Survey of Effective Factors on Customers Trends in Uses of POS Services in Electronic Banking

Shahram Gilaninia[1], Mahdi Rahemi[2]

[1] Associate professor, Department of Industrial Management, Rasht Branch, Islamic Azad University, Rasht, Iran
[2]M.A. Student of Business Management, Rasht Branch, Islamic Azad University, Rasht, Iran

ABSTRACT

Terminals sale (POS: POINT OF SALE) device that is installed in the centers of the sale of goods and services instead of paying cash transactions to the physical transportation of money, the transaction amount from the account holder of the e-card (customer) account deduction and the card acceptor (seller) is paid. The statistical survey of 385 customers using POS devices in the chain stores is in Ardabil province. For data analysis were used software SPSS, both descriptive and inferential statistics. Results showed that between all the motivational independent variables and trend customers have positive relation. Also the Pearson correlations between POS services exist and the regression test the relationship is direct and meaningful.

KEYWORDS: Terminal Sales, Motivational Variables, Electronic Banking Services.

1. INTRODUCTION

Banking is one of the many service industries, characterized by high customer contact with individually customized service solutions, where customer satisfaction has been an increasing focus of research (Gilaninia & et al,2011) E-commerce has faced welcomed by many human societies in recent years (Gilaninia & et al,2011). With the rapid growth of information and communication technology, electronic banking and a central role in the field of electronic payment the field of online transactions to support many applications, e-commerce such as electronic shopping, electronic auctions, buying and selling stocks online, and many other makes, it will. (Ming, 2009). As an application of the Internet, e-commerce depends on information infrastructures and telecommunications for its development (Gilaninia & et al, 2011). Although there is a growing body of literature dedicated to the analysis of the technical and operational aspects of Electronic Commerce, there is little empirical research on topics relating to the factors that would lead to the successful adoption of this emerging technological innovation and business practice. Moreover, there is little empirical research to date that examines the success of Electronic Commerce deployments in organizations once the technology has been adopted (Gilaninia & et al, 2011).Today Using Web-based technologies is One of the biggest opportunities and challenges that organizations are face it, Internet as a new channel has put to create new sources of income and opportunities for economic exchange in organizations. Exchange rates through the internet are growing day by day and companies that do not use this technology will soon disappear from the market (Seyed Javadin, 2005, 61). Information technology is rapidly changing. These changes started in the late twentieth, in the early twenty-first century shows more their accelerated (Madhoushi, 2004). In years past, in our country banking industry, due to various problems of economic, social and to be public and most of all exceeds demand to supply, Elements of the Customer Orientation and the pillars of it has neglected (Gilaninia & et al, 2011).

Large banks to enter the field of information technology enable them to provide and expand services for their own. They used every means of communication and information to their customers about new methods to faster and better customer service needs to get past. Accordingly, Iran's banks need to adapt to new technologies and international banking industry. (Hasani & Soltani, 2009)

2. LITERATURE REVIEW

The modern banking system has got the attention of all the people in the world in the 1970s. (Alam, 2011, Gilaninia, 2011). The banking sector is becoming increasingly competitive around the world (Taleghani , Gilaninia,Mousavian,2011). ICT[1] as a new technology enters the market in the 90s and quickly developed. This technology has is a fundamental difference due to general with other technologies. This means that not only is impressive in its scope، rather in general economic activity and non-economic significant impact in facilitating tasks and enhancing the productivity and efficiency (Pezeshki, Dabaghrezaei, 2005). One of the issues raised in each country's economy is achieving to a sustainable growth in long term (Gilaninia & 2011). Understanding the environment and the necessity of dealing with issues Arising from the pressures arising from environmental

---

[1] Information and communication technology

Corresponding Author: Shahram Gilaninia Associate professor, Department of Industrial Management, Rasht Branch, Islamic Azad University, Rasht, Iran. E-mail:gilani_sh45@yahoo.com

variables (Gilaninia & et al ,2011). With the rapid development of e-commerce and Internet and banking and financial sectors, banking customers are encouraged to use on – line banking (Yiu et al,2007), Promote and facilitate access to money and banking services with the use and benefit from of individuals and societies is considered the great achievements of modern in banking system. Resolution of physical needs in bank branches, increased accuracy in receiving and payments, accelerating in flow of economic exchanges, increasing the safety factor and many other small and large benefits that electronic banking has brought benefit with it (Baiat,2008). Technological advances have changed the way in which financial services are transacted,(Gilaninia & et al,2011) In order to survive of banks in competitive banking branches are required to change the method from traditional banking. Customer's willingness and interest based on a new form of Internet, competition based on cost reduction, customer retention, customer persuasion, customer acceptance behavior (acceptability), security, ease of use, is a large part of the Products and Services.(Chang, 2007). In one sentence we can say that today's banking industry includes a wide range of economic activities and without it and without transformation, and transformation in this industry is weak the largest part of economic stimulus community (Abbasinejad & Mehrnoosh ,2006).

