES IN JORDAN

MAHMOOD JASIM ALSAMYDAI<sup>1</sup>, SAAD GALIB YASSEN<sup>2</sup>, HUSAM MUSTAFA ALNAIMI<sup>3</sup>,  
DIMA MOUSA DAJANI<sup>4</sup> & IHAB ALI AL-QIREM<sup>5</sup>

<sup>1,3,5</sup>Department of Marketing, Faculty of Economic and Administrative Science,  
Al-Zaytoonah University of Jordan, Jordan

<sup>2</sup>Management Information System, Faculty of Economic and Administrative Science,  
Al-Zaytoonah University of Jordan, Jordan

<sup>4</sup>Department of Tourism, Faculty of Economic and Administrative Science,  
Al-Zaytoonah University of Jordan, Jordan

### ABSTRACT

This current study seeks to determine the factors that affect the acceptance of the use of mobile banking services from the viewpoint of customers. These factors are divided into two groups in terms of their impact; the first represents the motivating factors that drive customers to use mobile banking services, it includes five factors: (Assurance, ease of use, communication, speed of transaction, pursuance), the second are the factors impeding the use of mobile banking services, which represent obstacles that prevent the use of mobile banking services, it also includes five factors: (Personal desires, knowledge, habit, resistance to innovations, experience).

A study model has been designed, containing the (motivating and impeding) factors, in addition to intention, attitude, perceived usefulness, and finally the usage of mobile banking. Consequently, the study model is made up of six dimensions with six developed hypotheses one per each corresponding dimension, with the exception of the sixth hypothesis which has been divided into two sub- hypotheses. Six hypotheses were developed based on the dimensions of the study as well as the relevant literature. In addition, a seventh hypothesis was added to measure the correlation between the different constraints of the study model. In order to collect the data required for examining the hypotheses and reaching conclusions, a questionnaire, consisting of (19) questions covering the dimensions and hypothesis of the study was designed. The design and development of this questionnaire was based on an initial pretested survey distributed to a sample consisting of (56) customers of Jordan Banks.

The initial survey was also pretested and evaluated by a panel of marketing banking experts and IT specialists. In order to assess the items of each constraint, the questionnaire was then distributed to customers of commercial banks in Amman. Data collection resulted in 36 usable surveys for subsequent analysis. Overall, the findings provided support for the model of the study. All the hypotheses regarding the impact of the factors included in the study on usage of mobile banking were supported. All the hypotheses of the study have been accepted, indicating the positive impact of the motivating factors on the usage of mobile banking services, and the negative impact of the impeding factors on the usage of mobile banking services. At the same time, the study confirms that there is a variable correlation for all constructs (the dimensions of the study), with the result that "the degree of correlation between the motivating factors of mobile

banking services usage is greater than the degree of correlation between impeding factors". This result is acceptable as the members of the study sample use mobile banking services.

**KEYWORDS:** Mobile Bank, Service, Impeding Factors, Attitude, Intention, Perceived Usefulness

## INTRODUCTION

The great and rapid development of information and communication systems has led to an expansion in the use of technological means by organizations and individuals alike, which in turn reflected on the expansion in the use of the Internet as a primary mean of communication alongside other means of communication such as mobile phones in many activities including marketing activities which involve many of the practices that have been adopted by the organizations of different types such as electronic marketing, online marketing, mobile marketing, and many others. Mobile marketing is one of the aspects of development in the field of products marketing (goods, services, and ideas), it is thus considered a tool of electronic marketing which can be defined as using interactive wireless media to provide customers with information about the products at any time in a way that generates value to stakeholders), or as a set of practices that enables the organization to connect to its public interactively (Alsamydai & Rudaina, 2012). Therefore, a lot of organizations began using mobile marketing to facilitate their transactions and maintain continuous contact with their customers, including banks which began to expand in providing mobile banking services in accordance with the so-called mobile banking. This type of service is considered an advanced mean of providing banking services for customers as it necessitates a basic knowledge base from customers, experience in interaction, and a change in the traditional customs in dealing with banks.

The customers' acceptance of the usage of mobile banking services depends on many factors, including motivating factors that drive toward the acceptance of such usage such as: (Pursuance, speed of transaction, communication, ease of use and assurance). These five factors included in the research represent the motivating factors that the study proves their positive impact on the usage of mobile banking services.

