RESISTANCE TO MOBILE BANKING ADOPTION IN EGYPT: A CULTURAL PERSPECTIVE

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ABSTRACT

Mobile banking (m-banking) faces various types of resistance that may hinder customers' adoption in Egypt. This study identifies three groups of m-banking non-adopters, namely postponers, opponents and rejectors. The objective of the study is to explore the reasons for resisting m-banking services in Egypt and whether it differs with regards to these customer groups. Accordingly, a questionnaire was distributed, Chi square tests, Kruskal-Wallis H tests and one-way analysis of variance (ANOVA) test. Frequencies and cross tabulations were used. The results indicate that the three non-adopter groups differ significantly with respect to usage, value, and image barriers. On the other hand, risk and tradition barriers did not show any statistical significance; however, risk barrier received the highest overall mean. Significant relations between usage, risk and image barriers with the gender and level of education were noted. Finally, findings enabled a clear mapping between Hofstede's cultural dimensions and the study's results.

KEYWORDS

Consumer resistance, Consumer behaviour, Mobile banking, Culture dimensions.

1. INTRODUCTION

Over the last two decades, advances in information technology have revolutionized the delivery of banking services. The development of electronic banking services via multiple electronic channels such as Internet and mobile has made it possible to provide new kinds of added value for customers. Mobile devices are becoming a popular way of accessing the web as they allow users to access all sorts of information anytime and from anywhere because of the upgrade of mobile devices, the expanded coverage of mobile telecommunications infrastructure, cheap and durable mobile devices [1].

Egypt in particular has many success factors of m-banking adoption such as the high penetration rate of handsets that exceeds 71 million in January 2011[3], the availability of alternative payment methods such as credit cards and the significant unbanked population [2,3]. However, in spite of its many advantages, the use of mobile phones in banking actions is in its immaturity phase and is still facing doubts in Egypt. There seems to be some inhibitors that slow down the use of mobile channels in banking transactions [4]. Based on the models and different studies on consumers behavior towards innovation, consumers' resistance to adoption of m-banking is mostly determined by psychological barriers; image and tradition barriers, and Functions barriers; usage, value and risk barriers towards existing products [5].

In addition, resistance leads consumers response towards three forms, it may take the form of direct rejection, which is the most extreme form of resistance or postponement which consumers delay the adoption of an innovation or opposition which it is a kind of rejection, but the consumer is willing to test/check the innovation before finally rejecting it [6, 7].

Accordingly, studying these factors provides m-banking manufacturers and marketers in Egypt with useful information that would help them address customers' needs, and thus increase the chance of acquiring and retaining customers.

As a result, the purpose of this study is to identify the factors that mainly affect or determine consumers' resistance to m-banking in Egypt and whether these factors differ among different types of non-adopters (Postponers, Opponents and Rejectors).

2. RELATED WORK

Nowadays, there is a growing interest in studying the adoption of electronic banking [8, 9, 10, 11, 13, 14, 15].A large number of the studies in the field have aimed to explore consumer perceptions and expectations of service quality to measuring consumer satisfaction[10,16,17]. Other studies have investigatedconsumer motives, acceptance of techno-based banking services [18], and explored the benefits sought and consumers' attitudes towards online banking [19]. Research have also addressed time of adoption, adopter categories, the rate of innovation diffusion, consumers' usage, attitudes and behaviors towards online and mobile banking with special emphasis on demographics [12, 20]

Curran and Meuter[21] reported that the significance of the factors affecting the adoption of ATMs, phone banking, and internet banking differed substantially between the channels. Additionally, Internet banking users and M-banking users were found to be divergent in their demographic characteristics. Whilst Karjaluoto et al. [22] found that the Finnish adopters of Internet bankingare highly educated, relatively young, and have high income;Laforet and Li [10] showed thateducation does not affect the adoption of M-banking in China. Furthermore, the averageage of M-banking users was found to be much higher than the average age for Internetbanking users within China, which is consistent with the findings of Suoranta andMattila's[9] Finnish study. In addition, M-bankingusers also vary in their channel attribute preferences, as well as in their valueperceptions about their banking activities [4, 23].