Payment systems are a core group of strategic information systems which contribute towards economic development, especially in emerging economies, and forms the foundation for financial sector and national information infrastructure developments (Listfield& Montes-Negret, 1994; Talero, 1997).Many authors have belief that the internet, and the WWW have some unique characteristics that make them central to a perceived paradigm shift in the way in which goods and services are likely to be marketed in the future (see: Barnes-Vieyra and Claycomb, 2001; Brynjolfsson and Smith, 2000; 1998; Eid et.al., 2002).The rapid implementation of e-commerce/e-marketing by business continues unabated, and the scope of applications of these technologies is pervasive. Tourism-related services have emerged as a leading product category for promotion and distribution through the Internet (Connolly et al., 1998; Millman, 1998; Sussmann &Baker, 1996; Underwood, 1996).
According to the attitude of users towards the adoption of new information systems has fundamental impact in successful adoption of information systems (Davis et al, 1989). Much research has been done so far in the field of information systems. This research used from variety from theoretical frameworks. Technology Acceptance Model (TAM) in 1989 by Fred Davis was present to review the behavior of computers use. Theoretical foundations of this model have been adapted theory of reasoned action (TRA) of Ajzen and Fishbein. TRA theory by using different variables predicts individuals' behavior in certain circumstances (Davis et al, 1989). It also includes research on e-banking in Iran can be noted that in 2008 by Arezpoo Pourmirza in University of Tarbiat Modares master thesis with the subject with titled "acceptance of electronic banking by the customer in 2007,". The finding of this study is also shown the fundamental differences between the demographic characteristics of customers and customer behavior. In addition branch office is known as a popular channel and then is located ATM, electronic banking, banking telephone and banking e-mail has the lowest use by customers. Demographic characteristics of customers are associated with acceptance of electronic banking. In between full understanding obtained from amount of efficiency in electronic banking. The results show that the security aspects and lower awareness about electronic banking and technical knowledge are the most important and most fundamental barriers in order the acceptance of electronic banking. Another thesis on electronic banking, by Mahmoud Salehi has been done in 2004 at Tehran University master with entitled "identify the factors affecting on bank customers tendency to use a bank ATM systems". Including studies performed in the field of electronic banking at the global level can be noted following cases. One of these studies, an article entitled " adopters and non-adopters oe-procurement in Singapore: An empirical study " which was written in 2009 by Teo..h,Lin.h.(2009). In this study investigates several factors relationship with acceptance of electronic purchase. Assessment questionnaire was administered to collect data of 141 companies in Singapore and Regression test was used for data analysis and concluded that firm size, excellent management support, perceived indirect benefits and impact of trade partners shopping has a significant positive relationship acceptance of electronic purchase and type of industry does not show any relationship with the acceptance of electronic purchase and purpose of this study is provide a better understanding of factors relationship acceptance of electronic purchase for the organization (Teo&lin,2009). Another study entitled "TAM-based success modeling in ERP" was writing Bueno&salmeron in 2008. Enterprise resource planning system, this research assumed a complex tool that due to this complexity enterprise resource planning is causing a negative effect on user acceptance (Bueno & Salmeron, 2008).another article with title " Internet VS mobile banking: compering customer value perceptions" was written Laukkanen in 2007. This research, performance, easily and safety noted the most important of demanding customer that makes the difference in perceived value of mobile banking and the internet and safety was introduced as a major concern. The results of this study show that Increase information in business managers about differences perceived value is electronic banking channels to increase for accepts this by customers of banking channels (Laukkanen, 2007)

