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Determinants of Customer Intention to Use Mobile Banking: An Empirical Research Based on Extended Technology Acceptance Model

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ABSTRACT

Technology takes years to evolve but the people take more time to accept it. Lack of user acceptance remains a big challenge for the success of new technology. Now a day, the banks are facing the same situation regarding Mobile Banking. Advancement to internet banking, now the customers can access to their bank accounts and process multiple type of financial transaction with the use of their mobile phones. The current study investigates the influence of perceived compatibility, perceived relative advantage and perceived ease of use in forming of attitude of the customers towards mobile banking. Furthermore, the current study also examines the influence of attitude, trust and credibility on intentions of customers to use mobile banking. Based on previous literature, a comprehensive model has been developed to check the causal relationships of these variables. The study utilizes the self-administered questionnaire approach to collect the primary data from the respondents. The questionnaire was prepared by using the previously established scales and distributed among 600 respondents (clients of different banks). 564 completed questionnaires were used for further analysis. Before conducting the final analysis, the data has been verified for reliability and validity concerns. According to results of the study, perceived compatibility, perceived relative advantage and perceived ease of use significantly affect attitude and further attitude, trust and credibility significantly affect customer intentions to use mobile banking. All the hypotheses are supported and further discussion is provided.
KEYWORDS: Mobile banking, attitude, trust, credibility, relative advantage, compatibility, ease of use

1. INTRODUCTION

Mobile banking (M-Banking) and some time it refers to cell phone banking (Cellular Banking) is the process of performing different kind of banking activities and transactions with the help of different mobile terminals like mobile phones and personal digital assistants (PDA) through wireless application protocol (WAP). Banking users are able to perform and use different banking services i.e. money transfer, information inquiry, management of account and bill payment through mobile banking (Luarn& Lin, 2005). Cellular banking is free of time and physical constrictions as compared to traditional and internet based online banking. Account information can easily be acquired by users in real time and now it is convenient for them to make payments anywhere at any time (Ghotbi & Gharechedaghi, 2012). It helps traditional banks perk up with their service quality and lessen the service charges. Therefore, many banks have developed mobile banking services and market them to potential cell phone users.

iResearch that is a research contributing company, centers on the internet sector of china conducted a survey and the result showed that exclusively 14.3 % of mobile internet users took up mobile banking (iResearch, 2008). The resulting figure was far below than the adoption of other cell phone value added services i.e. cellular instant messaging (IM) (72%), image and ringtone download (48.4%), mobile games (43.8%), and mobile search (34.3%) (iResearch, 2008). By conducting research to explore the factors that affect the adoption and use of mobile banking services, banking institution would be able to target the barriers that obstruct the adoption of mobile banking and as well improve their services.

Through mobile banking, the banking customers can check their account balances, transfer their funds, pay their bills and inquire their transactions history with the help of mobile devices such as mobile phones, PDAs and smart phones (Laukkanen, 2007; Turban et al., 2006). Adoption and acceptance of mobile banking could be different from non-mobile banking (internet or online banking) in two ways. First, the major difference between these two advance-banking services is the speed of development. The mobile banking progression is much quicker than internet banking. Different researchers of information systems have claimed that the most significant technological advancement in banking services is mobile banking that has been emerging as a important tool for enhancing the access to customer's account with the help of mobile phones using wireless technology (Laukkanen

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and Laurenen, 2005; Herzberg, 2003). The second major difference is the convenience of time and physical location. The customers can perform different banking activities without wasting time and bound to some physical location even in the case of internet banking (Rossi and Tuunainen, 2004).