The other group included in the study represents impeding factors which hinder this usage, such as: (Personal desires, personal knowledge, habit, resistance to innovation and experience). The results of this study demonstrate that three of the impeding factors have a positive impact on usages which are: (Personal desires, Experience and habit, Personal knowledge). Conversely, two factors of that group (Personal Knowledge, Resistance to Innovation), have a negative impact on customers in the usage of mobile banking services. In addition to the two groups of factors previously mentioned, the study model includes other factors such as (Intention, Attitude, Perceived Usefulness), and the usage of the services of mobile banking as a subordinate factor that is affected by the overall factors included in the study model. The study model has been tested, proving the presence of an impact of all these factors on the usage of mobile banking services. All six hypotheses corresponding with the six dimensions of the study have been accepted. The correlation coefficient was additionally used to determine the relationship between the constructs of the study model study, which demonstrated that there is a significant correlation between those constructs. Despite the wide scope of this study which includes many of the factors affecting the customers' acceptance of the usage of mobile banking services and in spite of its findings, future studies should take interest in this subject and particularly with respect to the impeding factors that affect the usage of this type of mobile banking services.

## RESEARCH QUESTIONS

Mobil Banking is one of the modern and advanced means of providing electronic banking services in addition to the technological means and methods commonly used at the present time. However, this type (mobile banking services) still suffers from several problems regarding the customer's usage due to multiple factors including factors impeding the customer's usage of this type, although there are other factors motivating toward the adoption of this type of providing banking services. This has led this study to seek to determine the nature of the factors that motivate toward the usage of this type of service in order to strengthen them and focus on them in promoting these services, as well as to seek to minimize the impact of the impeding factors in the mindset of the customer through encouragement to alleviate his/her fears in that regard.

This research will attempt to answer the following questions:

- What is the impact of the motivating factors on the customer's usage mobile banking services?
- What is the impact of impeding factors on the customer's usage of mobile banking services?
- What is the impact of the perceived usefulness of the usage of mobile banking services?
- What is the impact of the attitude of the customer on the usage of mobile banking services?
- What is the impact of intention on the usage of mobile banking services?
- What is the correlation between the different factors (motivating, impeding, perceived usefulness, attitude, and intention) and the usage of mobile banking services?

## RESEARCH OBJECTIVES

The Purpose of the current research is to identify and examine the motivating and impeding factors and their impact on the usage of Mobile banking services.

Many of the motivating and impeding factors affect banking services and mobile banking users. At the same time, these are modern services that require a certain degree of expertise and familiarity with the electronic and technologic means used in the application of mobile banking services.

Therefore, the following research objectives were considered worthy of exploration:

- Determining the factors that motivate the customer to use mobile banking services.
- Determining the factors that impede the customer from using mobile banking services.
- Determining the manner in which the factors of perceived usefulness, attitude and intention affect the usage of mobile marketing services.
- Determining the correlation of the impact of the perceived usefulness and the attitude and intention on the user of mobile banking services.

## STUDY MODEL

The observer of marketing literature would notice that the concepts of Mobile Banking Services-Banking and

Internet Banking, as well as the factors affecting consumers acceptance and usage of mobile banking services have received considerable attention by several researchers (Yong, Jong-Hyun, & Nambo, 2009; Dikit at al, 2012). Based on these studies as well as the results of pre-test of a survey distributed to 42 Jordanian Customers and taking into consideration the various marketing environment factors related to the banking sector in Jordan, the study model was developed which has conceptualized the focal constructs, that is the factors influencing using the Mobile banking services.

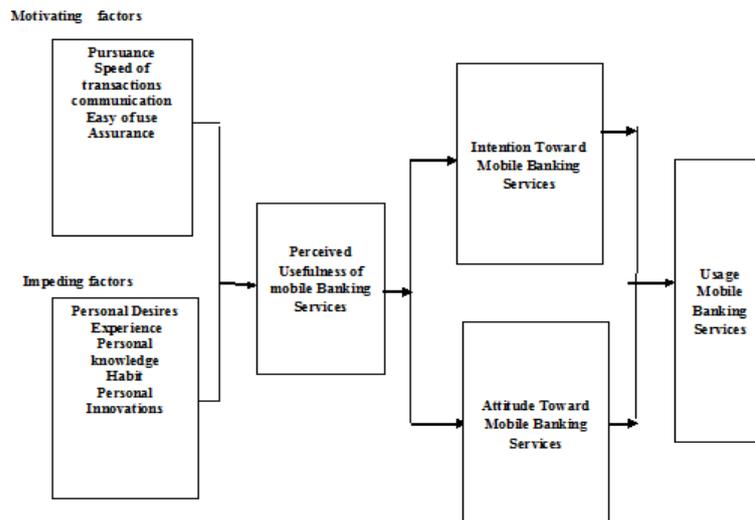


Figure 1: Study Model

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

As an aim of the current study is to determine the factors that influence customer intention towards usage mobile banking services, the literature related to motivating and impeding factors to usage of mobile banking is listed as following.

