

Evaluating the Effectiveness of E-Banking Application on Customers Satisfaction of BT

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Abstract

The aim of this study is to evaluate the effectiveness rate of the application of electronic banking (E-banking) on the satisfaction level of customers of Bank Tejarat (BT), Tehran's Northwest branches. The methodology of this study is applied oriented and data collection method is descriptive in correlation type. Population of this study includes 384 people from customers of Bank Tejarat in Tehran's Northwest region who are selected randomly and research data are collected by using the researcher-made questionnaire. Questionnaire validity was confirmed through content validity by using the viewpoints of a group of experts. The method of Cronbach's alpha was used to determine the validity and reliability of questionnaire answers that the coefficient of 0.949 was obtained. Results from this research indicated the confirmation of all the presented hypotheses.

Keywords: Banking, Banking Services, Quality of Service, Electronic Banking, Customer Satisfaction

Introduction

Development of information technology has put positive consequences and effects on different economic fields and communities that take advantage of these technologies. New business requires appropriate tools and infrastructures for development of economic processes. Banks are one of the most important indicators in the business dealings. Banks play a key role in business fields by establishing the close relationship with people and for this reason; they are always trying to expand their services to overtake their competitors. Banks in the field of business developments have paid serious attention to create structural developments in the system of receipts and expenditures of money and create facilities in the trend of servicing to customer. In fact it can be claimed that the reason for general acceptance to electronic business is the attention of bank managers to the importance and necessity of this phenomenon that finally is resulted to their serious tendency and attention for providing banking structure with electronic method. What makes banks different from conventional methods in using electronic banking system is quantitative and qualitative expansion in servicing to customer. In the other word, electronic banking allows customer to have more extensive and variable services, while time and place dimension will not have any effect on increasing or decreasing of servicing to customer. Also customer can control his/her activities without physical presence in bank branches from every location.

About the concept of electronic banking it should be said that electronic banking generally includes to provide some facilities for staff in order to increase their speed and efficiency in presenting banking services in the location of branch as well as inter-branch and interbank

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processes throughout the world and provide hardware and software facilities for customers so that by using them, customers can do their desire bank operations through safety and reliable communication channels without the need for physical presence at bank at any hour of the day (24-hour)(Hasani, 2008: 21). About components and elements of electronic banking in Iran, it should be said that principles of electronic banking in the country indicate the strategic amendments the banking system for the realization of new banking. This means that banking system has provided infrastructure for implementation of new banking. In general, electronic banking principles for implementation include (Abbasi, 2009: 138): Card-based payments, acceleration (Shetab) network, system of the interbank settlement of currency exchanges, switch network of Individual-bank and interbank operations, swift central network. Of the other Iran's electronic banking components, we can point to ATM cash machines, mechanized branches, branches with pin pad devices, pos devices, smart cards, phone bank and fax bank and etc. The question here is that what does the customer satisfaction mean? It should be said that customer satisfaction has many definitions; "Topfer" believes that "customer satisfaction does not depend on the type of commercial activity of an organization and or on the position of organization in the market, customer satisfaction depends on ability and capability of organization in supplying the desired quality of customer". "Zhoran" defines customer satisfaction as: "a status that customer feels that product features are consistent with his/her expectations." "Richard Oliver" believes that customer satisfaction and lack of his/her satisfaction results from difference between customer expectations and the quality that he/she has received. On the other hand following relationship can be used to measure the customer satisfaction (Kavoosi, 2009: 45):

