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# Comparing Effective Factors in Accepting Banking Services via Internet in Customer's point of view in Melli and Pasargad Banks

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#### **ABSTRACT**

Statistics show that, as it is expected, tendency to use banking services via internet is nothigh, and despite development of banking services via internet, bank customers have no tendency to use it. Increase of competition in attracting customers among banks, justifies need for considering effective factors of using internet banking. Purpose of this research is comparing customers of Melli bank and Pasargad bank in using internet banking and its effective factors. We used Pikkarainen et.al (2004) model in this research. Statistic population in this research is all of customers of branches in Melli and Pasargad bank in whole of Tehran city. Sample amount in these two banks is 196and 197, respectively. Sampling method in this research is multi-stage. Therefore, Tehran is divided into 5 regions of north, west, center, south, and east. Then five branches are chosen of every cluster by random and finally for sampling in branches, a convenience sampling is used to consider hypothesis comparing average test of two populations. Analyzing the data show that the two banks, have meaningful difference just in perceived enjoyment and security and privacy. In such a way that compared to the Melli bank, Pasargad bank has higher average in meaningful way in perceived enjoyment; and Melli bank has higher average in security and privacy in meaningful way in comparing to Pasargad bank.

**KEYWORDS:** Pikkarainen model, acceptance, internet banking, perceived usefulness

#### 1-INTRODUCTION

By development of technology, service industry was changed and using technology in giving service is increasing daily (Durkin et.al, 2008). In middle of 1990 decade, one mutation happened toward online banking services (Pikkarainen et.al, 2004). By development of internet technology, online banking has significant role on epayment and e-trade; like: on-line purchase, on-line auction and... (Nasri, 2011). All researchers agree on advantages of electronic banking for the society. Decrease in costs and economy in time, independence to specific place and time (Suh and Han, 2002), increase in efficiency (Chong et.al, 2010). Economy in marketing and operating costs (Rexha et.al, 2004), increase of customers. Giving services with higher quality and less costs, protection and improving the market share (Rasoulian and Saffari, 2011), having unlimited trade due to place aspect, focus on new distribution channels, competition of brands, improving the relation management, giving widespread and diverse services, focus on costs and increase in income, decrease in trading and procurement cost, existing close relation among banks, decrease in environmental pollution. (Kolodinsky et.al, 2004) internet banking is one kind of electronic banking that gives the customer this opportunity to use widespread banking services via internet and designed websites. Using on-line banking was prevalent in middle of 1990 decade (Pikkarainen et.al, 2004). Giving internet service was provided first by Nottingham building society and Scotland bank in 1980 that faced to non-acceptance of customers (Tait and Davis, 1989). Reports show that show users despite access to technologies, don't use them. For example, in OECD just 31% of people use internet banking and this statistics in Iran is less than any other place (about 8.7%) (Lajavardi&NoushAbadi, 1390).

Importance and necessity of this research is worth discussing in three categories. First is increase in access to internet, necessity of paying attention to customer focus and lack of enough research about comparison among the banks.

Interworld site (www.internetworldstates.com) has declared the number of internet users about 32.2 million people in 2009. (Markazi) central bank of Islamic republic of Iran, has declared the number of internet banking services about 5.8 million at the end of three last months of 2009(Khedmatgozar et.al,1389). In comparison to developed countries, this statistics is inconsiderable; but we expect that by internet being widespread, internet banking will be increased, too. Another necessity of doing this research, is customer focus. Main principle in customer focus is on respond to customers' daily need (Venus and Safayian, 1386,37&38). Using internet banking causes to customer's satisfaction. As the researcher knows, above mentioned reasons in comparing two banks in effective factors on tendency to internet banking have been formed rarely. Above mentioned reasons justify necessity of research in this field. Our purpose in this research is comparing

customers of Melli bank and Pasargad bank in using internet banking and its effective factors. The used model in this research is Pikkarainenet.al 's model (2004).