Although the literature on innovations has concentrated mostly on the diffusion, motivating factors of adoption and the characterization of innovation adopters [24, 25], the reasons that inhibit or delay the diffusion of an innovation appear to be neglected [26] especially for developing countries, particularly in Egypt. Therefore, resistance to innovation remains to be the less developed modeland more studies needed and its relation to culture dimensions.

2.1. Consumer Resistance to Innovation Theory

Consumer resistance to innovations has been described through different barriers that prevent the adoption of an innovation. It consists of Usage; value and risk barriers represent functional barriers, whereas tradition and image barriers refer to psychological barriers. Functional barriers are likely to arise if consumers perceive considerable changes from adopting an innovation, while psychological barriers are often caused by conflict with consumers' prior beliefs [5].

Usage barrier becomes clear when the innovation is not compatible with consumers' existing workflow, practices, or habits. It is mostly related to the usability; including complexitysimilar to Rogers' concept and ease-of-use of an innovation relatedto the technology acceptance model (TAM)which are argued to be two closely parallel concepts [27, 28, 29, 30, 31, 32]. In m-banking services, consumers have reported inconvenience due to the small keyboard and tiny display of the device.

The value barrier is based on the economic value of an innovation, and refers to the low-to-price compared to its alternative products. The value barrier is closely related to Rogers' concept [33] of relative advantage, which resembles the concept of perceived usefulness derived from the technology acceptance model (TAM)[29]. The relative advantage may be perceived as poor since online banking does not offer any functions that were notpreviously available [34]. Although m-banking might be perceived to be expensive, it was found that some of the m-banking services increase customers' feeling of control over their financial affairs [35].

Risk barrier is the degree of potential risks an innovation may entail. Gerrard et al. [36] found that risk is the main factor that explains why consumers do not use Internet banking. The first type of risk is physical risk: harm to person or property that may be inherent in the innovation [5]. The second type of risk is economic risk, the higher the cost of an innovation, as with capital goods, the higher the perceived economic risk [5]. The third type of risk is due to performance uncertainty and is known as functional risk [5]. The customer worries that the innovation may not have been fully tested and that therefore it is possible that it may not function properly or reliably [5, 37, 38, 39]. The fourth type of risk is social risk. Customers may resist an innovation because they feel that they will face social ostracism or peer ridicule when they adopt it [5].

Traditional barrier generally involve the changes an innovation may cause in daily routines, it is a preference for products and behaviorsthat already exist over novel ones [40]. Lack of human interaction may actually be a source of dissatisfaction in Internet financial services [41.42]. Customers preferred to deal with human tellers rather than adopting the self-service technologies [43], and would increase their e-banking use, if they become technology and change oriented [44].

The image barrier is associated with the innovations identity (from its origin) like the product category, brand, or the country of origin [5]. In addition, this is related to different types of anxiety towards computers [45], or technology itself, referring to consumers' negative state of mind about technology tools [46]. Fain and Roberts [34] stated that the image barrier in online banking emerges from a negative hard-to-use image of computers and the Internet. This may also be the case in m-banking today as some consumers may perceive the mobile technology to be too difficult to use and therefore instantly form a negative image of the service related to the technology.

2.2. Types of Consumer Resistance

Many researchers have noticed that consumers react in a less enthusiastic way even for successful new products, which could be considered as the consumers' resistance [47, 48, 49, 50, 51, 52, 53]. Resistance normally leads consumers' response towards one of three forms: direct rejection, postponement or opposition [6, 7].

Postponement occurs when consumers delay the adoption of an innovation. It simply refers for delaying the decision to adopt [38]. This delay depends on situational factors, such as waiting for the right time to become capable, or to make sure the product works effectively. Postponement may take the form of acceptance or rejection after a certain time period [6].