Customer satisfaction = Customer perception of quality - Customer expectations

The question that is always raised is that why customer satisfaction is valuable and important. It should be said in response that customer is the key to success for any organization and any commercial and economic activity. The credibility of one successful organization is based on its long-term relations with customers. Providing appropriate services is the most important factor to obtain satisfaction and loyalty of customer. An organization that has outlined its one of practical purposes on providing appropriate services based on customer's expectations and needs can be a successful organization relying on other commerce principles. Providing appropriate services are not feasible except on the base of recognition of needs, favorites, facilities and expectations of customer. Collecting such information as integrated helps organization in order to providing appropriate services in accordance with the needs and expectations of customers (Beverley, 2004:30). Findings show that more than 90% of unsatisfied customers of an organization do not try to communicate in order to presenting complaint or criticism of the organization. These customers refer to competitors to meet their need and tell their dissatisfaction to other potential customers with full interest. How can we measure the amount of satisfaction? In response, many scientists believe that adding satisfied customers is of the general policies of business and the most important factor to reach the commercial success. In order to maintain competitiveness and achieve the lofty goals of organization, it is needed to promote the level of customer satisfaction continuously. On the other hand, to improve the level of customer satisfaction it is essential the current level of customer satisfaction to be determined initially. Nowadays, demands and expectations of customers about desired products and services are changing every moment. As "Paffrath" and "Sebastian" have said, the main purpose from measuring the customer satisfaction is to guide activities and sources of organization by receiving a feedback from customers in a way that finally reach to the most important purpose of organization that is keeping customer and

creating a long-term relationship with her/him. However, the importance of creating and developing the system of customer satisfaction measurement is not covered for anyone, due to different reasons such as lack of standard models in national level as well as unfamiliarity with conventional models in developed countries, the subject of customer satisfaction in Iran, has been less paid attention (Kavoosi, 2009: 65). Existence of customer satisfaction assessment system in each organization is essential. Existence of this system is as measuring blood pressure, pulse and other vital signs. Regular and continuous measurement of customers' satisfaction is an undeniable need for making customer loyal. Measuring customers' satisfaction provides an effective tool to control the general function of organization and helps organization to recognize its weaknesses and attempts to remove them. In the following we will refer to some similar studies conducted so far: According to the research with the subject of "the effect of electronic banking on customers satisfaction in Bank Eghtesad-e Novin" that was conducted in 2009 by Mrs. Shahideh Taleb, shows that there is a significant relation between electronic banking and customers satisfaction, while according to the results of statistical tests, the variable of reliability has the most effect on customers satisfaction. After that, speed variable and more accessible variable, respectively have the most effects on dependent variable of customer satisfaction. Also two variables of being confidential and assurance have negligible impact on the improvement of model and the increase of customer satisfaction. The difference existing in ranking the amount of effectiveness of mentioned dimensions with the present research can be found in the type and quality of services provided by bank Eghtesad-e Novin.

According to the research with the subject of "the effect rate of the application of electronic banking on customers satisfaction level of bank services in bank Mellat" that was conducted in 2009 by Mr. Hadi Seifi Sabangholi, shows that there is a significant relationship between electronic banking and customers' satisfaction. While according to the results obtained from statistical tests, except the factor of accuracy, other factors namely speed, communication and informing, trust, flexibility, ease of use, security, cost, credibility, ease of access have a significant impact on improving the services quality of electronic banking and consequently customers satisfaction. Meanwhile, factors of cost, security, credibility and trust have the most impact on customer satisfaction.

According to the research with the subject of "investigation and assessment of service quality and its relationship with customer satisfaction: case study: bank Tejarat" that was conducted in 2006 by Mrs. Feresgteh Tavakolli Jazi shows that there is a significant relationship between banking services quality and customer satisfaction, according to the results obtained from this research, the dimension of empathy has the most relationship with customers satisfaction, next effective variable on customer satisfaction is reliability from the customers' perspective, next effective variable is response and the last effective variable on customer satisfaction is assurance. By evaluating the results of this desired research with this research, evidences that show the existing difference in the field of ranking the amount of effectiveness of dimensions of service quality can be related to this that the subject of Mrs. Tavakolli's research has considered all banking services while the subject of this research is just about electronic banking of bank Tejarat.

According to the research with the subject of "measuring the satisfaction rate of final users of electronic banking services: study case: Banks of Parsian, Pasargad, Eghtesad-e Novin" that was conducted in 2010 by Mrs. Fatemeh Nikbakht, shows that banks can enhance the customers satisfaction through three main factors of content, ease of use, accuracy and precision. On the other word, these three factors play the most effect on reaching the customer satisfaction.