### 2-LITERATURE OF RESEARCH

2.2 electronic banking was first known in 1995 in America and after this year was developed in other countries (was et.al.2005).researchers give different definitions about electronic banking; for example Burr(1996)defined electronic banking as electronic relation between bank and customer to provide, manage and control financial transaction (lustsik,2003). Daniela and Octavian(2004) define electronic banking as providing possible access for customers to banking services by using safe dealers and without any physical presence .( Daniela and Octavian,2004).

Electronic banking channels include all electronic tools that customers use for access to their accounts. These channels include, telephone , Internet , ATM machines (Gilaninia et.al , 2011). Tejarat bank issued its first bank card in 1370 that was known as cheque card of Tejarat bank , following this action of Tejarat bank , Sepah bank issued bank and by installing seven ATM machines in 1371 (Amadeh and jafarpour , 1388); but at the first of 90 decade , Iranian banks started installing ATM machines by improving Automation standards and gradually , on- line protocols and webs and basic platforms of on-line transfer were formed by development of internet connection so , by defining electronic banking projects in national fields, these banks could make their first move toward making and development of using e-payment .like ATM and Posand electronic cards(Alagheband , 2006,13).

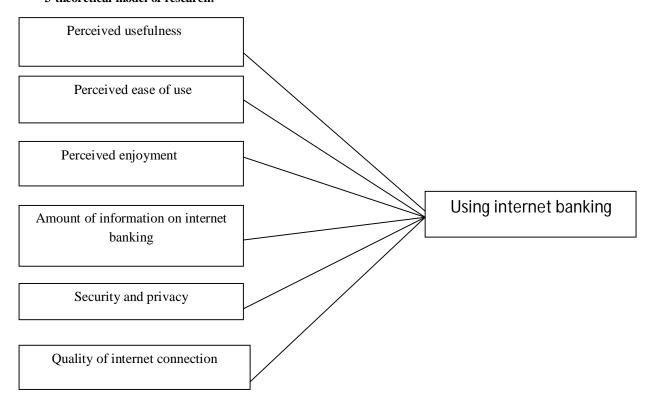
#### 2.3. Internet banking

Internet banking is a new kind of information system that has used the world wide web internet and technology and make customers to do their financial activities in cyberspace (shih and Fang,2004). In another definition, Lau (1997) has defined Internet banking as providing banking Services via internet web by direct free accessing. To the customer's home or address.(yiu et.al , 2007).

SFNB bank was the first internet bank that was opened in October  $18^{\text{th}}$  of 1995 to do business affairs(Gilanina et.al,2011) .we can say that using internet banking among European people has different rates. In Norway and Finaland acceptance rate is between 70 to 80 percent of people who use internet in on-line banking and this rate is 40i-in Austria and Germany (Meyer, 2006) and also in developing, too-(Hernabdez and Mazzon , 2007); and it has considerable users in Asian countries like south Korea , china and Taiwan(shih and Fang ,2004).

Using internet banking has special advantages in comparison to the electronic banking kinds.advantages like no time and geographic limit, 24 hours access in all weekdays, no need for installing proprietary software (Gilaninia et.al, 2011). In a comparison by kolodinsky et.al(2004) among banking costs in different methods, researchers show that a normal customer trade by traditional banking methods, costs one dollar and by telephone costs 0.3 dollar and by internet costs 0.09 dollar.(kolodinsky et.al, 2004).

## 3-theoretical model of research:



Pikkarainen et.al (2004) model, is extending Technology Acceptance Model. The researcher used focus group including 4 conversant people in banking to extend their model. This model includes 6 variables that effects on tendency to use on-line banking. The main hypothesis in this research is comparing using internet banking in Melli and Pasargad bank. Feature number 1 shows theory model of the research.

Due to theoretic model of research that is based on influencing independent variables on variables of using internet banking and due to research purpose we can codify research hypothesis.