Opposition refers is a kind of rejection, but the consumer is willing to test/check the innovation before finally rejecting it. The causes of opposition vary. This may be due to habit resistance, situational factors, and consumers' cognitive style [7,38].

Rejection is the most extreme form of resistance [7]. When a mass of consumers reject an innovation, manufacturers usually change or iterate/modify it appropriately and then re-introduce it in the market. Rejection may occur if the innovation does not offer any valuable advantage, is complex or risky, etc. [6]. Rejection can be of two types, passive and active rejection; where passive rejection occur when the innovation is never really adopted or implemented, and active rejection occur when the innovation has been considered but later rejected [54].

2.3. M-banking in Egypt

M-Banking refers to the execution of financial services using mobile communication techniques together with mobile devices [55]. According to a research reported by Berg Insight [56], the worldwide number of users of m-banking and related services is forecasted to grow from 55 million in 2009 at a compound annual growth rate (CAGR) of 59.2 per cent to reach 894 million users in 2015. Currently, m-banking services offer lots of services concerning account information, Payment and transfers, Investment, Support and Content service.

Egypt has a great potential to expand in retail banking activities due to its high population, which exceeds 84 million. Electronic payment systems have developed over the last decade due to the rapid development of telecommunications and IT networks [57, 58]. As early as 2000, a number of local and international banks launched electronic banking services to give clients access to cash and allow them to conduct necessary financial transactions. Yet, online banking services have not taken off in Egypt because of low rates of computer literacy and Internet penetration. According to the Ministry of Communication and Information Technology (MCIT), the number of computer users in Egypt was only 6.78 million in May 2007 [59]. However, Egypt's national telecommunications regulator stated that the total number of mobile subscribers has already reached 71.46 million in January 2011 [59]. Therefore, it is obvious that there is an upward trend in the Egyptian mobile usage. This brings a calling need for investing in m-banking as it is a leading sector and mobiles are highly valued and used.

Egyptian m-banking has already taken its first steps from mere notification to actual transactions. In some banks customers can now pay for their mobile bills using their phones using SMS in Egypt [60]. Although, the number of people using m-banking in Egypt is estimated at less than 200,000 bankers believe there is a considerable growth potential [60]. The success of m-banking in countries like South Africa, Kenya, and Botswana might also be an indication that Egypt’s low-income segment may succeed too [59].

2.4. Culture and Its Dimensions in Egypt

Traditionally, the term culture was formulated by Hofstede is “the collective programming of the mind which distinguishes the members of one group or category of people from another”. In the definition of culture, groups or categories of people refers to people that are in contact with each other or that have something in common such as nationality, gender, religion, and ethnicity [61]. Hofstede has identified four main dimensions that form a model for differences among national cultures. These dimensions are Power distance, Individualism vs. Collectivism, Femininityvs. Masculinity, and Uncertainty Avoidance.

First, Power distance, refers to the extent to which the less powerful members of organizations within a country expect and accept that power is distributed unequally. Large Power Distance with a value of (80) was found to be a leading Hofstede Dimension characteristic in Egypt.Leaders in Egypt seem to have power and authority, which indicates a high level of inequality of power and wealth within the society.

A second dimension is Individualism vs.collectivism, which refers to societies in which the individual interests prevail over the group interests versus societies in which the group interests prevail over the individual interest. Egypt in particular has (38) compared to a world average ranking of (64). This translates into a *Collectivist society* as compared to Individualist culture and is clear in a close long-term commitment to the group member, whether it is a family, extended family, or extended relationships.

Then, the third dimension is the Femininityvs. Masculinity, where masculinity stands for a society in which social gender roles are clearly distinct, while, femininity stands for a society in which social gender roles overlap. Thisdimension in Egypt is (52), only slightly higher than the (50.2) average for all the countries.

Finally, the fourth dimension is the Uncertainty avoidance, which refers to the extent to which the members of a culture feel threatened by uncertain or unknown situations [61].The high Uncertainty Avoidance characteristic (68) in Egypt which justify why Egyptian people try to stick to rules in an attempt to control things in order to avoid uncertainty which leads to the society being risk adverse.

