

Evaluating the Effective Factors on Behavioral Tendency in Using Mobile Bank Services (Case study: Ardebil province Melli Bank)

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Abstract

This research has been done to investigate the effect of different levels of factors of customer's tendency toward using mobile-bank services according to technology acceptance model of Davis in Banking Industry. The research population was the customers and the users of mobile-bank services of National (Melli) Bank in Iran. We used questionnaire to gathering data. The inferential statistics was used for analyzing data. We used ANOVA, Duncan test and Friedman test to test the hypotheses. Findings show that effective factors on behavioral tendency in using mobile bank services between Ardabil national bank customers respectively are having profit, security and understanding fluency.

Keywords: Mobile Bank, usefulness of perception, security of perception, behavior tendency

Introduction

Social indirect reciprocity seems to be crucial in enabling large-scale cooperative networks among genetically unrelated individuals in humans (Kato-Shimizu et al, 2013). Much of the research on the development of prosocial behaviors has been guided by cognitive-developmental perspectives emphasizing the role of cognition and emotion (Eisenberg & Fabes, 1998; Krebs & Van Hesteren, 1994). There has also been research that has examined the social learning mechanisms associated with prosocial development (Hoffman, 1983).

However, the role of ethnic culture on prosocial development has received relatively little scientific attention even though culturally related content may be transmitted through social learning mechanisms and may be related to cognitive achievements (Knight, Bernal, Garza, & Cota, 1993).

According to fast growing of information and communication technology, electronic banking will have important and main role in electronic payment that it provides online for supporting many applications of electronic commerce like electronic buying, electronic auction, internet buying and selling the share and etc (Hassani & Solthani, 2008, P.38). On the other hand, electronic banking is a method for decreasing the costs and being left over comprising with traditional banking (Mohammadi & et al, 2011).

Entering the banks to the great land of informational technology was accompanied by main mutation in presenting and developing their electronic services. They introduce the newest methods to their customer by informational and communicational means. So, Iranian banks should adopt themselves with new and international technologies of banking industry. One of these technologies is banking based on mobile and mobile bank (Hassani & Solthani, 2008, P.39). Mobile bank is one of the payment methods that by using it, it can decrease the banking costs and can provide the satisfaction of customers in the viewpoint of easy accessing to financial Like checking account balance with exchange and payments by mobile in any time and place (Mohammadi & et al, 2011). Mobile bank is

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one forms of banking exchanges that it was done by mobile. It enables the customers to check their accounts, to do their banking operations and to inform their account.... One of the benefits of mobile banking is eliminating time and place limitations. It means that customers can do their banking affairs easily anytime and place. So, it can be said that if internet banking services has economical benefits

for banks, they will providefor customers (Kafashpour & et al, 2011, P: 121).

The main purpose of this study is finding answer to this question: How is the triage of effective factors on behavioral tendency on using mobile bank services by customers?

The conceptual framework of this research is presented in Figure 1.

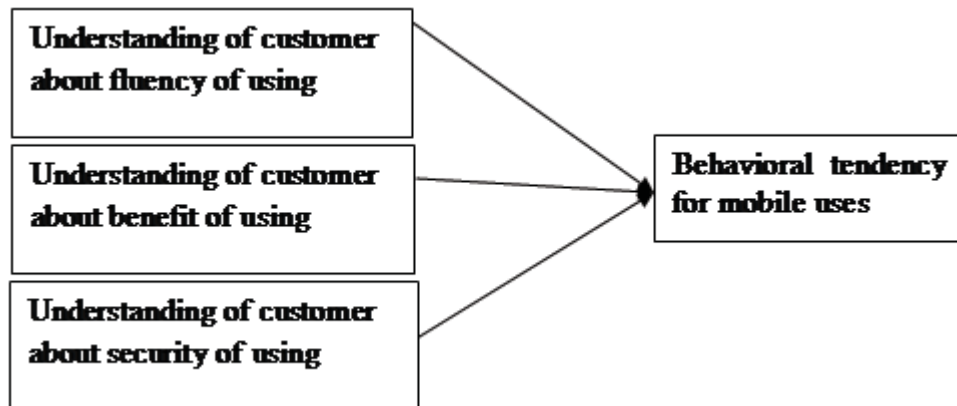


Figure 1. Conceptual framework

Research hypotheses

The main hypothesis of research

The effect of different level of factors on behavioral tendency on using mobile bank services by customers is different.

