



The study of factors affecting the adoption of the mobile banking in Arman credit institution

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ABSTRACT

Mobile banking is one of the newfangled and developing in e-banking. And Arman Financial Institute is intended to use it. Thus the present research aims at identifying and evaluating effective factors on using mobile bank in Arman Credit Institute in Guilan. The present research is an analytic-descriptive one. Out of the total subject population that included all customers of these Arman Credit Institute in the city of Rasht, a sample population of 400 customers was chosen randomly. For evaluating validity they used content validity and for evaluating reliability they used. The present research result shows that there is a direct effect on accepting three expected performance, trust, and perceived risk factors in mobile bank. Also there is indirect effect on three other factors include of self-efficacy, trust tendency, perceived risk. On the other hand The Strength of relationship between expected performance and trust and perceived Risk In order to use Mobile bank respectively are equal to 0.41, 0.70, and 0.42. A researcher-made questionnaire was used after being standardized. The reliability and validity of the questionnaire were gained through Cronbach Alpha. This was 0.863. Then, the data collected were analyzed by SPSS 19, t-test of two independent samples, and variance analysis. Finally, the mixture elements were ranked. It was indicated that there was meaningful relationship between expected performance, trust and perceived risk on aim at using mobile bank.

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1. Introduction

The banking system in recent decades is moving fast toward capitalizing on new technologies and offering customer services, it means the banking system is moving toward the electronic banking systems. The development of electronic banking increases efficiency of banks financial transactions and customers satisfactions with removing geographical and time limitations. Mobile banking (m-banking) is among the latest in a series of recent mobile technological wonders. Although automated teller machine (ATM), telephone, and Internet banking offer effective delivery channels for traditional banking products, but as the newest delivery channel established by retail and microfinance banks in many developed and developing countries, m-banking is likely to have significant effects on the market (Safeena et al., 2012; Karjaluoto et al., 2015). In particular, the expanded uses of smart phones has increased demand for m-banking services, prompting many more banks, microfinance institutions, software

houses, and service providers to offer this innovative service together with new sets of products and applications designed to extend their client reach (including to unbanked populations), improve customer retention, enhance operational efficiency, increase market share, and provide new employment opportunities (Shaikh, 2013). Mobile banking (m-Banking) enables customers to carry out their banking tasks via mobile devices. We advance the extant body of knowledge about m-Banking adoption by proposing a model for understanding the importance and relationship between the user perception of m-Banking, initial trust in m-Banking services, and the fit between the technology and m-Banking task characteristics. The impact and influence of m-banking are so extensive that IT experts believe that this phenomenon is one of the largest events in the field of mobile technology as well as trade and business (Tiago et al., 2014). The value of mobile banking for consumers is in its immediate location-free access

To banking services enabling time savings, real-time information, and enhanced feelings of control (Laukkanen and Lauronen, 2005). However, significant differences in channel attribute

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preferences exist between users and non-users of mobile banking (Laukkanen, 2007c). The topic of the diffusion of innovative IT artifacts has piqued interest among researchers. Similar to other innovative technologies, MB is facing adoption barriers while in its infancy stage. Prior research has indicated that factors including technological advances, better understanding of technology, and more tech-savvy consumers make today's environment ripe for MB (Jacobs, 2007). However, the acceptance or rejection of the artifact is still in doubt; as m-commerce continues to struggle to find widespread consumer adoption (Vance et al., 2008). MB inevitability confronts such challenges as consumers' trust in the new wireless technology and their perception of risk associated with the open airwaves of a wireless medium. We thus argue that consumers' trust and risk perception may influence their acceptance of MB services; motivated by recent research that suggests manifold dimensionalities for risk and trust and the integral studies on trust versus risk in new IT contexts (Gefen and Pavlov, 2008). Therefore, it is necessary to identify affecting factors on the performance of m-banking. Based on recent studies and research fields it should be determined that which factors affect the acceptance of m-banking and how much is the effect of these factors? According to the importance of m-banking, in this research it has been identified a model for determining influence factors on customers intend to use m-banking.

1.1. Statement of the problem

One of the innovations that caused because of developments in information and communication

technology has experienced significant growth in e-banking. So banks move towards electronic banking and new financial services, Had a significant role in increasing trade volume, especially e-commerce. Mobile banking or e-banking is one of the dimensions which banks are advertising it for a short time in recent years. But an important point in m-banking is the acceptance of electronic technology and users leave away traditional methods (Jafarpour et al., 2010). Nowadays using e-banking is an advantage than a necessity. Firstly, virtual e-banking that are active on the internet able to provide faster, more complete, more accurate and more desirable services to their customers all over the world; secondly, the slowness of the traditional banking system which has taken away golden opportunity of attracting of customers. Traditional paper exchanging has obsoleted in progressed countries. The possibility of transferring such documents is excluded in developed countries (shojaei, 2010). In this research our effort is to identify affective factors on choosing m-banking by Iranian Customer and then localize this model. This research will answer the following questions: what are affective factors on acceptance of e-banking by customers of Arman financial institute? What relations are there among affective factors m-banking?