The innovation diffusion theory describes that the perceived innovation elements such as perceived relative advantage, perceived ease of use and perceived compatibility affect the user intention to adopt an innovation (Rogers, 1995). Different researchers use this perspective to study the adoption of technological innovations (Papies and Clement, 2008; Tan and Thoen, 2001; Agarwal and Prasad, 1997). There are many new features in mobile banking different from other conventional banking such as phone banking, Internet banking and ATM (Automated Teller machine). The role of innovation elements warrants consideration in studying the adoption of mobile banking, which did not get full attention in the previous researches (Sulaiman, Jaafar and Mohezar, 2007). Whenever innovative services are introduced like mobile banking, customers may feel fears about using it especially when the financial risk is involved. The perception of trust can facilitate these business transactions under uncertainty and decrease the fears of losing something (Corritore, Kracher and Wiedenbeck, 2003). The current study investigates the affect of these innovation attributes (perceived compatibility, perceived ease of use and perceived relative advantage) on attitude towards using mobile banking. Additionally, the current study investigates the affect of attitude, perceived trust and credibility on intention to use mobile banking.

2. LITERATURE REVIEW

2.1 Mobile Banking

Previously, many researchers have been used the Technology Acceptance Model to understand and predicts the adoption of new information technology by people. These researches continuously verified that the two basic constructs of TAM namely perceived ease of use and perceived usefulness explain the acceptance of new technologies among the users (Agarwal and Karahanna, 2000; Davis et al., 1987; Thong et al., 2006; Gefen et al., 2003; Pavlou, 2003; Devaraj et al., 2002). However, we need to explore some more factors that are important in the adoption of new information technology in specific context like mobile banking (M-Banking).

Due to the benefits of mobile banking for the banking customers, manyresearchers predict the extra ordinary growth in the use of mobile banking in the coming years (Juniper, 2009). However, the actual figures are not only below the expected level of different researchers and industry specialists but also the growth in the numbers of mobile banking users are very low (Laukkanen and Cruz, 2009; Lee and Chung, 2009; Suoranta and Mattila, 2004). This phenomenon supports the Davis (1987) arguments that the technology takes years to evolve but the people takes more time to adopt it. The advancement in the technologies and availability of innovative services are not sufficient to attract the masses of customers. This situation requires more researchers to understand the important factors that motivate a person to start using new technologies (Zarifopoulos and Economides, 2009).

2.2 Innovation Attributes and Attitude towards Mobile Banking

M-Banking can be considered as innovative technology in the field of banking because it permit the banking customers to perform their banking activities without wasting their time and constraint of physical location. These banking customers can connect with the mobile banking services by using their mobile devices (Laukkanen, 2007). Different researchers indicate the influence of customer perception of the innovation towards the use of these technological innovations (Lean et al., 2009; Papies& Clement, 2008;Teo&Pok, 2003). The innovation diffusion theory presented by Rogers (1995) indicates many innovation attributes that can influence the customer's decision to adopt new technology. These attributes are perceived relative advantage (the degree to which a new technology provides a set a additional benefits compared with the previous one), perceived ease of use (the degree to which the new technology is perceived to be user friendly and less complex), perceived compatibility (the matching of the new technology with the norms, beliefs and practices of the customers and familiar), trialiability (the degree to which a new technology can be used for temporary period) and observability (the degree to which the new innovation is observe able to others) (Rogers, 1995). In the previous studies, among these factors relative advantage, ease of use and compatibility were used more frequently and found to be the major factors in influencing the users to adopt new electronic technologies (Papies and Clement, 2008; Liao et al., 1999; Vijayasarathy, 2004). Therefore, the current study includes these innovation attributes to investigate the affect of these constructs on adoption of mobile banking.

Perceived relative advantage represents the degree of which a customer perceives that the innovation provides additional benefits compared with the previous one. These perceived benefits includes as economic benefits, improved status and enhanced efficiency (Rogers, 1995). The perception of relative advantage is positively associated with the rate of acceptance of new technology (Moore and Benbasat, 1991). As, the mobile banking provides clear and discrete benefits for the customers in the shape of affordable, convenient and instant transactions,

it definitely influence the adoption of mobile banking (Laukkanen, 2007).Hence, when the customers observe these benefits of mobile banking, it will develop a favorable attitude towards adoption of mobile banking. Based on these arguments, the following hypothesis is formulated:

H1:*There is a significant positive relationship between perceived relative advantage and attitude towards mobile banking*

Perceived ease of use (PEOU) refers to the degree that a customer thinks less complexity in using a new technology. The customers do not need to learn additional skills or efforts to operate a new technology. The mobile banking is easy to understand and use due to its user-friendly interfaces, clear instructions and help facility. Hence, as the customer feels the mobile banking is not so difficult and easily accommodate in their life more favorable attitude is formed towards mobile banking. Hence, the following hypothesis is developed:

H2:*There is a significant positive relationship between perceived ease of use and attitude towards mobile banking*

Perceived compatibility represents the level that an innovation is paroxysms with the previous values, need and experiences of the potential customer (Rogers, 1995). More the compatibility among the customer needs and innovation more the chances of its adoption since it facilitate the positive interpretation of the customer of the innovation (Ilie, van Slyke, Green& Lou, 2005). In the previous literature, the perceived compatibility has been recognized as the strong indicator of perception to develop a positive attitude towards electronic transactions (Vijayasaray, 2004; Gilaninia, Delafrooz, Machiani, 2012). Therefore, the present study hypothesize that more the compatibility of the mobilebanking with the preferences and lifestyle of the customer more the favorable attitude towards using mobile banking.

H3:*There is a significant positive relationship between perceived compatibility and attitude towards mobile banking*

2.3Trust

Previous studies in the context of distribution channel refer trust as a conviction or faith of a firm in the honesty of other business partners and other aspects pertinent to this notion (Geyskens et al., 1998). In some other studies, trust has been acknowledged as the propensity of confidence in the business partners those are proficient of being trusted. In the context of electronic commerce, trust can be defined as the conviction of the customers that the vendors are willing to react according to their expectations (Luhmann, 1979; Grazioli and Jarvenpaa, 2000). Trust helps to reduce the potential risk and fraud occur by the opportunistic behavior of the other party (Pavlou, 2003) and offers the ultimate benefits like having more trustworthy banking services from the authentic banks (Gefen et al., 2003).

When the customers trust on the banks their perception of usefulness of the mobile banking will increase and they are more prone to adopt it. Therefore, an important factor in developing trust in electronic commerce is the perception of ease of use (Gefen et al., 2003). If the customer perceive the bank is not honest it is crucial to use the bank online web site. Perceived trust and risk are similar concept and frequently verified as major obstacle in adoption of online and mobile services (Lee and Turan, 2001; Featherman and Pavlou, 2003). Trust of the customer should get attention of the online banks to create it for long-term benefits of both parties. Similarly, perceived risk should be understood and remove so that the customers are more inclined to accept mobile banking.

H4:*There is a significant positive relationship between trust and intention to use M-Banking*

2.4 Credibility

Credibility is an additional factor in adoption of IT services. Credibility refers as the level of trustworthiness of a IT system and its capability in performing transactions (Erdem and Swait, 2004). According to Wang et al. (2003), credibility is the extent to which a customer thinks that using the mobile banking does not create any privacy or security issue. In the absence of credibility on the part of banks makes customer worry about their financial transactions and they fear that these information could be transmitted to some third party (Luarn and Lin, 2005). Some recent studies in the area of mobile banking have discovered that perceived credibility significantly affect the adoption of mobile banking. Similarly, absence of credibility reduces the chances of acceptance of mobile banking (Wang et al., 2006; Luarn and Lin, 2005). In another study, Koenig-Lewis et al. (2010) acknowledged that credibility has significant negative relationship with the perception of risk and positively affect adoption of mobile banking. Hence, higher the perception of credibility of mobile banking lower the perception of risk and therefore higher the willingness of the customers to adopt it. These researchers conclude that the perception of credibility and adoption of mobile banking is positively correlated with each other.