Methodology

The methodology of this study is applied oriented and data collection method is descriptive in correlation type. Population of this study includes 384 people from Bank Tejarat customers in Tehran's Northwest region who are selected randomly and research data are collected by using the researcher-made questionnaire. Questionnaire validity was confirmed through content validity by using the viewpoints of a group of experts. The method of "Cronbach's Alpha" was used to determine the validity and reliability of questionnaire answers that the coefficient of 0.949 was obtained.

Results and Discussion

Results in association with hypothesis number 1: Pearson correlation is used to evaluate the main hypothesis (hypothesis 1). According to the results obtained from desired statistical test, correlation coefficient is equal with 0.715. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, and with the increase of electronic banking, customer satisfaction also increases and with the decrease of electronic banking, customer satisfaction decreases. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of electronic banking and customer satisfaction is significant, because the level of significance is lower than 0.05.

Table 1 : Correlation Test

		electronic banking	Customer satisfaction
electronic banking	Pearson coefficient	1	.751**
	Sig. (2-tailed)		.000
	N	391	388
Customer satisfaction	Pearson coefficient	.751**	1
	Sig. (2-tailed)	.000	
	N	388	388

Results in association with hypothesis number 2: Pearson correlation is used to evaluate the second hypothesis. According to the results obtained from desired statistical test, correlation coefficient is equal with 0.578. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, and with the increase of empathy, customer satisfaction also increases and with the decrease of empathy, customer satisfaction decreases. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of empathy and customer satisfaction is significant, because the level of significance is lower than 0.05.

Table 2 : Correlation Test

		Empathy	Customer satisfaction
Empathy	Pearson correlation coefficient	1	.578**
	Sig. (2-tailed)		.000
	N	390	388
Customer satisfaction	Pearson correlation coefficient	.578**	1
	Sig. (2-tailed)	.000	
	N	388	388

Results in association with hypothesis number 3: Pearson correlation is used to evaluate the third hypothesis. According to the results obtained from desired statistical test, correlation coefficient is equal with 0.590. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, and with the increase of reliability, customer satisfaction also increases and with the decrease of reliability, customer satisfaction decreases. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of reliability and customer satisfaction is significant, because the level of significance is lower than 0.05.

Table 3 : Correlation Test

		Reliability	Customer satisfaction
Reliability	Pearson correlation coefficient	1	.590**
	Sig. (2-tailed)		.000
	N	391	388
Customer satisfaction	Pearson correlation coefficient	.590**	1
	Sig. (2-tailed)	.000	
	N	388	388

Results in association with hypothesis number 4: Pearson correlation is used to evaluate the fourth hypothesis. According to the results obtained from desired statistical test, correlation coefficient is equal with 0.644. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, it means that with the increase of assurance, customer satisfaction also increases and with the decrease of assurance, customer satisfaction decreases. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of assurance and customer satisfaction is significant, because the level of significance is lower than 0.05.

Table 4 : Correlation Test

		assurance	Customer satisfaction
Assurance	Pearson correlation coefficient	1	.644**
	Sig. (2-tailed)		.000
	N	391	388
Customer satisfaction	Pearson correlation coefficient	.644**	1
	Sig. (2-tailed)	.000	
	N	388	388

Results in association with hypothesis number 5: Pearson correlation is used to evaluate the fifth hypothesis. According to the results obtained from desired statistical test, correlation coefficient is equal with 0.646. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, and with the increase of speed, customer satisfaction also increases and with the decrease of speed, customer satisfaction decreases. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of speed and customer satisfaction is significant, because the level of significance is lower than 0.05.