1.2. The theoretical framework of research

According to hypotheses and variables of the following patterns in this research we are going to represent our research conceptual model (Fig. 1).

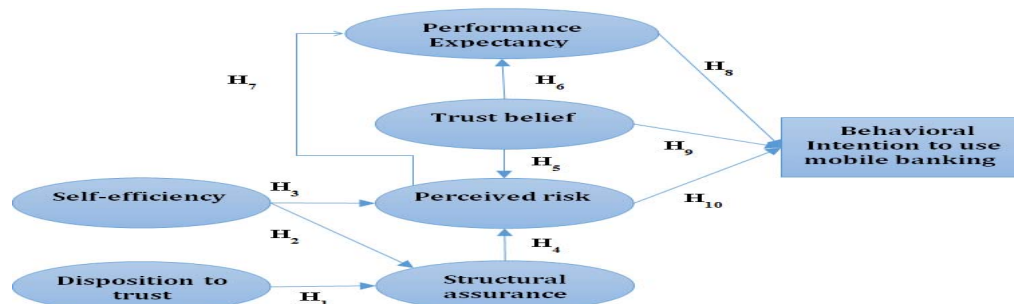


Fig.1: The conceptual frame work of this research

The conceptual frame work of this research is adopted based on Lo and et.al studies in 2010 in the field of mobile banking. In this study this model has been chosen as the reference model.

1.3. The purposes of this research

1.3.1. The main purpose

Explanation of influencing factors on customers intends to use mobile banking.

1.3.2. Secondary objectives

1. As saying the relationship between trust tendency on reliability of mobile banking reception.
2. As saying the relationship between self- efficiency on reliability of mobile banking reception.
3. As saying the relationship between reliability on perceived risk of mobile banking.
4. As saying the relationship between trust on perceived risk of mobile banking.
5. As saying the relationship between trust on performance expectancy of mobile banking.
6. As saying the relationship between perceived risks on performance expectancy of mobile banking.
7. As saying the relationship between performance expectancy on users tendency of mobile banking.

8. As saying the relationship between trust on users tendency of mobile banking.

9. As saying the relationship between perceived risk on customers tendency in using mobile banking.

1.4. State hypotheses

Based on the research question and model, following hypotheses were developed:

Hypotheses 1: Trust tendency on reliability of mobile banking has meaningful effect on acceptance of m-banking.

Hypotheses 2: Self-efficiency on reliability has meaningful effect on acceptance of m-banking.

Hypotheses 3: Self- efficiency on perceived risk has meaningful effect on acceptance of m-banking.

Hypotheses 4: Reliability on perceived risk has meaningful effect on m-banking.

Hypotheses 5: Trust on perceived risk has meaningful effect on m-banking.

Hypotheses 6: Trust on perceived performance has meaningful effect on m-banking.

Hypotheses 7: Perceived risk on perceived performance has meaningful effect on m-banking.

Hypotheses 8: Perceived performance has meaningful effect on customer's tendency.

Hypotheses 9: Trust on intention has meaningful effect on using mobile banking.

Hypotheses 10: Perceived risk has meaningful effect on using tendency.

2. Review of literature

The financial-banking domain has known an uncommon evolution in the last few years; the increase in volume of the transactions in this field has been accompanied by a diversification of the services offered by the institutions in the branch. Under these conditions, the use of some IT solutions that were able to answer some more and more specific needs became a mandatory requirement for the growth of operational efficiency of financial institutions. From a functional point of view, a high performance e-banking application should distinguish itself through easiness in navigation, meeting the customer's demands, selective access to content based on needs/types of consumers, credit simulation and diagnostic tools and, technically, response time and system reaction, pertinence and selectivity of the search engine are the important ones. The last, but not the least, the security of the application operation and of the traveling information should be built, maintained and monitored in a manner beyond doubt. For the business to business applications, which serve the really important transactions in the banking activity, the requirements are made to match. These applications have to change with each other an impressive amount of data and, furthermore, to react to a standard number of events with standard functions (Daniela and Octavian, 2004).

2.1. Mobile banking

Regardless of the terminology they use, scholars generally define m-banking as an application of m-commerce that enables customers to access bank accounts through mobile devices to conduct transactions such as checking account status, transferring money, making Payments, or selling stocks (Alafeef et al., 2012).