3. RESEARCH METHODOLOGY

As part of a wider study of the Consumer Resistance towards Mobile Banking Usage in Egypt, a structured questionnaire was designed to investigate the main five adoption barriers identified by Ram and Sheth model and their impact on each non-adopter group [5].

3.1. Research Hypotheses

H0 1. There is no significant difference among postponers, opponents and rejectors with respect to usage barrier.

H0 2. There is no significant difference between postponers, opponents and rejectors with respect to value barrier.

H0 3. There is no significant difference between postponers, opponents and rejectors with respect to risk barrier.

H0 4. There is no significant difference between postponers, opponents and rejectors with respect to image barrier.

H0 5. There is no significant difference between postponers, opponents and rejectors with respect to tradition barrier.

3.2. Data collection and analysis

The survey was administered both electronically and in person in order to increase the diversity of the respondents, increase the number of returned questionnaires, and increase the geographical accessibility. 500 questionnaires were distributed over respondents from Alexandria and Cairo; however only 380 valid questionnaires were returned of whom 229 respondents (61 per cent) are forming a non-adopter group. Most of the questions in the questionnaire were adapted from previous research. However, a number of questions were self-developed solely for the purpose of this research to address important concepts, which were not addressed in previous studies.

The questionnaire contains 20 items measuring Usage, Value, Risk, Tradition and Image barriers. These items were derived from prior Internet and mobile banking studies (Table I). A five-level Likert scale ranging from totally agree (1) to totally disagree (5) was used in all statements. The questionnaire also includes questions relating to socio-demographics (gender, age, income, and education), previous experience of online banking services and the use of mobile devices to access the Internet.

Statistical tests have been applied to assess whether the distributions of results differ significantly from results that might have arisen by chance. Differences in resistance between the postponers, opponents and rejectors were tested using chi square tests, the Kruskal-Wallis H tests and one-way analysis of variance (ANOVA) test in order to know the main reasons of non-adoption for each group. Thereafter, Kruskal-Wallis H tests and cross tabulations were used to determine if and how the segments differed in demographics and previous experience of respondents towards resistance decision and resistance barriers.

3.3. Results

A reliability analysis was conducted and the Cronbach's alpha scores indicated adequate reliability levels in usage (0.842), value (0.778), risk (0.848), image (0.637), and tradition (0.609) barriers [62].

The proportion of male and female respondents was almost equally split in this survey. The respondents were 188 males (49.5%) and 192 females (50.5 %). The majority of the respondents were in the 26-40 age group (60.8 %). Population studied comprised Masters and PhD students, and University level with frequency distributions of 31.6 % and 56.8 %, respectively. Respondents having no monthly income comprised the majority group (29 %) followed by those with a monthly income within the range of EGP 500 to 2000 (28 %). Moreover, the majorityowned smart phones (71.3%), and the majority of respondents are surfing the Internet through their mobile daily or few times a week (52.6%). In addition, 151 (39.7%) will intend to adopt the m-banking in Egypt, however, 138 (36.3%) intend to use the service but not decided when (opponents), 57 (15%) will not intend to use it at all (rejectors) and 34 (8.9%) were intending to adopt the service within a year (postponers). The above results supports Hofstede's cultural dimensions where there is a high percentage of respondents were resistant to adopting m-banking in Egypt [61]. This seems to justify why people will be less open to new ideas and to be more resistant to innovations such as m-banking.

H0 1. There is no significant difference among postponers, opponents and rejectors with respect to usage barrier. Chi-square = 45.435 (df=4, sig.=.000), with this result a significant difference was found, enabling the rejection of the null hypothesis. Kruskal-Wallis H test =26.690 (df=2, sig.=.000) again a significant difference was found, enabling rejection of the null hypothesis one more time.The interpretation is that the three non-adopter groups differ significantly with respect to the usage barrier. This proves that the usage barrier seem to have different impacts on the three non-adopter groups.