H4:*There is a significant positive relationship of credibility and intention to use M-Banking*

2.5 Attitude and Intentions

According to Fishbein (1963), the concept of Attitude shows the degree of favorability or un-favorability of a person towards any stimulus. Attitude is a measure of liking or disliking of a person towards external stimulus. This

attitude is formed with the help of beliefs and values of a person and store in the mind of the person, which facilitate him in decision-making. Different theories like expectancy-value theory, theory of reasoned action and theory of planned behavior used this concept to describe the actual behavior of the customer. These theories demonstrate that the actual behavior of a person can be predicted based on the attitude of the person towards any external stimulus. Hence, there is close relationship between the attitude of the customer and likely behavior. In the context of electronic commerce, this attitude can be refers as electronic attitude. Several studies confirm that electronic attitude is a strong predictor of adoption of electronic commerce like online shopping (Rizwan et al., 2013; Liao and Shi, 2009; Shim et al., 2001).

H6:*There is a significant positive relationship between attitude and intention to use M-Banking*

Proposed Research Model

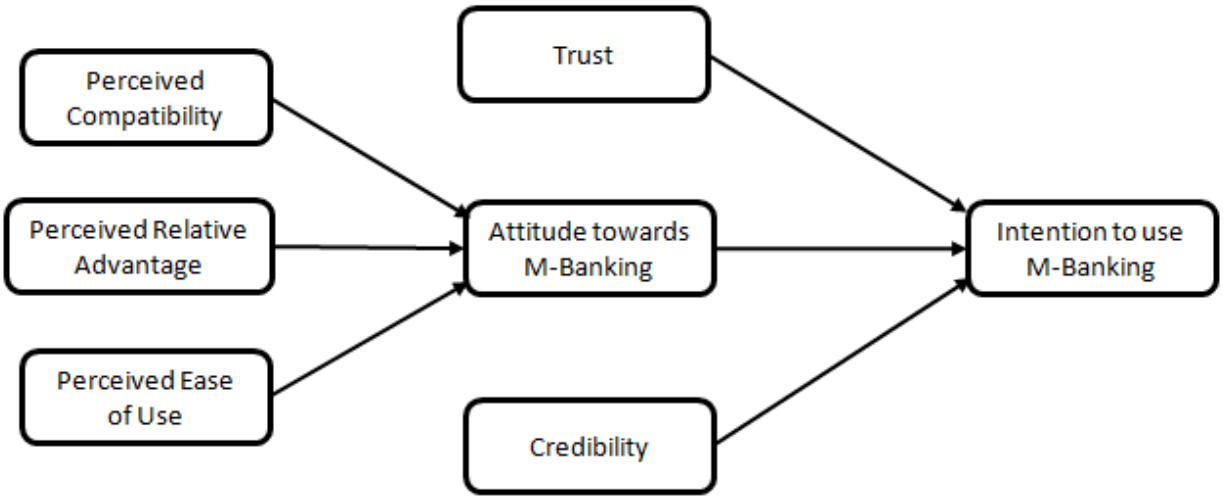

Figure 1. Proposed Model for M-Banking

3. METHODOLOGY

3.1 Sample Data Collection

The current study utilizes the survey method to collect the data to verify the established hypotheses. In this regard, a structured questionnaire was designed by using the scales from previous studies to ensure the reliability and validity of the data. A total of 600 questionnaires were distributed among different respondents from various cities of Pakistan including Karachi, Lahore, Islamabad, Bahawalpur and Multan. The current study adopted non-probability sampling method i.e. Convenience Sampling. According to Lym et al. (2010) convenience sampling is the most efficient method of data collection in management and business studies compared with other methods. Among the questionnaires that were distributed to different respondents, 564 have been included in the final data analysis and rest of the questionnaires was discarded due to incomplete or invalid responses. The complete details of the respondents according to their profile are given at table 1.