Secondary theories of research

1- The effect of different level of understanding fluency on behavioral tendency on using mobile bank services by customers is different.

2- The effect of different level of understanding profits on behavioral tendency on using mobile bank services by customers is different.

3- The effect of different level of understanding security on behavioral tendency on using mobile bank services by customers is different.

Methodology

This research in the viewpoint of goal, selecting data and analyzing data is respectively, applied, descriptive and correlational. The statistical society of this research are all customers of Ardabil national bank who use mobile bank until July) July 2013(16000 persons).

$$n = \frac{16000(1.96)^2 \cdot 5(.5)}{16000(.05)^2 + 1.96^2 \cdot 5(.5)} = 375$$

The volume of statistical sample based on Cochran sampling is 375 persons.

Table 1. Cluster sampling method

The size of sample	Branches	Clusters	Row
175	10	Ardabil	1
40	2	Khalkhal	2
40	2	Parsabad	3
40	2	Meshkinshahr	4
40	2	Garmi	5
40	2	Bilesavar	6
375	20	6	Total

The questionnaire includes two parts. The first part includes personal characteristics of respondent like age, gender and education. The second part includes 21 questions. 13 questions relate to independent variables and 8 questions relate to dependent variables. Questions 1,2,3,4 relate to understand-

ing fluency, 5,6,7,8,9 relate to understanding profits, 10,11,12,13 relate to understanding security, 14,15,16 relate to view point, 17,18 relate to mental norms and 19,20,21 relate to behavioral tendency. For determining the validity of questionnaire Cronbach alpha coefficient was used.

Table 2. The Cronbach alpha coefficients of research's factors

Coefficient	The content of questionnaire	Row
80%	Understanding fluency	1
86%	Understanding profits	2
85%	Understanding security	3
82%	Behavioral tendency	4
83%	The whole questionnaire	5

The inferential statistics was used for analyzing data. For analyzing the three first theories were used ANOVA and Duncan post hoc test, for triaging the effective factors on behavioral tendency in using internet banking services was used Friedman test.

Results

Demographical Results

Sixty Five percent are male and thirty five percent are female. The responder's marital situation shows 7.5 percent are single and 92.5 percent are married. Also, responder's degree shows that 53.1 percent were BA or upper, 28.8 percent Associate Degree and 18.1 percent have DA degree. It means that the most of the responder have university degree.

Table 5. The mean and S.D of studying variables

Behavioral tendency	Understanding security	Understanding profits	Understanding fluency	Variables
35.66	16.86	23.23	14.80	Mean
3.88	5.51	2.07	1.46	S.D
24	10	16	8	The least of scores
40	20	25	17	The last of scores

Hypotheses Results

First Hypothesis: The effect of different level of understanding fluency on behavioral tendency in using mobile bank services by customers is different.

H0: The effect of different level of understand-

Table 3. Responders degree

Responder's Degree	Frequency	Percent
Diploma	68	18.1
Associate Degree	108	28.8
Bachelor	199	53.1
Total	375	100.0

The age of customer's analysis results show 27.5 percent have between 20-29, 38.3 percent have between 30-39, 41.6 percent have between 40-49, and finally 2.7 percent have more than 50 years.

Table 4. Customers' age

	Frequency	Percent
20-29	103	27.5
30-39	106	28.3
40-49	156	41.6
More than 50	10	2.7
Total	375	100.0

According to table and chart (3) the mean and standard deviation of understanding fluency, profits and security are respectively 14.80 and 1.46, 23.23 and 2.07, 16.86 and 2.51. The mean and standard deviation of behavioral tendency in using mobile bank services are 35.66 and 3.88. The descriptive indexes of research variables are as follow:

ing fluency on behavioral tendency in using mobile bank services by customers isn't different.

H1: The effect of different level of understanding fluency on behavioral tendency in using mobile bank services by customers is different.