Main hypothesis: using internet banking by Melii bank and Pasargad customers' has meaningful difference. Subordinate hypothesis:

H1: perceived usefulness in internet banking acceptance by Melli bank and Pasargad bank customers' has meaningful difference.

H2:perceived ease of use in accepting internet banking by clients of Melii and Pasargad banks has meaningful difference.

H3:Perceived enjoyment in accepting internet banking by clients of Melli Pasargad banks has meaningful difference.

H4:Amount of information on internet in accepting internet banking by clients of Melli and Pasargad banks has meaningful difference.

H5: security and privacyin accepting internet banking by clients of Melli and Pasargad banks meaningful difference.

H6:quality of internet connection in accepting internet banking by clients of Melli and pasargad banks has meaningful difference.

#### 4-METHODOLOGY

This research is considered as a part of applied research in view of its purpose and in view of collecting data, is survey-descriptive. Statistic population of this research include all customers of Melli and Pasargad banks in whole of Tehran city. Considering there is no precise number of the customers of these two banks, we used unlimited population sampling. By considering confidence level of 95% and accepting error coefficient of 0.07, number of sample mass is 196.

Sampling method in this research is multistep cluster sampling .so, Tehran is divided in 5 regions of north, west, center, south and East and then 5 branches are selected of any cluster by random. And finally for sampling in branches, convenience sampling method is used to consider effect of any of model variables on using internet banking in Melli and Pasargad banks, multiple regression in used.

# 5-evaluation of variables

Research questionnaires were distributed among above mentioned customers of banks after translation and executing professor's ideas.table 1 shows the questions' reference and their validity coefficient.

Validity Number of Variable coefficient question 0.858 Perceived usefulness 4 0.899 5 Perceived ease of use 0.842 3 Perceived enjoyment 0.846 4 Amount of information on internet banking 0.8606 Security and privacy 0.653 2 Quality of internet connection 0.932 questionnaire

Table 1 :question reference and their validity coefficient

When a question is valid that its Cronbach's Alpha, is more than 0.7 as its shown table 1, Cronbach's Alpha for all of variables and the whole questionnaire is higher than 0.7. so, we can say that research questionnaire has acceptable validity.

## 6- Data analyzing method

6.1-statistic population specification:

The number of 220 questionnaires were distributed among customers of different branches of Melli and Pasargad banks in this research. Finally, number, of 197 questionnaire were known analyzable table 2 shows descriptive statistics related to specifics of sampling population.

Table 2: specification of sampling population

	1	1			1 81 1			
total	married	single			female	male		
393	258	135	Frequency	Marital	171	222	Frequency	sex
100	66	34	percent	statue	44	56	percent	
393			Older than 51	41 to 50	31 to 40	younger than 30	Frequency	Age
100			19	82	121	171	percent	-
			5	21	31	44	•	
936			Unemployed	Retired	Non-	Governmental	Frequency	Job
100			39	50	governmental	59	percent	
			10	13	245	15	_	
					62			
393			P.H.D	master	bachelor	Advanced	Frequency	Education
100			18	51	158	diploma and less	Percent	
			5	13	40	166		
						42		
393			Higher than	1000000-	500,000- 100000	Less than 500.000	Frequency	Salary
100			1500000	1500000	150	134	percent	(Tomans)
			34	75	38	34	_	
			9	19				

#### 6.2-normality test of research variables

Result of normality test of research variables are shown in table3.

Table 3: normality test of research variables

Result of test	error	Meaning full level	Statistic base	variable
abnormal	0.05	0.000	3.263	Quality of internet connection
abnormal	0.05	0.000	2.239	Information on internet banking
abnormal	0.05	0.000	3.725	Perceived usefulness
abnormal	0.05	0.000	2.560	Perceived ease of use
abnormal	0.05	0.000	2.947	Perceived enjoyment
abnormal	0.05	0.004	1.771	Security and privacy
abnormal	0.05	0.000	2.636	Using internet banking

Results of table 3 show that research variable have abnormal distribution.