### Motivating Factors

#### Ease of Use

Extensive research over the past decade provides confirmation of the significant effect that ease of use has on perceived usefulness (Agarwal & Prasad, 1999; Davis et al., 1989; Hu, Chau, Sheng, & Tam, 1999; Venkatesh, 1999, 2000; Venkatesh & Davis, 1996, 2000; Venkatesh & Morris, 2000). Mobile banking systems must be both easy to learn and easy to use in order to prevent the using problems of mobile banking system. In this study, it is argued that the mobile banking ease of use is one of the motivating factors of perceived usefulness of mobile banking.

#### Assurances

Assurances in the form of agreements, contracts, regulations, policies, laws, feedback forums, guarantees, and others enhance initial trust between the two parties in a relationship (McKnight et al., 2004; Pavlou & Gefen, 2004). Customers understand that there are suspicions and risks associated with dealing with mobile banking due to the information irregularity between buyers and sellers which can result in opportunistic behaviors (Kim & Prabhakar, 2004). Therefore, in this study, we examine the effects of various assurances offered by mobile banking companies, which include reimbursement for financial losses because of service errors and the protection of customer information and privacy, on perceived usefulness of mobile banking.

### **Speed of Transactions**

The amount of time required to perform offline banking transactions is, relatively, higher than the time to log in mobile banking to perform the same transactions by visiting banks branches. Within the literature of mobile banking, few studies discuss the importance of the speed of performing bank's transactions by using mobile banking. We argued that the time of performing different transactions with the bank by using mobile banking is lesser than doing the same transaction by using offline banking. That is, the higher the transaction speed is, the better the customer's perceived usefulness of mobile banking.

### **Pursuance**

"The account that travels with you". This is needed in today's fast business environment. With mobile banking facilities, customers can pursuit their bank transactions at any time and in any condition or anyhow. In the context of mobile banking, one of the reasons people use mobile banking is that they find the systems useful to follow up their transactions. Benefits are also observed by banks in the form of reducing the number of branches which in turn reduces the cost per transaction. Within mobile banking research, there is extensive research providing evidence of the significant effect of following up transaction by banks' customers and perceived usefulness of mobile banking on usage intention (e.g., Haque et al., 2009; Vijayakumar, & Jayachitra, 2013). In this study, we argue that the customer's pursuance of account transactions significantly affects the customer's perceived usefulness of mobile banking.

### **Communication**

Clark (2008) argued that as a channel the mobile phone can expand the number of channels available to customers to obtain information about their banks' offers and news. That is, over the years, mobile banking has developed from a simple information delivery channel to a comprehensive banking transaction channel and this development has been fueled by both growing business needs and progress in mobile technology. Banks implemented a solution of proactively communicating account balances and important transactional activity on accounts to customers through a simple SMS service. Customers stopped using ATMs or offline banking for inquiry transactions. In this study, we suggest that communication is one of the motivating factors to using mobile banking and that it significantly affects the customer's perceived usefulness of mobile banking. Taken the above together, this work posits the following hypothesis to explore the relationship between the motivating factors namely, ease of use, assurances, speed of transactions, pursuance and communication, and customer's usage of mobile banking:

**H1:** Motivating factors have a significant positive effect on customer's usage of mobile banking services

### **Impeding Factors**

#### **Personal Desire**

An alarming question on the minds of many banks is whether or not people would use mobile banking services. Staff (2006) and Cook and Goette (2006) argued that the customer's desire negatively affects their perceived usefulness of mobile banking services. That is, personal desire play a critical role in using mobile banking services since as the desire of using this service decreases the perceived usefulness of mobile banking services will decrease. Hence, we suggest that personal desire negatively affects customer's perceived usefulness of mobile banking.

## **Experience**

While a mobile banking experience generally influences a customer's usage, the degree to which a mobile banking experience affects a consumer's usage varies and is subject to the particular technical support being examined. Specifically, the use of mobile banking depends on the technical support itself and the skill or experience level of the individual using it. Karjuoto et al. (2002) contended that prior computer experience, prior technology experience, and prior personal banking experience positively affect consumers' attitude and behaviors towards online banking. However, the limited prior experience of using mobile banking will contribute negatively to the perceived usefulness of mobile banking. Mobile banking experience has been found to be associated with perceived usefulness (Chung & Kwon, 2009). Given the lack of prior experience of mobile banking usage of Jordanian banking customers, we propose that experience has a negative impact on perceived usefulness of mobile banking.