Table 6. The findings of ANOVA-the effect of different level of understanding fluency

Significance level	F	The mean of squares	df	Total of squares	References of changes
0.001	95.76	958.75	2	1917.50	Between group
		10.01	372	3724.16	Inter group
			374	5641.66	Total

According to table 6, the calculated F is 95.76 that it is meaningful in level 0.01. So, it can be rejected the equality between levels. Therefore, H₀ was rejected and H₁ was accepted. So, the effect of different level of understanding fluency on behavioral tendency on using mobile bank services by customers is different. When F is meaningful, we should use Duncan post hoc tests for determining the difference between means. It shows the lowest differential meaningful difference between means.

Table 7. The Duncan test of understanding fluency

The Level Of Understanding Fluency	1	2	3
Low	28.82		
Middle		34.63	
High			37.60

According to table 7 Duncan test shows that if the understanding fluency of customers be high, their tendency to use mobile bank services become higher.

Second Hypothesis: The effect of different level of understanding profits on behavioral tendency on using mobile bank services by customers is different.

H₀: The effect of different level of understanding profits on behavioral tendency on using mobile bank services by customers isn't different.

H₁: The effect of different level of understanding profits on behavioral tendency on using mobile bank services by customers is different.

According to table 4-8, the calculated F is 122.19 that it is meaningful in level 0.01. So, it can be rejected the equality between levels. Therefore, H₀ was rejected and H₁ was accepted. So, the effect of different level of understanding profits on behavioral tendency on using mobile bank services by customers is different.

Table 8. The findings of ANOVA-the effect of different level of understanding profits

Significance level	F	The mean of squares	df	Total of squares	References of changes
0.001	122.19	1118.39	2	2236.79	Between group
		9.15	372	3404.86	Inter group
			374	5641.66	Total

When F is meaningful, we should use Duncan post hoc tests for determining the difference between means. It shows the lowest differential meaningful difference between means.

According to table 9 Duncan test shows that if the understanding profits of customers be high, their tendency to use mobile bank services become higher.

Third Hypothesis: The effect of different level of understanding benefits on behavioral tendency on using mobile bank services by customers is different.

H₀: The effect of different level of understanding security on behavioral tendency on using mo-

bile bank services by customers isn't different.

H₁: The effect of different level of understanding security on behavioral tendency on using mobile bank services by customers is different.

Table 9. The Duncan test of understanding profits

The Level Of Understanding Profits	1	2	3
Low	28.76		
Middle		32.48	
High			37.09

Table 10. The findings of ANOVA-the effect of different level of understanding security

Significance level	F	The mean of squares	df	Total of squares	References of changes
0.001	152.06	1238.86	2	2537.67	Between group
		8.34	372	31.03.97	Inter group
			374	5641.66	Total

According to table 10 the calculated F is 152.06 that it is meaningful in level 0.01. So, it can be rejected the equality between levels. Therefore, H0 was rejected and H1 was accepted. So, the effect of different level of understanding security on behavioral tendency on using mobile bank by customers' using mobile bank is different. When F is meaningful, we should use Duncan post hoc tests for determining the difference between means. It shows the lowest differential meaningful difference between means.

Table 11. The Duncan test of understanding security

The Level Of Understanding Security	1	2	3
Low	29.77		
Middle		32.33	
High			37.35

According to table 11 Duncan test shows that if the understanding security of customers be high, their tendency to use mobile bank services become higher.

Research question: How is the triage of effective factors on behavioral tendency on using mobile bank services by customers?

To answer this question, after testing the theories, the effective factors were ordered on the basis of priority as follow:

According to table 12, it can be concluded that since the significance level of this test is lower than 0/05, its ordering relates to in first degree, the understanding profit with mean 2.16, in the second, the understanding security with mean 2.10, in the third, the understanding fluency with mean 1.74.

So, the effective factors on behavioral tendency in using mobile bank services between Ardabil national bank customers are respectively having profit, security and understanding fluency.

Table 12. Friedman test for ordering customers' understanding level

Significance level	d.f	Chi- square	The mean of ranks	The effective factors on behavioral tendency
0.001	2	101.74	1.74	Understanding fluency
			2.16	Understanding profits
			2.10	Understanding security

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