The banking industry is among the leading sectors in adopting the Internet and mobile technology for consumer markets (Laukkanen and Lauronen, 2005). Today, the Banking industry shares the common characteristics of a high technology Industry: competitive volatility, market uncertainty, and Technology uncertainty (Pousttchi and Schurig, 2004). According to Oh and Lee (Lee et al., 2003). Before the advent of Internet banking, banks had long invested in information technologies and the operation of banks was mostly accomplished electronically with successful experience in development systems such as ATMs and phone banking. The emergence of the Internet had a significant impact on the diffusion of electronic banking, which is seen as one of the most successful business-to-consumer (B2C) applications in e-commerce. Electronic banking has changed the business of Retail banks significantly in terms of cost reduction and increased convenience for the customer (Laukkanen, 2007). While technologies, such as 2.5G (i.e. GPRS), 2.75G (i.e. EDGE), and 3G wireless networks that support faster and easier access to the Internet, have become increasingly ubiquitous and thereby changed consumers' behavioral patterns in interacting with their financial institutions, consumers are more technologically savvy than ever, which has reduced their uneasiness involving technological innovation (Hoffman, 2001; Lee et al., 2003). This newly-emerging channel for delivering financial services via mobile devices has created the inception of mobile banking, which can be implemented through such technological means as downloadable applications, mobile browsers, text messaging, and preloaded applications.

2.2. Mobile banking adoption

We believe that the literature associated with e-commerce, particularly Internet banking, may offer valuable insights into innovative mobile banking acceptance because of the congruence in terms of human users facing e-commerce systems, although differences exist in customers' perception of their value (Laukkanen, 2007). A plethora of prior studies, such as Nor and Pearson (2008) and Nor et al. (2008) as well as Kim et al. (2008), although demographic characteristics help identify potential mobile banking adopters, the question of why people adopt or do not adopt mobile banking cannot be answered solely by socio demographic information. Determinant factors suggested by the diffusion of innovation model, the Theory of Planned Behavior

(TPB), the Technology Acceptance Model (TAM), and other related constructs have been studied to explain MB adoption behaviors. As MB services offered via a mobile media channel are still new to customers, some researchers have found Rogers' diffusion of innovation model relevant (Mattila, 2003).

3. Materials and methods

Regarding the goal of the present research, it is descriptive-analytic and of applied one. Simply put, the descriptive research here describes the characteristics of customers based on their age, gender, work background and experience, and level of education.

The subjects in this study included this entire institute bank customer in the city of Rasht which was 100000 customers totally. Out of the total subject population a sample population of 384 customers was chosen to indicate the degree of their trust to Arman financial institute. Since the subject population in question was too much and unlimited population, sampling was conducted by the use of Cochran formula as shown below. And for considering probable risk and increasing liability of evaluation they chose 400 customers for their test.

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$$n = \frac{NZ\alpha_2^2 S_x^2}{(N-1)d^2 + Z\alpha_2^2 S_x^2}$$

$$\lim_{n \rightarrow \infty} (n) = 384 \quad (1)$$

Since the level of significance is 0.5, the subject population was finally totaled to be 384.

The data collection procedure was done through researcher-made questionnaire consisting of seven parts consist of: performance expectancy, trust belief, behavioral intention, perceived risk, self-efficiency, structural assurance, disposition of trust, and 23 questions. It was designed based on five Likert Scale (very low to very high). The first seven parts includes the role of customer, and the fifth part involves the demographic characteristics of the subjects.

To evaluate the validity of the questionnaire, surface and content types of validity were utilized. In so doing, the questionnaire was submitted to a number of outstanding professors in management and behavioral science. Based on the views that a questionnaire should be of reasonable length, unambiguous with simple instructions and direction, and most importantly, purposeful, their ideas and views certified the questionnaire fully after making some corrections and modifications. To evaluate the reliability of the questionnaire, Cronbach's alpha was used. Thirty questionnaires were first distributed among the customers. A total of thirty questionnaires were evaluated through Cronbach's alpha. The result was 0.836 with the level of significance of .5. The data collected were analyzed by SPSS 19, one sample t-test, independent samples t-test, and analysis of variance (ANOVA).

3.1. Data analysis

What follows is the data analysis of the results achieved through the application of related statistical procedures.

3.2. Respondents' demography

The demographic characteristics of respondents such as gender, age, level of education, and work experience are discussed in this section

3.3. Structural model in this research

In structural model we have two types of variables: Latent variables and observed variables. Our Latent variables in this research are: Expected performance, perceived risk, efficacy, Trust tendency, assurance, trust, use intendancy. Latent variables "intended use of mobile banking" is a dependent variable. Then it will evaluate the effects of Expected performance, perceived risk, efficacy, Trust tendency, assurance, and trust on intended use of mobile banking. "Efficacy" and "Trust tendency" are exogenous independent variable. It means that none of these effective factors are not considered, they are just two independent variables which have direct or indirect effect on it. "Expected performance", "perceived risk", "assurance", "trust", is endogenous independent variables.