Table 1.Profile of the respondents

Measure	Frequency	Percentage
Gender		
Male	352	62%
Female	212	38%
Age		
Less than 20	65	12%
20-30	87	15%
30-40	134	24%
40-50	210	37%

50 and Above	68	12%
Income		
Less than 10000	74	13%
10000-25000	61	11%
25000-40000	86	15%
40000-55000	154	27%
Above 55000	189	34%
Education		
Bachlor	134	24%
Master	370	66%
Post Graduate	60	11%
Status		
Student	147	26%
Employee	229	41%
Self Employed	188	33%

3.2 Scales/Measures

The scales of the current study were adopted from the previous published studies and used a multiple item scale method to measure the important constructs of the current study. The wordings of the scales were modified to suit the current context of mobile banking. The survey instrument was first pilot tested with 35 respondents to validate the survey instrument. These respondents were requested to put their comments on the clarity, meaningfulness and relevance of these scales. Hence, the content (face) validity of these scales were established. The scales for three innovation variables (perceived compatibility, perceived ease of use and perceived relative advantage) were taken from the study of Karahanna et al. (1999). Perceived relative advantage was measured by using four items, perceived ease of use by four items and perceived compatibility by four items. The constructs of Trust and Credibility were measure by the scale of Koenig-Lewis et al. (2010) and the scale consist of five items for trust and six items for credibility. The scales for Attitude towards M-Banking and Intention to use M-Banking were adopted from Yu et al. (2005). The construct of Attitude was measured by using four items and Intention was measured by using five items.

3.3 Reliability and Validity Analysis

Reliability is the internal consistency of different items measuring a common variable, while validity refers to the degree, by which a scale is measuring what it really supposed to measure (Hair et al., 1998). The reliability and validity of the measurement instrument was tested using reliability analysis, principal component analysis and confirmatory factor analysis. The reliability analyses showed that all the constructs were reliable with Cronbach's alphas were greater than the recommended level of 0.7 (Hair et al. 1998). For discriminant validity, the results of Principal component analysis showed good internal consistency with eigen values over 1 and all the factor loading are greater than 0.8 that indicates all the items were manifesting the relevant construct to which they were supposed to belong. The results of Confirmatory factor analysis showed an excellent measurement model fit, with all GFI and CFI values are greater than 0.9 (Arbuckle, 2006). The results of reliability and validity are given at Table 2.

Construct	Alpha	Goodness of Fit Index	Items	Factor Loading
Perceived Compatibility	0.76	GFI = 0.92 CFI = 0.94	Item 1	0.84
			Item 2	0.81
			Item 3	0.85
			Item 4	0.83
Perceived Relative Advantage	0.84	GFI = 0.93 CFI = 0.95	Item 1	0.88
			Item 2	0.87
			Item 3	0.91
			Item 4	0.85
Perceived Ease of Use	0.85	GFI = 0.91 CFI = 0.96	Item 1	0.87
			Item 2	0.83
			Item 3	0.83
			Item 4	0.88
Trust	0.79	GFI = 0.94 CFI = 0.92	Item 1	0.87
			Item 2	0.85
			Item 3	0.81

			Item 4	0.86
			Item 5	0.82
Credibility	0.77	GFI = 0.91 CFI = 0.95	Item 1	0.83
			Item 2	0.87
			Item 3	0.81
			Item 4	0.83
			Item 5	0.86
			Item 6	0.82
Attitude Towards M-Banking	0.84	GFI = 0.95 CFI = 0.96	Item 1	0.92
			Item 2	0.84
			Item 3	0.87
			Item 4	0.85
Intention to use M-Banking	0.82	GFI = 0.95 CFI = 0.93	Item 1	0.92
			Item 2	0.87
			Item 3	0.85
			Item 4	0.85
			Item 5	0.91

3.3 Validation of the Model

Confirmatory factor analysis was conducted to validate the measurement model. AMOS 18.0 was used to check the goodness of fit model. The current study yield a high significance level ($\chi 2$ =326.922; degree of freedom = 213; probability level = 0.17). The appropriate distributional assumptions were met and we conclude that the model is correct. The departure of the data from the model is significant at the $p>0.05$ level.