## **Resistance to Innovations**

Rammile and Nel (2012) explain the influence of customers' resistance to mobile banking on their behavioral intention through usefulness and ease of use constructs as mediator variables extracted from Technology Acceptance Model (TAM) theory that has been first introduced by Davis (1989) to present "the determinants of technology acceptance." Barati and Mohammadi (2009) argue that if the resistance to mobile banking would increase, the intention of using mobile banking would decrease. Further, Laukkanen and Cruz (2010) suggest that the functional and psychological barriers to innovation positively and significantly affect the non-adoption of mobile banking. Thus, a negative relationship between the resistance to innovation and the intention of using mobile financial services would be expected. Hence, in this study we propose that customers' resistance to innovation negatively affects the perceived usefulness of mobile banking.

## **Habit**

Within the mobile banking literature; attention has been given to the impact of customer's habit of dealing with their banks on customer's perceived usefulness of mobile banking (Laforet & Li, 2005; Servon, & Kaestner, 2008). Bank's customers prefer to perform their transaction with banks by using offline services, therefore, this habit is preventing customer from using mobile banking services. Consequently, we suggest that there is a negative relationship between customer's habit and their perceived usefulness of mobile banking.

## **Knowledge**

A review of the offline and online bank services literature has revealed that limited customers' knowledge about mobile banking services has an impact on perceived usefulness of mobile banking (Laforet & Li, 2005; Servon, & Kaestner, 2008). For example, a considerable amount of knowledge is required to improve consumers' use of mobile banking services. In this context, consumer may not quickly adopt mobile banking because of a lack of understanding and knowledge about this technology (Corritore, Kracher & Wiedenbeck, 2003). Further, Gerrard, Cunningham, and Devlin (2006) find that customers who have limited knowledge about using mobile banking were more likely to continue to use traditional banking services. Therefore, we argue that knowledge about mobile banking has a significantly negative effect on perceived usefulness of mobile banking.

The present study argues that impeding factors, as discussed previously, influence the customer's usage of mobile banking. Accordingly, this study hypothesizes:

**H2:** Impeding factors have a significant negative effect on customer's usage of mobile banking services.

### **Perceived Usefulness of Mobile Banking**

According to the TAM, perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). Perceived usefulness is defined as the extent to which an individual believes that he or she would benefit from using mobile banking. The importance of perceived usefulness has been widely recognized in the field of mobile banking services (Bhatti, 2007; Guriting & Ndubisi, 2006; Kim, Chan & Gupta, 2007; Laforet & Li, 2005; Liao & Cheung, 2002; Polatoglu & Ekin, 2001). Previous research has consistently argued that there is a positive relationship between perceived usefulness of mobile banking, intention and attitude toward mobile banking and mobile banking usage (Bhatti, 2007; Davis et al., 1989; Kim et al., 2007; Pavlou, 2003; Venkatesh, 2000; Venkatesh & Davis, 1996, Venkatesh & Morris, 2000). For example, Chau and Lai's (2003) examined the contributing factors towards the consumer's adoption of internet banking and determined that perceived usefulness was found as an important factor in fostering a positive attitude towards accepting the internet banking services. Also, within mobile banking literature, a significant positive relationship between perceived usefulness of mobile banking and the usage of mobile banking is found (e.g., Davis, 1989; Davis et al., 1989; Gefen, Karahanna & Straub, 2003; Venkatesh & Morris, 2000). People evaluate the consequences of their behavior in terms of perceived usefulness and their behavioral choices are based on the attractiveness of the perceived usefulness. Thus, this study hypothesizes the following:

**H3:** Perceived usefulness of mobile banking have a significant positive effect on customer's usage of mobile banking services

### **Attitude toward Mobile Banking**

Attitude toward mobile banking has received considerable attention within the consumer behavior literature. It has been found that attitudes and intention towards mobile banking were both influenced by customer's perceived usefulness. The concept of attitude towards behavior seems to play an important role in predicting and understanding consumer intention and behavior (usage of mobile banking) (Ajzen, 1991, 2002, 2005; Alsamydai, Yousif, & Al-Qirem, 2013; Bansal & Taylor, 1999; Smith et al., 2008; Pavlou, 2003). Indeed, consumer attitudes towards mobile banking are an important indicator of customer intention and usage of mobile banking services. Therefore, in this study we propose that customer's attitude towards mobile banking significantly affects their intention towards mobile banking and the usage of this service. Accordingly, the following hypothesis is posited:

**H4:** Customer's attitude toward mobile banking has a significant positive effect on customer's usage of mobile banking services

### **Intention toward Mobile Banking**

Behavioral intention refers to an individual's willingness to perform (Ajzen, 2002), or not to perform, a specific future behavior (Konerding, 1999). It has been considered an important predictor of an individual's behavior (Ajzen, 2002; Castañeda Muñoz-Leiva, & Luque, 2007). Almost every step in the proposed on-line transaction process requires customers to interact with their banks and use mobile banking. Since intentions towards the use of mobile banking, it is justifiable to consider the variables of the technology acceptance model in predicting intentions to use mobile banking for transactions. TAM has received substantial attention in the information systems literature because it focuses on system use, has reliable instruments with outstanding measurement properties, and is frugal. It has been shown to apply to

a wide range of information technologies, including e-commerce. For instance, Moon and Kim (2001) investigated the impact of perceived usefulness and ease of use on consumer use of the internet. Thus, in this study, we argue that customer's intention towards the use of mobile banking is influenced by their perceived usefulness of mobile banking. Also, we suggest that customer's intention toward using mobile banking significantly affects the usage of mobile banking. This is line with Ajzen (1991), as within the framework of the Theory of Planned Behavior (TPB), customers intention toward behavior is largely influenced by consumers' attitudes. For this reason, this research hypothesized that customers' attitude toward mobile banking has a positive influence on their intention toward mobile banking.

The above discussion reveals a need to ascertain the role of customer intention toward mobile banking. Therefore, the following hypothesis is posited:

**H5:** Customer's intention toward mobile banking has a significant positive effect on customer's usage of mobile banking services

### **Usage of Mobile Banking**

The usage of mobile banking by bank's customers is the final outcome in the proposed model of this study. Practically, every step in the proposed mobile banking transaction process requires customer's attitude and intention towards using this service (Moon & Kim, 2001; Pavlou, 2003). Hence, we argue that customer's attitude and intention towards mobile banking significantly affects the usage of mobile banking services. Recently, considerable research has been done to explore the relationship between the usages of mobile banking and the customer's perceived usefulness (e.g., Bhatti, 2007; Chau & Lai's, 2003; Davis et al., 1989; Kim et al., 2007; Pavlou, 2003; Venkatesh, 2000; Venkatesh & Davis, 1996, Venkatesh & Morris, 2000). Therefore, we examine the relationship between customer's perceived usefulness of mobile banking and the usage of this service. In addition, other hypotheses have been developed to examine the correlations between all the constructs under the study; which are:

**H6:** Motivating and impeding factors, perceived usefulness, customer's attitude and intention toward mobile banking influence customers to accept usage of mobile banking services.

**H6-1:** Motivating factor, perceived usefulness, customer's attitude and intention toward mobile banking influence customers to accept usage of mobile banking services.

**H6-2:** Impeding factors, perceived usefulness, customer's attitude and intention toward mobile banking influence customers not to accept usage of mobile banking services.

The second category: in order to test the relationship between the constructs of the study model.

**H7:** There is a significant relationship between the constructs of the study's model.

## **METHODOLOGY**

### **Data Source**

This current research has utilized two types of data sources necessary to conduct this study:

- **Secondary Sources:** Data and information obtained from reviewing the literature and research findings related to this study and its objectives. Also used in the design and development of the study's model.
- **Primary Sources:** Pertaining to data collection through the development and design of an initial questionnaire

that was distributed to 56 individuals. Based on the results, the final questionnaire was designed and then evaluated by a number of specialists in the field of marketing who provided observations and suggestions for its final drafting which included (19) question distributed over six dimensions.

**The Scale and Dimensions**

The scaling technique adopted by this study is considered one of the main instruments of current marketing research (Malhotra et al, 2004) and is most commonly used for assessing how people feel or think about objects or constructs (Neuman, 2003). Having taking into consideration the criteria for selecting a scaling technique (Alsamydai et al, 2013), for example, information needed by the study and the characteristics of the respondents as well as the model of administration (Alvin et al 2003), the quintet(Likert) scale was chosen for the current study. Therefore, all the focal constructs of the current study were measured on quintet (Likert) scale ranging from "To a very great extent to" To a small extent"/ "Strongly disagree".