H02. There is no significant difference between postponers, opponents and rejectors with respect to value barrier.Chi-square = 45.957 (df=4, sig.=.000)and a significant difference found between these sets, enabling also the rejection of the null hypothesis. Kruskal-Wallis H test =34.515 (df=2, sig.=.000)and a significant difference found between these sets, enabling rejection of the null hypothesis too. The results show that the three non-adopter groups also differ significantly with respect to the value barrier.

H03. There is no significant difference between postponers, opponents and rejectors with respect to risk barrier.Chi-square = 6.342 (df=4, sig.=.175)and a non-significant difference found between these sets, consequently the null hypothesis was failed to reject it. The Kruskal-Wallis H test =5.824(df=2, sig.=.054)also show non-significant difference found between these sets and the null hypothesis was failed to reject too. The results show that the three non-adopter groups did not differ significantly with respect to the Risk barrier.

H04. There is no significant difference between postponers, opponents and rejectors with respect to image barrier.Chi-square = 10.000 (df=4, sig.=. 04)and a significant difference found between these sets, enabling rejection of the null hypothesis. Kruskal-Wallis H test =7.024(df=2, sig.=. 03)and a significant difference found between these sets, enabling rejection of the null hypothesis too. The results show that the three non-adopter groups differ significantly with respect to the image barrier.

H05. There is no significant difference between postponers, opponents and rejectors with respect to tradition barrier.Chi-square = 5.555 (df=4, sig.= .325)and a non-significant difference found between these sets, consequently the null hypothesis was failed to reject it. The Kruskal-Wallis H test =4.022 (df=2, sig.=.134) also show non-significant difference found between these sets and the null hypothesis was failed to reject too. The results show that the three non-adopter groups did not differ significantly with respect to the tradition barrier.

The descriptive statistics and F statistic tests indicated that the risk barrier is the most intense barrier to mobile banking adoption among the three non-adopter groups. The rejectors' group reported high resistance regarding all barriers, however, it seems to have functional barriers to mobile banking adoption rather than psychological barriers as risk and usage barrier scored the highest value followed by the value barrier. While the most determining factor in the case of the postponers' group appears to be the risk barrier contrary to tradition barrier that causes the lowest factor to m-banking adoption. Similarly, the opponents' group showed the highest value to risk barrier and the value barrier is the second strongest. The image barrier received the lowest mean score among the three groups and being the weakest barrier to the m-banking adoption.

A closer look at the results reveals that the greatest concern that all groups have is the risk to transmit or store banking transaction data, or the poor reliability of the connection. However, the rejectors are the only group who seem to prefer visiting the bank in person. Apart from the risk barrier, the three groups do have doubts that m-banking would enhance their ability to control their financial affairs. This result is also compatible with Uncertainty Avoidance dimension in Egypt that was proven by Hofstede to be a main issue to Egyptians [61], who are risk adverse by nature. So by being unsure whether the m-banking will be secured or reliable, they tend to be infrequent users. Unawareness is another key issue where although customers might have heard of m-banking, they are not well aware of the services provided or how to use it. Furthermore, the results revealed that there is no significant difference in terms of the cost of m-banking service among the three groups.

With regards to the demographics analysis, this study all results were insignificant, except for the significant relationship found between both the levels of education and the type of mobile owned by users (smart /feature phone) with the decision of adoption among the three non-adopter groups. The Kruskal-Wallis H test for the levels of education and the type of mobile owned were 6,365 (df=2, sig.=.041) and 14,91 (df=2, sig.=.001), a significant difference found between these sets.