3. Conceptual model and research hypotheses

Researcher according to the model, Davis and colleagues in 1989 to investigate relationship between variables, attitudes and trends customers use the service POS in electronic banking has paid. A question of that here are the "users and their attitudes to what extent in trends to use electronic banking services at the POS are effective?"
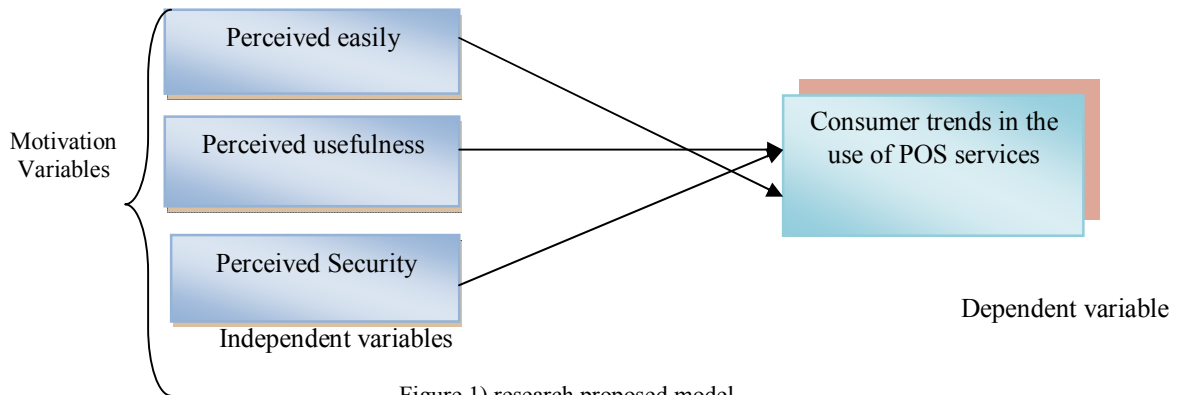
Figure 1) research proposed model

H1. There is a significant relationship between perceived easily and customers trends to use the POS service.

H2. There is a significant relationship between perceived usefulness and customers trends to use the POS service.

H3. There is a significant relationship between perceived security and customers trends to use the POS service.

The main research question: "users and their attitudes to what extent in trends to use electronic banking services at the POS are effective?"

4. RESEARCH METHODOLOGY

The study aims to solve a common problem in the workplace is findings and the results used to solve specific problems within the organization are common, research is applied. Considering that the aim of this research is to measure the relationship between motivation variables with consumer trends in the use of POS services to the investigation of the above comments is applied. According to the survey using a questionnaire to evaluate how the relationship between several independent variables and a dependent variable is the population sample surveys can be said that this description and the type of survey research is causal.

4.1. Data Collection Tool

In this study to collect data needed to evaluate and prioritize the elements of relationship between motivation variables with consumer trends in the use of POS services of field methods is used and also from the library (of books, articles, journals, research databases and the Internet) is used and to gather information from the questionnaires used in this study.

4.2. Estimating sample size and sampling

In this study, simple random sampling method and sampling method, non- probability the available is used. When sampling with the placement of a restrictive society, or without sampling placement of an unrestricted population, the sample size is calculated as follows. (Azar &Momeni, 2010)

$$n = \frac{(z_{\frac{\alpha}{2}}x)^2 * \delta^2}{e^2} \cong 385 \qquad \alpha = 0/05 \quad e = 0/05 \quad \sigma = 0/5$$

4.3. Component the questionnaire

The questionnaire has been used in this study consists of two parts. In the first part of the personal questions such as age, genders are asked. In this study, 16 persons under 20 years, 250 persons 20 to 30 years, 99 persons 30 to 40 years, 16 people between 40 to 55 years and 2 people over 50 have the second part of the specific questions relating to the independent variables and the dependent has been formed. It is notable that the five options are responses to the questionnaire, the Likert range is used and the present of 385 of the respondents are distributed. The questionnaire with 12 questions, the perceived easily indices with 3 questions, the perceived

usefulness indices with 3 questions, and the perceived security indices with 4 questions and two questions that the dependent variable is (trends to use electronic banking services at the POS).

4.4. Questionnaire Validity and Reliability

Validity or credibility of the answer to this questions that measuring to what extent the desired trait measures. (Sarmad and et al, 2002). In the survey questionnaire to determine if the data needed to test the research hypotheses can gather, the views of faculty advisors are used. To determine the reliability of the final distribution of a preliminary study by distributing questionnaires among 30 customers were cultural products, and then through the Spss software, Cronbach's alpha coefficient was calculated over the value of is 89 percent. So we can say that the questionnaire has suitable and good reliability.

Table 1) Questionnaire reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.89	12

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded a	0	.0
	Total	30	100.0

5. Data Analysis

The results of this study are presented in two parts: descriptive and inferential statistics. The results are shown in table 2 and 3:

5.1. Results of the descriptive statistics

Table 2) Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Perceived easily	385	3.3740	.67390	1.75	5.00
Perceived usefulness	385	2.9636	.85855	1.00	5.00
Perceived Security	385	3.6840	.84145	2.00	5.00

Most of the variables in the table above are perceived security and the lowest variable is perceived usefulness.