This current study was divided into six dimensions relating to the different constructs of the study model:

Dimension (1) The Motivating Factors.

Dimension (2) The Impeding Factors.

Dimension (3) The Perceived usefulness.

Dimension (4) The Attitude toward mobile Banking Services.

Dimension (5) The Intention toward Mobile Banking Services.

Dimension (6) The Usage of Mobile Banking Services.

**Analyzing Method**

Several statistic techniques were used including Cronbach's alpha one sample test, descriptive analysis, and frequency analysis. The tests analysis was used to accept/reject the hypotheses (group 1) through testing the average mean of single sample, based on the value of scale midpoint, the higher the value the more favorable the attitude, and vice versa. Amid point equal to (3) was chosen by adding the lower coded value of the liker scale (1) and the upper coded value (5) of the liker scale. Person's correlation coefficient was also used for testing the hypotheses (group 2).

**RESULTS**

**Test of Reliability**

The researchers submitted the questionnaire to (18) referees of university professors and marketing specialists to verify its validity. Cranach's alpha coefficient has been used with a value of Cranach's alpha ( $\alpha = 76.3$ ) for all variables of the study, which is a good and suitable value for the purposes of the study being higher than the accepted percentage of 60%.

**Table 1: Reliability Coefficients**

N of Cases	Cronbach's Alpha	N of Items
365	.763	19

## Results General

By using descriptive analysis it was determined that the mean of all questions are over the midpoint (3) except for questions (7-9). These results are shown in table (2)

**Table 2: General Results**

	Questions	Mean	Std. Dev	T.	Sig(2) Tailed
<b>First Dimension: Motivate Factors</b>					
1	To what extent do pursuance affect your usage of Mobile Banking Services	3.30	1.47	3.92	.000
2	To what extent do speed affect your usage of Mobile Banking Services	3.39	.91	8.25	.000
3	To what extent does communications affect your usage of Mobile Banking Services	3.16	1.06	2.90	.004
4	To what extent does ease of use affect your usage of Mobile Banking Services	3.49	.88	10.60	.000
5	To what extent does assurance affect your usage of Mobile Banking Services	3.35	.99	7.99	0.000
<b>Second Dimension Impeding Factors</b>					
6	To what extent does your personal desires affect your usage of Mobile Banking Services	3.80	1.02	14.96	.000
7	To what extent does your personal knowledge affect your usage of Mobile Banking Services	2.90	1.06	-1.71	.007
8	To what extent does your habit affect your usage of Mobile Banking Services	3.70	1.02	13.13	.000
9	To what extent does your Resistance to innovation affect your usage of Mobile Banking Services	2.69	1.17	4.96	.000
10	To what extent does your experience affect your usage of Mobile Banking Services	3.75	1.02	15.01	.000
<b>Third Dimension Perceived Usefulness</b>					
11	To what extent does perceived usefulness affect your attitude to usage Mobile Banking Services	3.31	1.09	5.46	.000
12	To what extent does perceived usefulness affect your intention to usage of Mobile Banking Services	3.31	1.18	5.01	.000
13	To what extent does your perceived usefulness affect your intention your usage of Mobile Banking Services	3.66	1.08	11.68	.000
<b>Four Dimension Attitude</b>					
14	To what extent does your attitude affect your usage of Mobile Banking Services	3.11	1.08	1.94	.000
15	To what extent does your attitude affect your usage of Mobile Banking Services	3.90	1.01	1.94	.001
<b>Five Dimensions Intention</b>					
16	To what extent does your intention affect your usage of Mobile Banking Services	3.37	1.09	6.49	.000
17	Your Intention toward Mobile Banking effect your usage of Mobile banking Services	3.66	.98	6.49	.000
<b>Six Dimensions Usage Mobile Banking</b>					
18	Do motivate factor, perceived usefulness, your attitude and intention toward Mobile Banking make you accept using of Mobile Banking Services	4.06	.78	26.37	.000
19	Do impeding factors, perceived usefulness, your attitude and intention toward Mobile Banking make you not accept using of Mobile Banking Services	3.78	.86	17.35	.000

## Testing Hypothesis

The First Category: test results of the first set of hypotheses of the study are shown in Table (3). Statistical

analysis of this table illustrates an overall mean score of the respondent which measures the dimensions (D1, D2, D3, D4, D5 and D6) that corresponds to the first co hypotheses. The mean values of these are (H1=3.35, H2=3.30, H3=3.42, H4=3.50, H5=3.48 and H6=3.92). These values are above the scale midpoint (3) with the standard deviation showing small dispersion. These result were further validated by the one sample t- test which revealed that the overall mean difference for these dimensions as a whole was statistically significant (N = 0.000) at (Ns = 0.05) with a height T-value (H1=11.22, H2=10.76, H3=9.45, H4=11.71, H5=10.62 and H6=29.20), these scores are higher than tabular (tabular 1 = 1.96).