Concerning the relationship between the usage barrier and the demographics criteria, we discovered a significant relationship among the usage barrier with the gender and the level of education. The Kruskal-Wallis H test for the gender and the levels of education with the usage barrier were 13.439 (df=2, sig.=.001) and 13.289 (df=2, sig.=.001) respectively. On the other hand, the value barrier reported a significant relationship with the levels of education and the occupation with Kruskal-Wallis H test = 17.844 (df=2, sig.=.000) and 9.205 (df=2, sig.=.01) respectively. Moreover, risk barrier appeared also to have a significant relationship with gender and level of education as the usage barrier with Kruskal-Wallis H test = 7.094 (df=2, sig.=.029) and 10.358 (df=2, sig.=.006) respectively. Likewise, the image barrier showed significant relationship with gender and level of education and income per month with Kruskal-Wallis H test =6.852 (df=2, sig.=.033) , 7.034 (df=2, sig.=.03) and 8.088 (df=2, sig.=.018) respectively. Finally, the Kruskal-Wallis H test revealed that the tradition barrier has no significant relationship with demographics. These results are well-matched with the Masculinity index in Egypt [61], where men in Egypt are more outgoing and less conservative than women. This is clear where 58% of males realize that m-banking is easy to use and is secure. Also 55% agree that they are likely to use m-banking, while 65% of females have the perception that m-banking is risky and hard to use, and, 65% stated that they will not use this service at all.

4.0. CONCLUSIONS

The results show that the three non-adopter groups namely postponers, opponents and rejectors differ significantly with respect to the usage, value, and image barriers, thus supporting the hypotheses H1, H2 and H4. The risk and the tradition barriers did not show any statistical significance, however, the results indicate high-risk perceptions among all m-banking non-

adopters. Therefore, the groups should be approached with different strategies and differentiated targeted marketing actions.

First of all, we can find that the postponers who intend to adopt m-banking within a year are less resistant to the service. However, they seem to perceive some risk mainly concerning transmitting and storing information related to banking transactions. Therefore, safety issues in particular should be well addressed and targeted marketing actions should be taken in order to encourage postponers adopt the m-banking service soon. Banks in Egypt should highlight the fact that the service is secured and mention explicitly the security techniques used. In addition, banks may promote the service trial by providing a free of charge demo, where they can actually try using the system without using their own real accounts. In addition, based on Hofstede's study about Egypt [61]who states that Egypt is a collectivistic culture, if decision makers succeeded to convince postponers to accelerate the decision of adoption, many other customers will be influenced in consequence with minimal effort needed.

On the other hand, opponents who intend to adopt m-banking in the future but did not decide when, not only share the postponers' concerns regarding m-banking risks but are also having value doubts, where they are not sure that m-banking will improve the control of financial accounts which also prove that the uncertainty avoidance in Egypt is high [61]. So by being unsure whether the m-banking will be secure or reliable, they tend to be opponent users. Unawareness is another key issue where although customers might have heard of m-banking, they are not well aware of the services provided or how to use it. Consequently, bank marketers should still focus on the same basic risk-related aspects as with the postponers, but they should also emphasize the value obtained when using this service. This could be realized using both mass media advertising and face-to-face communications, which would enable marketers to better, communicate with potential customers and meet their needs.

Finally, rejectors who have no intention to adopt m-banking are the most challenging customers to be convinced of the potential benefits, usefulness, ease of use, positive image and high security of m-banking. This was particularly clear where high resistance regarding all barriers, was reported. However, it seems that functional barriers were more important than psychological barriers as risk and usage barrier scored the highest value followed by the value barrier. An appropriate way for bank marketers to approach this group of customers could be via face-to-face communication and educational techniques, which could enable a demonstration of how the service could be used and allow practicing the actual use of the service. By doing this, customers would have a better chance to realize the ease and convenience of use while at the same time learn more about the high security techniques used. Mass media marketing could also be used to advertise the benefits of the service and to fix the negative image perceived by rejectors.

The main limitation of this study is the limited geographic dispersion, where questionnaires were distributed mainly in Alexandria, which is the second city in Egypt. A more diverse random sample would help making the results more generalizable.

A complementary qualitative study may provide bank marketers with a better understanding of customers' decision-making process, and would enable them to determine the factors that are more influential and accordingly makes marketing campaigns more efficient and effective by designing them in a way that addresses the various customers' concerns, especially the most important concerns. Studying the bank's decision makers perspective may also yield in depth knowledge regarding the adoption of m-banking, where having the broad picture would enable decision makers alleviate or eliminate barriers as needed.