Table IIIshows both the results of indices for the current model and suggested guidelines for evaluating model fit (Arbuckle, 2006; McDonald & Ho, 2002; Bentler, 1992). Modification indices do not provide any indication of misfit of the structural model suggesting that there is no need for model modification or inclusion of any new path between the constructs of the model.

Table III. Results of Model Fit indices for the model

Model Fit Indices	Values	Suggested Guidelines
$\chi 2$/df	1.153	Less than 3.0
CFI	0.918	equals/be greater than 0.9
IFI	0.926	equals/be greater than 0.9
GFI	0.958	equals/be greater than 0.9
AGFI	0.932	equals/be greater than 0.9
TLI	0.961	equals/be greater than 0.9
RMSEA	0.028	0.05 or below / Good fit; below 0.08 / Fair fit
Source: Arbuckle (2006), Mc Donald & Ho (2002), Bentler (1992)		

4. RESULTS AND ANALYSIS

4.1 Hypotheses Testing

This section of the study finally tests the hypotheses of the model. Regression analysis of the study shows that all the hypotheses are valid and significant on 0.05 level. In SEM analysis, the R-square values of endogenous variables are examined to check the explanatory power of the structural model. The results of the structural model are showed in Figure 2. Linear regression techniques were used to check the direct effects and as well as indirect effects of the variables on mobile banking intentions. Table IV summarizes the results of regression analysis.

Perceived Compatibility and Attitude towards M-Banking

Regression analysis of the study confirms the significant positive relationship between perceived credibility and attitude towards M-Banking with β=0.19 and $p<0.01$. This results show that perceived credibility contributes approximately 20% to attitude towards M-Banking.

Perceived Relative Advantage and Attitude towards M-Banking

The regression results of the current study show that there is a significant positive relationship between perceived relative advantage and attitude towards mobile banking with β=0.24 and p<0.01. This means perceived relative advantage contributes 24% towards attitude towards mobile banking.

Perceived Ease of Use and Attitude towards M-Banking

While considering the significance between perceived ease of use and attitude towards mobile banking, the results confirm significant positive relationship between these two construct. The regression coefficient of the relationship is 0.31and significance level is less than 0.001.

Trust and Intention to use M-Banking

According to the results of the study, there is a significant positive relationship between trust and intention to use mobile banking with β=0.27 and p<0.001. These results confirm the significant impact of trust on intention to use mobile banking. More specifically, the trust contributes approximately 27% towards intention to use mobile banking.

Attitude and Intention to use M-Banking

Attitude has the highest contribution in developing intention to use mobile banking. The regression results confirm the significant positive influence of attitude towards mobile banking on intention to use mobile banking with β=0.36 and p<0.001. That means, the attitude contribute more than 36% towards intention to use mobile banking.

Credibility and Intention to use M-Banking

According to the results of the study, credibility proves to be a significant predictor of intention to use mobile banking. Credibility positively influence the intention to use mobile banking with β=0.21 and p<0.001.

Table IV. Regression Results

R^2	Dependent Variable	Independent	Standardized Beta	Sig
0.52	**Intention to use**	Trust	0.27	0.000
	M-Banking	Attitude	0.36	0.000
		Credibility	0.21	0.000
0.48	**Attitude towards**	Compatibility	0.19	0.004
	M-Banking	Relative Advantage	0.24	0.002
		Ease of Use	0.31	0.000