As a result, the set of these six hypotheses is accepted; these results are shown in Table (3):

**Table 3: Testing Hypothesis First Category**

The Hypothesis	Test Value = 3			
	Mean Score	St of Dev	T Value	Sig/2 Tailed
<b>H1:</b> Motivate factors have a significant positive effect on customers of mobile banking Services	3.35	.602	11.22	.000
<b>H2:</b> impeding factors have a significant negative effect on customer's usage of mobile banking Services	3.30	.518	10.76	.000
<b>H3:</b> Perceived usefulness of mobile banking have a significant positive effect on customer's usage of mobile banking Services	3.42	.865	9.45	.000
<b>H4:</b> Customer's attitude toward mobile banking has a significant positive effect customer's usage of mobile banking Services	3.50	.826	11.71	.000
<b>H5:</b> Customer's intention toward mobile banking has a significant positive effect customer's usage of mobile banking Services	3.48	.931	10.62	.000
<b>H6:</b> Motivate impeding factors, perceived usefulness, customer's attitude and intention toward mobile banking make you accept using of mobile banking Services	3.92	.604	29.20	.000
<b>H6-1:</b> Motivate factors, perceived usefulness customers attitude and intention toward mobile banking make customers accept using of mobile banking services	4.06	.78	26.37	.000
<b>H6-2:</b> Impeding factors, perceived usefulness customers attitude and intention toward mobile banking customers not accept using of mobile banking services	3.78	.86	17.35	.000

The second Category: it tests the constructs of the study model in order to test the relationship between the constructs of the study model. Pearson correlation coefficient was adopted and hypothesis H7 was developed. There is a significant relationship between the constructs of the study model (motivating factors, impeding factors, perceived usefulness, attitude, intention and usage of Mobile Banking). Results indicate that the correlation between the motivating factors and using mobile banking (0. -501) is higher than the correlation between the impeding factors and not using mobile banking (.175).The highest correlation is between D3 and D5 (.507) regarding the relationship between awareness and the use of mobile banking services, which complies with the behavioral theories. Further, there is an inverse relationship between impeding factors and both perceived usefulness and the use of mobile banking services.

**Table 4: Pearson Correlation**

Dimensions	D1	D2	D3	D4	D5	D6
D1	1.00	.254**	.166**	.285	.383	.501**
D2	.254**	1.00*	-.078	.212**	.343**	-.175
D3	.166**	-.078	1.000	.213**	.265**	.091*
D4	.285**	.212**	.213**	1.000	.507**	.454**
D5	.383**	.343**	.265**	.507**	1.000	.285**
D6	.501**	-.175	.091*	.454**	.285**	1.000

\*\*Correlation is significant 0.01 level 2- tailed)

## DISCUSSIONS AND CONCLUSIONS

This current study aims to identify the factors influencing customers' use of the mobile banking services by examining several areas related to this subject. For this purpose, a study model was developed consisting of six dimensions including motivating factors, impeding factors, perceived usefulness, attitude, intention and usage of mobile banking services. The hypotheses of the study are divided into two groups. The first group includes six hypotheses and focuses on testing the factors affecting the consumers usage of mobile banking services, this test was conducted through the use of T-Value (one sample t-test), and statistical analysis; and The second group which includes hypothesis 7, Pearson correlation coefficient was used to determine the correlation between the constructs of the study model.

The responses of the study's sample to the questionnaire's questions (19 questions), were all positive expect for two questions (7, 9) as the mean values for these two questions were less than three (midpoint = 3). The highest value was scored by question (18) with a mean value of (4.06); this question is related to the effect of the motivating factors on the customers' acceptance of using mobile banking services with a value of (t.26.37). Meanwhile, question (19), which refers to the effect of impeding factors on the customers' non-acceptance of using mobile banking services scored a mean value of (3.76), indicating that impeding factors have a negative effect on the use of mobile banking services.