5.2. The results of inferential statistics

Table 3) Descriptive Statistics

Row	variables	df	sig	α	Pearson correlation coefficient
1	Perceived easily	384	0/000	0/01	0/42
2	Perceived usefulness	384	0/000	0/01	0/38
3	Perceived Security	384	0/000	0/01	0/49

According to Table 4 indicates that the correlation coefficient is positive variables it can be said of the Motivation variables with customers tend to use the POS service have direct relationship.
The first hypothesis: The first hypothesis Results of the Pearson correlation test shows that 42 percent of the value of r and p-value equal to 0 / 000 is so we can conclude that:
α= 0/01> p-value = 0/000
The correlation coefficient test at α=0/01 is significant. So we can say that the perceived easily use and trends in customer service, POS, there is a significant and direct relationship.

The second hypothesis: The second hypothesis Results of the Pearson correlation test shows that 38 percent of the value of r and p-value equal to 0 / 000 is so we can conclude that:
α= 0/01> p-value = 0/000
The correlation coefficient test at α=0/01 is significant. So we can say that Perceived usefulness and trends in customer service, POS, there is a significant and direct relationship.

The third hypothesis: The third hypothesis Results of the Pearson correlation test shows that 49 percent of the value of r and p-value equal to 0 / 000 is so we can conclude that:

α= 0/01> p-value = 0/000

The correlation coefficient test at α=0/01 is significant. So we can say that Perceived Security and trends in customer service, POS, there is a significant and direct relationship.

In the multiple regression test results indicate that according to amount of R=68/7% is observed that there is relationship between motivational variables and customers trends to use of POS services and according to sig amount is less than 0/05, this effect is significant. For determine this effect, according to coefficient B can be observed that this effect is direct. Other hand the R^2 amount is 47/2 that it means motivational variables in this study as the independent variable can be explain up to 47/2 from changing customers trends in the use of POS services as the dependent variable.

6. Summary and Conclusions

Correlation and regression test of research model shows that there is impact of significant and positive relationship between motivational variables and customer orientation from service POS Also, according to the Beta coefficient can also be said that the variable perceived usefulness had the greatest role in and customer's trends to use the POS service and then are influenced by the variables of Perceived Security and easily. According to the results the following suggestions are recommended to banks:

- According to first hypothesis, however customers feel comfortable, more tendency to use of pos. Banks can help to this tendency by using free courses of justification or color brochures in their remarkable.
- According to second hypothesis that banks must explain to customers how to use this service will increase the rate of exchange and the customer will notice that the transactions conducted through such a system has some advantage.
- According to third hypothesis, however security perceived by customers is higher in result their tendency to use electronic services is also higher. Therefore, banks must efforts to inform customers from security issues and compliance standards by their own to increase public awareness. Discussion of financial insurance against possible errors in the funds paid or received should be considered more serious than to growth in customers using of this services.

REFERENCES

Abbasinejad,h;mehrnoosh,m.(2006).electronic banking, samt publishing,first printing.

Alam,H.,Arsalan,M.,Saleem,M.,Raziq,H.,Alee,A.(2011). Development of Islamic Banking in Pakist, Journal of

Contemporary Research in business,VOL3,NO1.

Azar,adel and Momeni,mansour.,(2010), "Statistics and its application in management", Volume II, published by the SAMT.

Baiat,m.(2008). How we creating culture "electronic banking.

Barnes-Vieyra, P. and Claycomb, C. (2001). "Business-to-business Ecommerce: models and managerial decisions". Business Horizons 44(3), pp.13-20.

Brynjolfsson, E. and Smith, M.D. (2000). "Frictionless Commerce? A Comparison of 46(4), pp.563-585.

Bueno.s, Salmeron.j.l. (2008)."TAM-based success modeling in ERP", interacting with computers, vol20, pp515-523.

Connolly, D. J., Olsen, M. D., & Moore, R. G. (1998). The Internet as a distribution channel. Cornell Hotel and Restaurant Administration Quarterly, 39(4), 42–54.

Davis, F. D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", MIS Quarterly 13(3): 319–340.

Eid, R., Trueman, M. and Ahmed, A "A Cross-Industry Review of B2B Critical Success Factors". Internet Research:Electronic Networking Applications and Policy 12(2), pp.110-123.