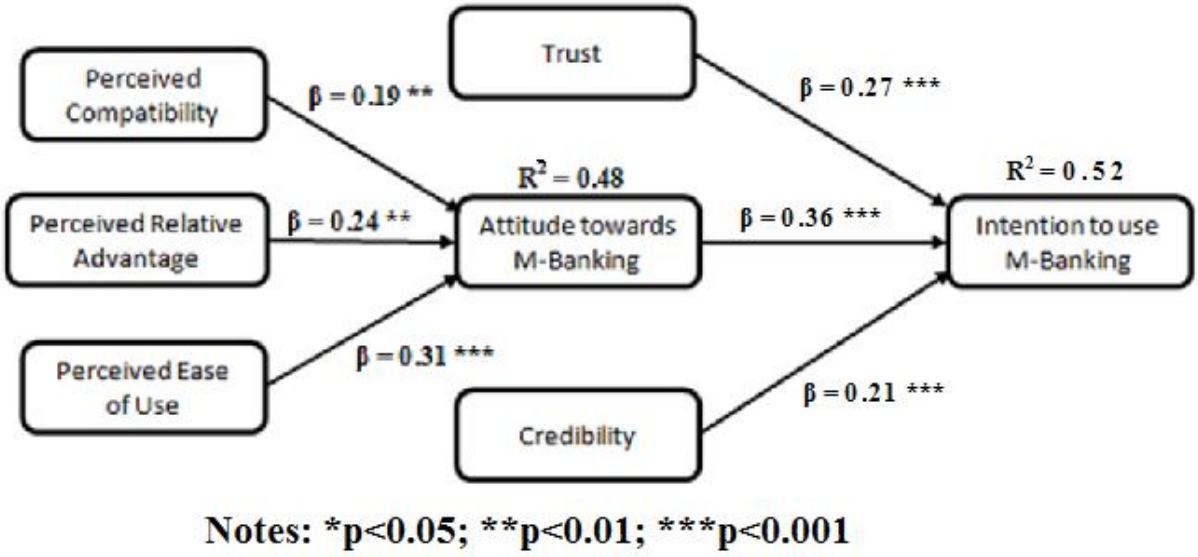

Figure 2 Structural Model Results

5. DISCUSSION AND IMPLICATIONS

The current research represents a major contribution towards the mobile banking literature by combining the two conceptual perspectives to explore the important factors that influence the adoption of mobile banking decisions. These factors are taken from knowledge based trust and innovation diffusion theory regarding the mobile banking. This study is unique in its nature that it combine the two different perceptive to explain the process of adoption of mobile banking. In this study, we have selected many factors affecting the intention to use mobile banking, including perceived compatibility, perceived relative advantage, perceived ease of use, attitude towards mobile banking, trust and credibility. These factors were acknowledged and verified in various previous studies are tested in the context of Pakistan. According to the results of the study, all these factors are proved to be significantly affecting intention to use mobile banking.

The empirical results present some important finding. The interpretations and implication of these results are discussed below. First of all, the results of the current study significantly support the importance of innovation attributes to forecast the consumer attitude towards mobile banking. Perceived compatibility, perceived relative advantage and perceived ease of use were proved to have significant positive influence on attitude towards mobile banking. People who have strong positive perception of compatibility, relative advantage and ease of use have more favorable attitude towards mobile banking. Among these perceptions, the perception of ease of use has the strongest effects on attitude. If customers perceive the mobile banking is easy to use, they are more willing to use the mobile banking for their daily use banking transactions. Hence, these mobile banking firms need to develop a user-friendly mobile banking setup. Although the usefulness (here in this study relative advantage) motivate a person to adopt mobile banking but if the customers believe that using these systems are not easy for them, they never switch to mobile banking. This result confirms Wessels and Drennan's (2010), Luarn and Lin (2005), Curran and Meuter (2005), Venkatesh et al. (2003), and Dabholkar and Bagozzi (2002) studies that verified a positive relationship between perceived ease of use and attitude towards using a new technology. Although, many studies have provided different results. For example, a study by Pikkarainen et al. (2004) on online banking reported that ease of use had insignificant effect on attitude while usefulness had a significant effect. According to Wang et al. (2006), perception of ease of use depends upon the expertise of a customer as more experienced customers find it easier to use. The perception of ease of use is more important for new customers (users of a new technology) as they will become experiences the perception of easy to use will not remain important. Hence, as the new customers perceive that learn to use mobile banking is easy for them, the intention to use will increase. Based on these facts, it is strongly recommended that mobile banking software should be designed in a way that the customers can use them easily.