The data analysis of the first dimension of this study (motivating factors) showed that the ease of use scored highest with a mean of (3.49) followed by Assurance with a mean of (3.39). This result is consistent with the findings of (Agarwal & Prasad, 1989; Venkatesh, 1999, 2000; Venkatsh & Davis 1996; Ventalesh & Morris, 2000). Assurance ranked second among the motivating factors affecting the use of mobile banking services with a mean value of (3.39), which is consistent with the findings of (Kim & Parabbakar, 2004; Mcknightdt al, 2004; Pavlou & Gefen, 2004).

The study further determined that Pursuance has an effect on the use of mobile banking services with a mean value of (3.30), which is consistent with the findings of (Talque et al, 2009), (Vijayakumar & Tayachitra, 2013). Furthermore, Communication was determined to have an effect on the use of mobile banking services as indicated by (Clark, 2008). Overall the results of the current study indicated that motivating factors in their five dimensions have an effect on consumers' attitude, intention and usage of mobile banking services.

The second group of dimensions, which are related to the impeding factors, scored the following mean values: personal desires (3.80), personal experience (3.75), habit (3.70), indicating an effect on the consumers' attitude, intention, and usage of mobile banking service. Meanwhile, the factor of resistance to innovation scored a mean value of (2.69), which is lesser than the mean of the measurement tool (3), and thus it is considered a factor with a negative effect on the use of mobile banking services. This result is consistent and analogous to what has been reached in the studies of (Davis, 1989), (Barati & Mohammad, 2009), (Laukkanen & Cruz, 2010). On the other hand, the factor of personal

knowledge scored a mean value of (2.90) which is also lesser than the mean of the measurement tool (3). This result indicates that this factor has a non-positive effect on customers' use of mobile banking services, which is analogous to the findings of (Dervon & Kaestner, 2008; Lafort & Li, 2005). Analogous to the findings of (Gerrard, Cunningham, & Devlin, 2006) who argued that customers with limited knowledge in the use of mobile banking services are more willing to continue to use conventional banking services, this study views these factors as factors that impede the use of mobile banking services.

The current study additionally found that the Perceived Usefulness has a positive effect on attitude, intention and usage of mobile banking services with a mean value of (3.44), which is consistent with the findings of several studies such as (Bahatti, 2007; Guriting & Ndubiz, 2005; Kim, Chan & Gupta, 2007; Laforet & Li 2005). Furthermore, this study indicates that there is a significant correlation between this factor and attitude, intention, and usage of mobile banking services, which is consistent with the studies of (Bhatti, 2007), (Davis et al, 1998), (Kim et al 2007), (Oavlou, 2003), (Venkalesh, 2000), (Davis, 1990), a finding which is shared by (Alsamydai, et al 2012) regarding the effect of Perceived Usefulness on using mobile Banking Services. Moreover, current study signified that attitude has a positive effect on intention and use of mobile banking services with an overall mean value of (3.50), while its effect on the use of mobile banking services scored a mean value of (3.90). The study indicated that there is a high significant correlation between attitude and intention, and a lower correlation with the use of mobile banking services. This result is in accordance with many of the studies of the attitudes such as (Ajzen, 2002, 2005; Alsamydai et al, 2013; Bansal & Taylor, 1999; Smith et al, 2008; Pavalou, 2003).

As for Intention, it is found to have a positive effect on the use of mobile banking services, scoring an overall mean value of (3.52). This complies with many of the behavioral studies that signify the effect of behavioral intention on subsequent conduct where intent represents the willingness to act (Alsamydai, Rudaina, 2005), and an unimportant predictor of an individual's behavior (Ajzen, 2002; Caslaneda et al, 2007). At the same time, this study demonstrated that behavioral intention has a significant correlation with the use of mobile banking services with a correlation value of (0.285 \*\*).

The study additionally finds that the use of banking services is affected by motivating factors (mean value (4.06)), and impeding factors (mean value (3.78)), indicating that the effect of motivating factors is more significant than the effect of impeding factors. Furthermore, the value of the correlation coefficient for the motivating factors is (\*\* 501), while the correlation coefficient for the impeding factors is (- .175) which is an inverse correlation indicating that the second group of factors prevent the customer from using mobile banking. An inverse correlation between impeding factors and perceived usefulness is also observable, which is in accordance with the findings of (Chung & Twon, 2009). All the hypotheses of the study were validated including the second hypothesis which refers to the negative effect of impeding factors on the use of mobile banking services, as well as the sixth hypothesis with its two sub-sections related to motivating factors that influence acceptance of mobile banking services and impeding factors that influence non-acceptance of mobile marketing services. Finally, a significant correlation between all the constructs of the study model was established.

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