3.4. The gender of respondents

208 respondents were male comprising 54.17 percent, and female respondents were 45.83 percent of total population. The following table shows this characteristic (Table 1).

3.5. The age of respondents

Regarding the age, respondents were divided into 4 groups. 113 respondents were in age range of 30-40 that comprised 29.43 percent of total

respondents. 108 respondents were in age range of 40-50 with 28.13 percent. 101 and 62 respondents were under 30 and over 50 respectively (Tables 2 and 3).

Table 1: Frequency based on gender

Gender	Frequency	Percent	Cumulative frequency
Man	208	54.17	45.83
Woman	176	45.83	
Total	384	100.00	100.00

Table 2: Frequency based on age

Age	Frequency	Percent	Cumulative frequency
Under 30 years	101	26.30	26.30
30 - 40	113	29.43	55.73
40 - 50	108	28.13	83.85
Over 50	62	16.15	
Total	384	100.00	100.00

Table 3: Frequency based on education level

Education level	frequency	percent	Cumulative frequency
Under diploma	60	15.63	15.63
diploma	101	26.30	41.93
BA	132	34.38	76.30
MA and higher	91	23.70	
Total	384	100.00	100.00

Education level of respondents: The highest frequency refers to those who own BA degree with 132 respondents, and the lowest frequency goes back to respondents of under diploma holder or higher with 91 persons MA degree and 60 were under diploma.

3.6. Marital status

264 respondents are married that comprised just 0.66 percent of population. 125 respondents are single that comprised just 33.69 percent of population. 13 people in his area haven't provided the correct information (Table 4). Monthly fee was shown in Table 5.

3.7. Hypothesis testing

The first hypothesis: disposition to trust influences the structural assurance.

The power of relationship between the variable tendency of trust and the reliability of reception of mobile banking was calculated to be 0.36. That is an acceptable range. And the t value was 11.45 that is larger than critical T at significance level of 0.5 that is 1.96 .thus, trust tendency on mobile banking acceptance has meaningful and positive effect (Figs. 2 and 3).

3.7.1. The second hypotheses

Self-efficiency influences structural assurance and trust from mobile banking acceptance.

Table 4: Frequency based on marital status

marital status	frequency	percent	Cumulative frequency
married	246	66.31	66.31
Single	125	33.69	
Total	371	100.00	100.00

Table 5: Frequency based on monthly fee

monthly fee	frequency	percent	Cumulative frequency
Less than 500000	7	2.55	2.55
500 - 1000000	74	56.91	29.45
1000000- 2000000	143	52.00	81.45
More than 2000000	51	18.55	
total	275	100.00	100.00

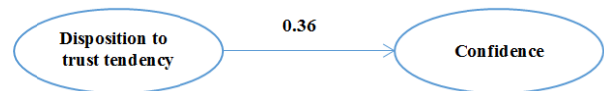


Fig. 2: The Load factor of the willingness to trust the reception of mobile banking

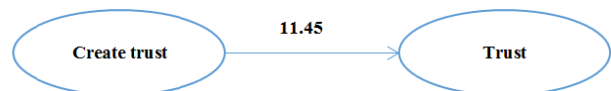


Fig. 3: T-value of the effect of disposition trust on confidence mobile banking acceptance

The power of relationship between the variable of Self-efficiency and the variable of the trust was calculated to be 0.39. This amount is acceptable. The T value was 9.38 that is larger than the critical T at significance level of 0.5 that is 1.96. Thus, Self-efficiency has a positive and meaningful effect on the structural assurance and trust from mobile banking acceptance (Figs. 4 and 5).



Fig. 4: The Load factor of the impact of self -efficiency on mobile banking acceptance



Fig. 5: T-value of the effect of self -efficiency on trust of mobile banking acceptance

3.7.2. The third hypotheses

Self-efficiency influences the perceived risk from mobile banking.

The power of relationship between the variable of Self-efficiency and the variable of the perceived risk was calculated to be 0.63. And the t value was 8.88 that is larger than critical t at significance level

of 0.5 that is 1.96. Thus, self-efficiency has positive and meaningful impact on perceived risk from mobile banking (Figs. 6 and 7).