Table 5 : Correlation Test

		speed	Customer satisfaction
speed	Pearson correlation coefficient	1	.646**
	Sig. (2-tailed)		.000
	N	388	386
Customer satisfaction	Pearson correlation coefficient	.646**	1
	Sig. (2-tailed)	.000	
	N	386	388

Results in association with hypothesis number 6: single sample t-student test and t-test have been used to evaluate the sixth hypothesis (the effect of electronic banking on indicators) that according to the results it can be said that the effect of electronic banking on indicators is significant and has a positive effect.

Table 6-1 : Single-sample statistics

	N	Mean	Std. Deviation	Std. Error Mean
Reliability	391	3.7810	.59833	.03026
Willingness and enthusiasm for responding	391	3.9642	.80188	.04055
Assurance	391	3.9305	.57292	.02897
Empathy	390	3.5527	.61723	.03125
Speed	388	3.5168	.86735	.04403
Flexibility	389	3.3033	.94256	.04779
Ease	384	3.7995	.92197	.04705

Table 6-2 : One-sample t test

	Amount of test 3 =			Mean difference	Confidence interval 95%	
	Test statistic t	Degrees of freedom	Significant levels - bilateral		Low limit	up limit
Reliability	25.809	390	.000	.78096	.7215	.8405
Willingness and enthusiasm for responding	23.776	390	.000	.96419	.8845	1.0439
Assurance	32.116	390	.000	.93052	.8736	.9875
Empathy	17.684	389	.000	.55272	.4913	.6142
Speed	11.736	387	.000	.51675	.4302	.6033
Flexibility	6.347	388	.000	.30334	.2094	.3973
Ease	16.992	383	.000	.79948	.7070	.8920

Results in association with hypothesis number 7: Pearson correlation is used to evaluate the seventh hypothesis. According to the results obtained from desired statistical test, correlation coefficient is equal with 0.409. As it can be seen this coefficient is positive and close to number +1, it means that it has direct relationship, and fee and costs of banking services has direct effect on customer satisfaction. Now we pay attention to the significance level for significance of this relationship. If the amount of this statistic is lower than 0.05, it means that the relationship between two variables is significance and is not resulted from accident, here, the relationship between two variables of the growth of electronic banking and banking fee is significant, because the level of significance is lower than 0.05.

Table 7 : Correlation Test

		Wage and banking costs	Customer satisfaction
Wage and banking costs	Pearson correlation coefficient	1	.409**
	Sig. (2-tailed)		.000
	N	391	385
Customer satisfaction	Pearson correlation coefficient	.409**	1
	Sig. (2-tailed)	.000	
	N	385	385

Conclusion

Finally it should be said that the most important results that are obtained after exact review of literatures available in the researched field in the dimensions of internal and external as well as conducted, interview and implementation of researcher-made questionnaire can be categorized in following items: the rate of satisfaction from electronic banking services of Bank Tejarat is in well acceptable level. Dimensions of flexibility, speed and empathy have allocated to themselves the less amount of satisfaction in relation to electronic banking services of bank Tejarat. In this regard, while identifying the customer's needs and while creating the sense of friendship, the required flexibility in relation to customers should be applied. And provided

services to customer within the branch (like immediate card issuing) should be transferred from center into that branch as much as possible to increase the speed of servicing in this field. Solving existing problems about providing electronic banking to customers will cause that customers conduct most of their banking affairs from this way and provide the grounds of growth and excellence in this industry in Bank Tejarat as one of the largest and most prominent semi-public banks of country. Both customers and Bank Tejarat benefit from the tendency of people toward using these services because they get the most profit with the less cost. The growth of this industry will have countless benefits for Bank Tejarat and society that one of its smallest benefits is the decrease of urban travelling in order to do bank affairs and consequently the decrease of traffic. Organizations, usually, has no clear and obvious view from the rate of their customers satisfaction and their findings are unscientific and based on guess. Conducting this research based on scientific discussions and principles will cause that a clear view of the extent of customer's satisfaction becomes visible for officials and senior managers of the bank. Recognition of weakness and strength points of electronic banking services as well as opportunities and threats in front of this industry will cause that, managers of bank Tejarat find out shortcomings existing in services provided to customers and try to solve them.

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