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APPENDIX

APPENDIX1 : ANOVA TEST

Dimensions Cronbach alpha	Statements	Postponers	Opponents	Rejectors	Total	F-value	Sig
Usage Barrier (0.842)	Banking transactions would be easy using a mobile phone	2.18 (1.167)	2.46 (1.026)	3.49 (1.23)	2.68 (1.196)	21.724	P=.000
	It would be easy for me to remember how to conduct banking transactions on a mobile phone	2.32 (1.249)	2.54 (0.952)	3.23 (1.118)	2.68 (1.088)	11.044	P=.000
	A mobile phone would make it easier for me to conduct banking transactions	2.47 (1.26)	2.25 (.895)	2.91 (1.22)	2.45 (1.07)	8.206	P=.000
	Mobile banking services would be fast to use	2.15 (1.105)	2.22 (.89)	2.68 (1.167)	2.33 (1.014)	4.94	P=.008
Value Barrier (0.778)	Banking transactions would be useful using a mobile phone.	2.21 (1.12)	2.22 (.88)	3.02 (1.22)	2.42 (1.06)	13.205	P=.000
	Using a mobile phone is useful to eliminate the constraints of time and space when conducting banking transactions	1.94 (.952)	2.03 (.782)	2.33 (1.139)	2.09 (.915)	2.813	.062
	Using a mobile phone for banking transactions offers more advantages than other ways (e.g going to the bank, ..etc)	2.15 (.925)	2.22 (.959)	2.72 (1.27)	2.34 (1.06)	5.194	0.006
	A mobile phone is a good substitute of a PC to conduct banking transactions	2.56 (.894)	2.69 (1.07)	3.21(1.37)	2.8 (1.15)	5.157	0.006
	A mobile phone would give me greater control over my banking transactions	2.53 (.961)	2.69 (.942)	3.4 (1.08)	2.84 (1.03)	12.737	0.000
	It would not cost a lot to use mobile banking	2.5 (1.135)	2.59 (1.051)	2.82 (1.212)	2.63 (1.107)	1.221	.297

Risk Barrier (0.848)	Mobile banking would be secure in conducting transactions	2.62 (.985)	3.13 (1.207)	3.35 (1.261)	3.11 (1.207)	4.09	.018
	Mobile banking would not reveal personal information to others	2.91 (1.026)	3.02 (1.174)	3.18 (1.311)	3.04 (1.188)	.582	.560
	It would be secure to transmit and store information related to banking transactions on a mobile phone	3.06 (1.229)	3.31 (1.158)	3.46 (1.283)	3.31 (1.20)	1.167	.313
	It would be reliable to conduct a banking transaction via a mobile phone	2.68 (1.121)	2.91 (.935)	3.46 (1.196)	3.01 (1.06)	7.784	.001
Image Barrier (0.637)	Banking transactions performed on a mobile phone would be satisfactory	2.53 (.896)	2.54 (.821)	3.07 (1.132)	2.67 (.943)	7.277	.001
	New technology is too useful rather than complicated	2.03 (1.029)	2.07 (.856)	2.33 (1.17)	2.13 (.972)	1.746	.177
	I have an image that m-banking services are easy to use	2.35 (1.041)	2.42(.861)	2.77 (1.195)	2.5 (.99)	3.028	0.05
Tradition Barrier (0.609)	I do not prefer to visit the bank and chat with tellers	1.82 (1.086)	2.54 (1.227)	2.95 (1.315)	2.53 (1.27)	8.886	.000
	I find self-service alternatives more pleasant than personal customer service.	2.12 (1.094)	2.37 (1.004)	2.68 (1.105)	2.41 (1.05)	3.407	.035
	It is stylish to use a mobile phone for banking transactions	1.97 (.969)	2.38 (1.095)	2.68(1.098)	2.39 (1.098)	4.687	.01