3.7.3. The forth hypotheses

Structural assurance influences perceived risk from mobile banking



Fig. 6: The Load factor of the impact of self –efficiency on the perceived risk



Fig. 7: The t-value of the impact of self –efficiency on the perceived risk

The power of relationship between the variable of trust and the variable of perceived risk was calculated to be 0.35. And the t value was 11.78 that are larger than t critical t at significance level of 0.5 that is 1.96. Thus, trust has a positive and meaningful impact on perceived risk from mobile banking (Figs. 8 and 9).



Fig. 8: The Load factor of the impact of self –efficiency on the perceived risk

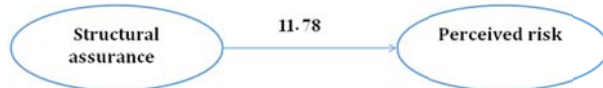


Fig. 9: T-value of the impact of self –efficiency on the perceived risk

3.7.4. The fifth hypotheses

Structural assurance influences the perceived risk from mobile banking.

The power of relationship between the variable of Structural assurance and the variable of the perceived risk was calculated to be 0.34. and the t value was 2.68 that is larger than the critical t at significance level of 0.5 that is 1.96. Thus, Structural assurance has a positive and meaningful impact on the perceived risk from mobile banking (Figs. 10 and 11).

3.7.5. The sixth hypotheses

Structural assurance influences the performance expectancy of mobile banking.

The power of relationship between the variable of Structural assurance and the variable of performance expectancy was calculated to be 0.54. And that value was 7.75 that is larger than critical at significance level of 0.5 that is 1.96. Thus, Structural

assurance has a positive and meaningful impact on the performance expectancy from mobile banking (Figs. 12 and 13).

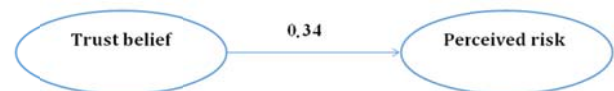


Fig. 10: The Load factor of the impact of trust belief on the perceived risk



Fig. 11: T-value of the impact of trust belief on the perceived risk



Fig. 12: The Load factor of the impact of the trust belief on the performance expectancy

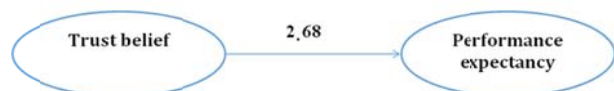


Fig. 13: T-value impact of the effect of trust belief on the performance expectancy

3.7.6. The seventh hypotheses

Perceived risk impacts the performance expectancy from mobile banking.

The power of relationship between the variable of Perceived risk and the variable of performance expectancy was calculated to be 0.51. and the t value was 6.90 that is larger than the critical t at significance level of 0.5 that is 1.96. Thus, Perceived risk has a positive and meaningful impact on performance expectancy from mobile banking (Figs. 14 and 15).



Fig. 14: The Load factor of the impact of the perceived risk on the performance expectancy.

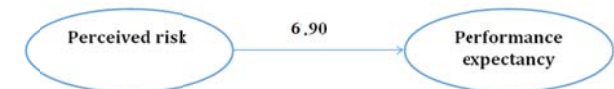


Fig. 15: T-value of the impact of the perceived risk on the performance expectancy

3.7.7. The eighth hypotheses

Performance expectancy impacts the behavioral intention from mobile banking.

The power of relationship between the variable of Performance expectancy and the variable of behavioral intention was calculated to be 0.41 and the T value was 11.73 that is larger than critical t at the significance level of 0.5 that is 1.96. Thus, Performance expectancy has a positive and

meaningful impact on the behavioral intention from mobile banking (Figs. 16 and 17).



Fig. 16: The load factor of the impact of the performance expectancy over the behavioral intention

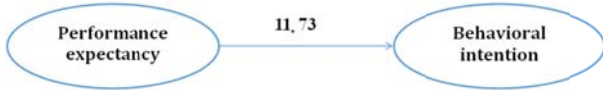


Fig. 17: T-value of the impact of the performance expectancy over the behavioral intention

3.7.8. The ninth hypotheses

Trust belief impacts on behavioral intention from mobile banking.

The power of relationship between the variable of Trust belief and the variable of behavioral intention was calculated to be 0.70 and the t value was 5.30 that is larger than critical t at significance level of 0.5 that is 1.96. Thus, Trust belief has a positive and meaningful impact on the behavioral intention from mobile banking (Figs. 18 and 19).

3.7.9. The tenth hypotheses

Perceived risk impacts the behavioral intention from mobile banking.