Gilaninia,Sh;Seyed Danesh,S.Y;Amiri,M;Mousavian,S.J.(2011). Effective Factors on Adoption of E-Commerce in SME Cooperative, interdisciplinary journal of contemporary research in business, ijcrb.webs.com,VOL 3, NO 6,pp13-21.

Gilaninia,Sh;Fattahi,A;Mousavian,S.J.(2011). Behavioral Factors Tend to Use the Internet Banking Services Case Study: System (SABA), the Melli Bank, Iran, Ardabil, International Journal of Business Administration, Vol. 2, No. 3;pp173-179.

Gilaninia,Sh;Mousavian,S.J;Deray,S;Ebrahimi,A.A;Talebian Soufi,Z;Akhavan,S; Taskini,A; Tavasoli,A.S; Zadbagher Seighani,F. (2011). Assess The Impact Of Internet Advertising On The Performance Of Industrial Marketing Units, Interdisciplinary Journal Of Contemporary Research In Business, Vol 3, No 8, Pp479-488.

Gilaninia,Sh;Mousavian,S.J;Ghorbani Ghavidel Boeini,S; Najafpour,A;Najibzadeh,M; Esmaeili,H;Babaei,M; Zadbagher Seighalani,F. (2011). Challenges Application Of E-Commerce In Iran, Interdisciplinary Journal Of Contemporary Research In Business, Vol 3, No 8,Pp 497-507.

Gilaninia,sh;alipour,h;ziakhosoosi,e;mousavian,s.j.(2011). CRM Application Impact on Customer Satisfaction in Financial and Credit Institutions (Case study: Financial and Credit Institutions in Guilan, Iran), J. Basic. Appl. Sci. Res., 1(8)956-963.

Gilaninia,Sh;Mousavian,S.J; Salimi,M.A; Azizzadeh,A; Makarehchian,A; Zadbagher Seighalani,F. (2012). Economic Growth in Iran and Effective Factors on Its Changes, *J. Basic. Appl. Sci. Res.*, 2(2)986-994.

Gilaninia,sh;chirani,e;banikhedmat,s;mousavian,s.j.(2011). Affecting factors on bank customers' intention to use of mobile payment services, Science Road Publishing Corporation, Trends in Advanced Science and Engineering,TASE 1(2) 40-48, 2011

Hassani,f,Soltani,S,(2009),"banking from Mobile", information Technology Age ,number 2,P.p:38:139

Laukkanen,t.(2007). "Internat VS mobile banking:compering customer value perceptions" ,Businessprocess management journal,VOL13,NO6,pp.788-797.

List"eld, R., & Montes-Negret, F. (1994). Modernising payment systems in emerging economies. Washington, DC: World Bank.

Madhoushi,M;Safaei Nejad,M.(2004). E-commerce web sites in Iran: strategies and models, Journal of Business Research, No. 3, pp163-188.

Millman, H. (1998). Online travel arrangements begin to catch on.Infoworld, 20(9), 78.

Ming- Chi Lee, (2009) " Factors influencing the adoption of internet TAM and TPB with perceived risk and perceived benefit", Electronic Applications 8,p.p 130– 141.

Pezeshki,y;dabaghrezaei,s.(2005). The Role of ICT in Economic Growth,Journal of Tadbir.

Salehi Maman,M.(2004). "Identification of factors affecting bank customers tendency to use a bank ATM systems," MS Thesis, Tehran University - Faculty of Management.

Sarmad, Zohreh, and Bzargan,Abbass and Elhe,Hejazi, A, (2002), "Research in the Behavioral Sciences", published by the AGAH, Fifth Printing

Sussmann, S., & Baker, M. (1996). Responding to the electronic marketplace: Lessons from destination management systems.International Journal of Hospitality Management, 15(2), 99–112.

Taleghani,M; Gilaninia,Sh;Mousavian,S.J.(2011). The Role of Relationship Marketing in Customer Orientation Process in the Banking Industry with focus on Loyalty (Case Study: Banking Industry of Iran), International Journal of Business and Social Science, Vol. 2 No. 19,pp 155-166.

Taleghani,M;Biabani,Sh;Gilaninia,Sh;Rahbarinia.S.A;Mousavian,S.J.(2011). The Relationship between Customer Satisfaction and Relationship Marketing Benefits, Arabian Journal of Business and Management Review, Vol. 1, No.3;pp78-86.

Talero, E. (1997). National information infrastructure in developing economies. In B. Kahin, & E. Wilson, National information infrastructure initiatives: Vision and policy design (pp. 287}306). Cambridge: MIT Press. Underwood, E. (1996). Electronic sky way. Brand week, 37(32), 30.