#### 6.3- research hypothesis test:

Research hypothesis are based on meaningful difference of customers of Melli and Pasargad banks in research variable point of view.ifMelli and Pasargad customers have no difference in research variables, it will be expected that their average will have no meaningful difference. So, for research hypothesis test, we used average comparison test of two independent population .results of hypothesis test are shown in table 4.

Table 4:hypothesis test

Rate of average		result	Meaning	Statistic of test	Research variable	
Pasargad	Melli		level			
187.84	206.20	Not rejecting zero hypothesis	0.103	-1.633	Using internet banking	
199.91	194.08	Not rejecting zero hypothesis	0.606	-0.516	Perceived usefulness	
202.92	191.05	Not rejecting zero hypothesis	0.296	-1.046	Perceived ease of use	
212.35	181.57	Rejecting zero hypothesis	0.006	-2.727	Perceived enjoyment	
196.31	197.69	Not rejecting zero hypothesis	0.903	-0.122	Amount of information on internet banking	
174.66	219.46	Rejecting zero hypothesis	0.000	-3.923	Security and privacy	
196.22	197.78	Not rejecting zero hypothesis	0.890	-0.139	Quality of internet connection	

Result of analysis and hypothesis test show that only subordinate third and fifth hypothesis will be accepted enjoyment and security and privacy in customers of Melli and Pasargad banks and there is no evidence on meaningful difference among other variables.

# 7-CONCLUSION AND SUGGESTIONS

Our main purpose in this research, is perception of effective factors in a accepting internet banking in Melli and Pasargad banks.so, we used Pikkarainen et.al(2004) model. To consider hypothesis, we used average comparison test of two population, hypothesis test result showed that there is a meaningful difference in internet banking use and effective variables on them in Melli and Pasargad banks just in two variables of perceived enjoyment and privacy:

Considering average test of two independent population, the results showed that there is no meaningful difference in using internet banking among customers of Melli and Pasargad banks .one reason is this

widespread access to internet and adventages that internet banking gives to these people;like economy in time and energy. Ingeneral, internet banking advantages have caused people to tend to use internet banking more than before. So, this result implicitly shows that bank customers need more use of electronic banking daily; so, banks must have more attention to it.

There is no meaningful difference in perceived usefulness among customers of Melli and Pasargad banks in other words. Customers of Melli and Pasargad banks(as agent of private and state banks) are aware of advantages of internet banking. We suggest that the banks emphasis on advantages and internal positive experiences and positive influencing of internet banking in different aspects in their advertisements. Add more options to internet banking to make people perceive its advantages more than before.

There is no meaningful difference in Melli and Pasargad banks in perceived ease of use among customers customers of Melli and Pasargad banks (as agents of state and private banks)know learning of internet banking use, easy suggest using special counters of internet banking and a professional person to learn doing banking affairs must be increased in branches. Advertisements that show why of using some banking affairs must be increased there is a meaningful difference in perceived enjoyment among customers in Melli and Pasargad banks. The results showed that average of perceived enjoyment among customers of Pasragad bank in meaningfully higher than customers in Melli bank.

Provided information amount in accepting internet banking by Melli and Pasargad customers has no meaningful difference, one reason is education level of researched sampling population. Almost 60% people are at least bachelor

So, we can say that, these population have enough information about internet and internet banking and way of using internet banking. We suggest that a message should be sent to customers about internet banking. also, banks can walk toward internet banking by cell phones step by step.

Security and privacy in accepting internet banking by customers of Melli and Pasargad banks have meaningful difference. Amount of perception of security and privacy in customers of Melli bank is higher than customers in Pasargad bank.we suggest that there must be advertisement in internet banking being widespread to make more people who watch this advertisement use internet banking and their confidence increase to this system spontaneously. Creating a system that warns users of internet banking that it's been only time suing old password and conducting them to go to changing password page.

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