Fig. 18: The Load factor of the impact of trust on the belief over the behavioral intention

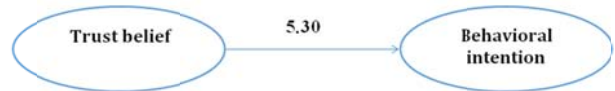


Fig. 19: T-value of the impact of trust belief over the behavioral intention

The power of relationship between the variable of Perceived risk and the variable of behavioral intention was calculated to be 0.70 and the t value was 5.30 that is larger than critical t at significance level of 0.5 that is 1.96. Thus, the Perceived risk has a positive and meaningful impact on behavioral intention from mobile banking (Figs. 20 and 21).



Fig. 20: The Load factor of the impact of the Perceived risk on the behavioral intention

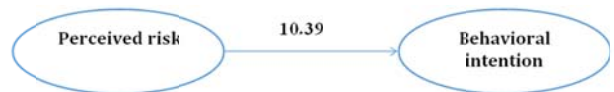


Fig. 21: T-value of the impact of the Perceived risk on the behavioral intention

4. Discriminated validity of measurement model

This structural model is saturated in three stages. Fitting indicators show favorable values. Xi-two normal value is also obtained 1/389 which is acceptable intervals from 1-5. Thus, this model has suitable treatability (Fig. 22) (Table 6) (Eq. 2).

$$\frac{\chi^2}{df} = \frac{301.61}{217} = 1.389 \tag{2}$$

Table 6: Suitable treatability

Discriminate validity of measurement	SRMR	RMSEA	GFI	AGFI	NFI	NNFI	IFI
Acceptable values	<0.05	<0.1	>0.9	>0.9	>0.9	>0.9	0 - 1
Calculated values	0.039	0.032	0.94	0.96	0.96	0.96	0.94

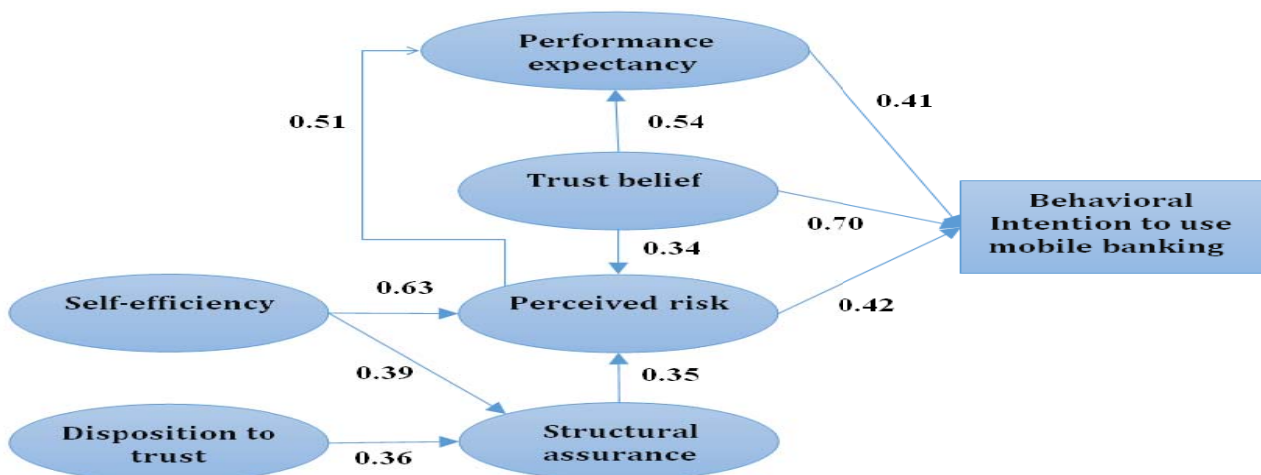


Fig. 22: Performance expectancy

5. Discussion and post-hoc analysis

Based on the analysis conducted on the results, the following findings based on which some

suggestions are recommended, were reached: this research focused on affecting factors on mobile banking acceptance of customers. Generally they tried to evaluate the affecting factors on increasing and maintenance of mobile banking customers and check their satisfaction's rate. Therefore, according to previous research and expert interviewed the groups of factors are distinguished. Factor analysis techniques are measured for final approval. This analysis is done from the customers' perspective. Descriptive statistical finding shows that: from perspective gender 176 it means 45% of respondents were women and 208 of them were men. Based on the test result the following hypotheses have been proposed:

1. According to a hypothesis and research model, tend to trust could be assured. This confidence from impacts on the perceived risk can increase personal tendency for using mobile banking services. For improving trust tendency toward Arman Institute, should create this idea that learning how to use mobile banking is a simple skill. And the process of using mobile banking should be understandable for customers. If customer consider Arman Credit Institute as legible one in giving services, their satisfaction would increase. One way is preparing safety and security of mobile banking services.
2. The second and third hypotheses show the role of performance expectancy on mobile banking acceptance. And performance expectancy on trust (second hypotheses) and perceived risk (third hypotheses) impacts on it. If someone believes that mobile banking is useful and has a lot advantages, it will be a necessary condition not sufficient. People should consider if they can use mobile banking or not. As more people are considering the ease of use of mobile banking People will be more willing to use mobile banking services. It is recommended to develop practical applications with simple interface and use suitable graphics for attracting potential user's attention. Providing practical training brochures makes people believe in existence of the necessary knowledge to strengthen using mobile banking services. It should be easy to gain necessary skills to use mobile banking. It should be tangible for users. It is recommended to Prepare Persian applications and simple Persian menu guidance. Its ease of access is very important too.
3. In hypotheses number 5, 6, 9 and 10 the role of trust in mobile banking acceptance is considered in three aspects of trust belief, structural assurance, performance expectancy and all three hypotheses is confirmed. Indeed t three factors have direct impact on mobile banking acceptance. Between three factors, performance expectancy, trust, perceived risk. Trust with 70% has the most influence on using mobile banking services in Arman Credit institute. Since the success of internet banking primarily depends on customers. Customer confidence could be key issues in the development of Internet banking account. In

addition, it should be noted that prerequisite of customer's satisfaction is trust. Because trust is created in a long-term process and customer satisfaction guarantees long-term process.

4. According to hypotheses number 7 and 10, which is Based on customer's analysis, security has importance role in customer's mobile banking acceptance. Thus, for being successful in this way the emphasis is on the security. In general, data confidentiality in various stages of banking transactions such as, storage, transfer, retrieval should be preserved. In general, data confidentiality in various stages of banking transaction process such as storage retrieval and transferring should be preserved. This work should be done apart from place of transaction, storage, transferring channel and etc. the common way for keeping data secretly is encrypting data. This service is a basic structure of public key. Using digital signature is another public service. Although the use of electronic banking transactions is very simple. It is likely that customer denies some banking transactions. In this case, there isn't any specific evidence to prove client transaction. Or it's very difficult to obtain such evidence. One way to avoid rejection of the transaction by the customer is digital signature. Bank transaction is done successfully if they consider clients digital signature successfully.

6. The following suggestions will also be studied

Easiness: this factor is the most important element in acceptance of mobile banking; so for being successful in this service. Easiness is the most important element. Easiness and proficiency are important element in this part. All other factors such as risk, availability, trust, easiness all have meaningful impact on client understanding.

Support: supporting services for customer is another important element in mobile banking acceptance. Loyalty to customer demands, suitable response to customer, and solves problems and dissatisfaction is important element in supporting customers. Between all these elements the bank emphasizes on Loyalty to customer demands. When in the bank we introduce new system we should have full client support to attract their attention and loyalty.

Advertisement: this research shows the importance of mobile banking. Therefore, we advise the bank managers to train their clients for benefits and advantages of using internet banking. And in this way influences customers' perceptions. This new distribution channel is used by customers caused to reduce bank transferring time, to make bank transferring easier and to increase bank performance. The bank ads can explain and remind these benefits to customers.

Guaranteed compensation: International contracts for insurance and security of banking transactions, Guarantee compensation for customers' accounts being hacked or Internet fraud,

client training to create, maintenance, and change their private information to reduce the possibility of abusing in the virtual environment, Providing accurate and updated data about the transactions used by the clients, to ensure customers about declining theft. These facilities decreases perceived customers risks.

Awareness: as well as awareness of the mobile banking services are necessary in the first selection steps. As mobile banking is a new service in Iran, effective introducing of media advertising such as Leaflets, brochures, web pages and etc. To introduce services to a wider audience and potential educated customers . It will be more useful and good advantages for mobile banking. Banks should consider some elements such as: saving time, comfort, low cost, accessibility of information, and in addition bank's website should be able to give enough information to customers.

Developed Website: Providing well-designed and user-friendly website is essential to attract.

Attention of potential selectors. The customer should not have to spend time and effort to select a large number of banking services or to accede to a great change in his own behavior. Information and instructions on the website should be prepared both in Farsi and English to be convenient for customers. Advertising Campaign emphasizes the benefits and easiness of using and services of mobile banking should be provided. Regularly customers surveys should be made to ensure continues progress of banks work. Observing service quality can improve the bank's image in giving good bank service.

7. Research limitations

As this study has done in a credit institute there are many problems and limitations during research process. These restrictions include of:

-Lack of clear information on quantitative and qualitative data about mobile banking in banks and other institutes. Thus, the most important way for collecting information is questioner.

- Restrictions on access and dissemination of classified information: thus, this research has done in the branches of credit institutes. And because the credit bank is in its beginning years of activity so preserving safety and security of this institute is very important.

- Lack of Theoretical and sufficient support: most previous research is done on impact factors on mobile banking acceptance and there isn't any academic support for this study.