The second important factor in determining the attitude of customers towards mobile banking is perceived relative advantage. These results are in line with the previous results of many studies that proved the significant importance of relative advantage in forming the attitude of the customers towards new technology. The strong perception of relative advantage compels a new customer to use a new technology. Similarly, in case of mobile banking, if the customers feel this new form of banking provide them discrete benefits compared with conventional banking, they have a strong attitude towards mobile banking.

Beside ease of use and relative advantage, people perception about the compatibility of this new mode of banking with the needs, experiences and values of their daily life also appears to be a strong building block of their attitude. These results demonstrate that customers who find mobile banking is congruent with their preferences and lifestyle enjoy using mobile banking. Therefore, it is important for mobile banking firms to consider the compatibility of wireless banking as well as related services with the customer's preferences and lifestyle to keep and attract new customers.

In a study by Wessels and Drennan's, 2010, perceived compatibility was having the second strongest effect on attitude towards mobile banking. In the current study, compatibility was found the third strongest predictor of attitude towards mobile banking. However, these results are in line with the results of several other studies (Sivanand et al., 2004; Wu and Wang, 2005; Aldás-Manzano et al., 2009). These results indicate that the degree to which a customer believes that the mobile banking can be incorporated in his daily life positively affects attitude towards mobile banking. Hence,the mobile banking firms should understand the needs and lifestyle of their main customers and try to provide mobile banking facilities accordingly.

The adoption of mobile banking increase with the increase in the perception of credibility. These results confirms the results of Luarn and Lin (2005) that report the significant affect of credibility on adoption of mobile banking. Besiade credibility, trust is more important in adoption of mobile banking. Many other studies suggest that there is a concern of trust for the people when adopting new technologies in their lives for doing different kind of jobs (Koening-Lewis et al., 2010; Gefen et al., 2003). Attitude of the user has the strongest effect on adoption of mobile banking in this model. These results confirm the significant effect of attitude on adoption of mobile banking

but also show the indirect effect of perceived relative advantage, perceived compatibility and perceived ease of use on mobile banking adoption. Attitude plays an important role in adoption of new technologies, as more positive attitude of the user towards new technology more is the intentions to use that technology.

6. Conclusion

The primary purpose of the current study is to explore the affect of different variables on intention to use mobile banking. In this respect, the current study combines two different approaches to identify the important variables that play a significant role in adoption of mobile banking (i.e. innovation diffusion theory and theory of reasoned action). The three important variables from the innovation diffusion theory were perceived compatibility, perceived ease of use and perceived relative advantage. These variables are proved in the empirical analysis that they significantly affect the attitude of the customer towards mobile banking. Hence, the benefits of mobile banking should be attractive for the customers compared with traditional banking modes and the customers are not required to put additional/extra efforts in this regards to get these benefits while the system of mobile banking should be compatible with the old routines of the customers. These three factors are connected to intentions through attitude that is according to the theory of reasoned action. According to theory of reasoned action, the actions or intentions can be predicted through the attitude of a person towards any external stimulus. As these three innovative factors proved significant, the attitude of a customer also significantly affects the intentions to use mobile banking. Customers with positive attitude towards mobile banking are more inclined towards possible usage of mobile banking. In the meanwhile, two additional factors are supported by the data that they are also affecting the intentions positively. These factors are perceived credibility and trust. If the customers perceived that the mobile banking system is credible/capable of performing their financial transactions without any error, their perception of privacy and safety risk will decreases and they would be easily transfer to this new system of banking. As the credibility of the banking system is important, the trust of the customer is also significant predictor of their intentions to use mobile banking. If the customers believe that, the banks are not opportunists and they do not take any extra benefits in case of mobile banking they will be more energetic to start using mobile banking.

7. Limitations and Recommendations for Future Research

The primary limitation of the current study is the selection of sample from some specific cities of the country. As these cities are comparatively more advanced so more people should be surveyed from less advanced cities to capture the more representative picture of adoption of mobile banking. In future, some more studies should be conducted to develop a comparative analysis by taking mobile banking and some other technologies to check the differences in the results.

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