- Time and cost limitations: another important limitation during the process of this research was each organization had a unique culture and atmosphere.

Suggestions for further research:

- Create trust and more confidence in customers and do research for other institutes: when the numbers of mobile banking customers are significant number, further research should also measure this factor.

- Seven of the perceived risks: One of the most important factors in the mobile banking is risk. We recommend doing specified research on seven perceived risk elements.
- Evaluate mobile banking from trust and confidence on performance point of view: Another very important field in Mobile Banking is trust. We recommend doing specified research on seven perceived risk elements.
- A comparative study of mobile banking and risk than other forms of electronic banking.
- Assessment of reliance on the intention of using the bank with customers in other credit institutions.
- Evaluating present conceptual model from experts' point of view with PLS techniques.
- Prioritize the factors identified in this study with multi-criteria decision-making methods.

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References

- Alafeef M, Singh D and Ahmad K (2012). The influence of demographic factors and user Interface on mobile banking adoption: A review. *Journal of Applied Sciences*, 12 (20): 2082 – 2095.
- Gefen D, Benbasat I and Pavlou v (2008). A research agenda for trust in online Environments. *Journal of Management Information Systems*, 24 (4): 275-286.
- Hoffman K (2001). Banking on wireless. *Internet World*, 7(4): 57-59.
- Jacobs T (2007). Multi-channel banking: banks go mobile, Again, Provenir Inc., July 25, 2007, retrieved from http://www.provenir.com/company/whitepaper_form.html
- Jafarpour M, Ghafour E and Fayazi M (2010). Evaluating effecting factors on acceptance of Mobile banking services in Persian Bank. *The International Conference of Electronic citizenship and mobile banking*, Tehran, Iran.
- Kim DJ, Ferrin DL and Rao HR (2008). A trust-based consumer decision-making model in Electronic commerce: the role of trust, perceived risk, and their antecedents, *Decision Support Systems*. *Journal of Management Information Systems*, 44 (2): 544-564.
- Laukkanen T (2005). Comparing consumer value creation in Internet and mobile banking. In *Mobile Business*, 2005. *ICMB 2005. International Conference* :655-658

- Laukkanen T (2007). Customer preferred channel attributes in multi-channel electronic banking. *International Journal of Retail & Distribution Management*, 35(5): 393-412.
- Laukkanen T (2007). Internet vs mobile banking: comparing customer value perceptions. *Business Process Management Journal*, 13 (6): 788-97.
- Laukkanen T and Lauronen J (2005). Consumer value creation in mobile banking services, *International Journal of Mobile Communications*, 3 (4): 325-338.
- Lee EJ, Lee J and Eastwood D (2003). A two-step estimation of consumer adoption of technology-based service innovations. *Journal of Consumer Affairs*, 37 (2): 256-82.
- Mattila M (2003). Factors affecting the adoption of mobile banking services, *Journal of Internet Banking and Commerce*, 8(1): 0306-04.
- Nor KM and Pearson JM (2008). An exploratory study into the adoption of internet banking in a developing country: Malaysia, *Journal of Internet Commerce*, 7 (1): 29-67.
- Nor KM, Shanab EAA & Pearson JM (2008). Internet banking acceptance in Malaysia based on the theory of reasoned action. *JISTEM-Journal of Information Systems and Technology Management*, 5(1): 03-14.
- Oliveira T, Faria M, Thomas MA & Popovič A (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34(5): 689-703.
- Pousttchi K & Schurig M (2004). Assessment of today's mobile banking applications from the view of customer requirements. In *System Sciences, Proceedings of the 37th Annual Hawaii International Conference*: 10
- Rusu D and Dospinescu (2004). The adoption electronic banking services in developing countries. *Department of Business Information Systems*, 5(6): 250-255.
- Safeena R, Date H, Kammani A and Hundewale N (2012). Technology adoption and Indian consumers: Study on mobile banking. *International Journal of Computer Theory and Engineering*, 4(6): 1020 - 1024.
- Shaikh AA & Karjaluo H (2015). Mobile banking adoption: A literature review. *Telematics and Informatics*, 32(1): 129-142.
- Shaikh AA (2013). Mobile banking adoption issues in Pakistan and challenges ahead. *Journal of the Institute of Bankers Pakistan*, 80(3): 12 - 15.
- Shojaei L (2010). Electronic banking and modifying consumption pattern, *Farabi Institute of Higher Education, Monthly Melli Bank*, 87.
- Vance A, Elie-Dit-Cosaque C and Straub DW (2008). Examining trust in information Technology artifacts: the effects on system quality and culture. *Journal of Management Information Systems*, 24 (4): 73-100.