Investigating the Effect of Electronic Banking Services Quality on the Customer Satisfaction

Azadeh Hoseini
Sama Technical and Vocational Training College,
Islamic Azad University, Gorgan, Iran
Saeid Khaje Dangoliani
Keshavarzi Bank, Golestan Province, Iran

Abstract. The present study conducted on the effects of electronic banking services quality on customer satisfaction of the branches of Keshavarzi Bank, Golestan province, Iran. In this regard, SERVQUAL model was used to investigate electronic banking services. The population was included all customers of Keshavarzi Bank branches, Golestan province, Iran. According to the provided formula, 400 individual was considered as sample size. The purpose of this study was applied and based on monitoring-correlation method. A questionnaire was used to collect data on the effect of the internet banking service. To determine the reliability of questionnaire, Cronbach's alpha (95.8%) was used and to determine the validity, content validity was used. For data and information analysis, descriptive statistics (indicators such as frequency and percentage and draw diagrams and tables) and inferential statistics (Pearson correlation coefficient and regression test) were used. The obtained results showed that there was significant effect ($p \leq 0.99$) between the quality of the electronic banking services (efficiency, performance, access to the system, privacy, reliability and attractiveness of the site) and customer satisfaction.

Keywords: Electronic banking services, Customers' satisfaction, Keshavarzi Bank

1.   Introduction.

Strategic management capability is accounted as one of the main skills of transformational managers. The purpose of strategic management is to implement continuous changes with the aim of adapting the organization with its environment (Kampono et al., 2005, p. 42). Important features that today's transformational managers must have are including knowledge of the existence of probable resistance to changes and new services and how to overcome it and to break the resistances in which sections of the organization and in what form it should be taken place (Mohammad Mahmoudi Meimanad, 2010).

One of the major changes in today's society is the advent of information and communication technologies that brings many benefits. Despite the multiple potential advantages, the development and deployment of these technologies is not enough to enjoy their benefits, rather technology should be used by users (Jalali, 2008, Hamner and Qahtani, 2009). In case of lacking acceptance and use of new technologies by users, it would be inconclusive the investment in the mentioned area (Elahi, Abduli and Danaie-far, 2010). To achieve the potential benefits of information technology, it should be considered the acceptance of it in the society (Centeno, 2004).

Today, the competition to improve service quality has been known as a strategic issue and is the key for organizations that are active in the service sector. Organizations that are achieved higher levels of the services quality will have higher levels of customer satisfaction as a prelude to achieving permanent competitive advantage (Guo et al, 2009). No doubt, customer satisfaction and even making them joy of the services quality at first stage requires to know their needs and desires and then to transfer these demands into a situation that goods and services are produced (Hosseini and Ghaderi, 2010).

Kotler knew the customer satisfaction dependent on the performance of the product or service, but according to customer expectations of the product or service (Kotler and Armstrong, 2001, p. 866). Tse and Milton defined the satisfaction as the response of customers to evaluation of the perceived difference between the previous expectations or some norms of yield and actual yields of products that will be understood after consumption (Caruana, 2002, p. 815). Customer satisfaction is a customer's feeling or attitude towards a product or service after using it (Jamal and Naser, 2002, p. 147).

Researches have shown that almost 96% of dissatisfied customers of an organization would never bother themselves to refer to the service provider organization and to offer their complaint (Kavoosi and Saghaie, 2005, p. 392). Finally, the dissatisfied customer would leave the organization surely and after separation from the organization, they will transfer the problem of their dissatisfaction to the 8 persons and more importantly, they

also pull them towards competitors of the organization (Mohamadi, 2003, p. 21). Thus, in addition to the fact that dissatisfied customers leave the organization themselves, they will indemnify the organization hugely in a long time by launching negative word of mouth publicities about the organization.

Electronic banking can be introduced as the use of advanced technology of telecommunication and networks to transfer resources (money) in the banking system. In fact the electronic banking means optimal integration of all the activities of a bank through deployment of modern information technology based on bank process and in accordance with the organizational structure of banks that provides the possibility of offering all the services needed to customers (Venus and Mokhtaran, 2002).

Customer satisfaction is one of the most important factors to preserve customers and repeat their purchase. Customer satisfaction is the emotional value which feels in costumers due to the comparison between expectations before purchase and performance of the product or service after buy. Two kinds of satisfaction have been identified in the marketing literatures. 1) Transactional satisfaction which is defined as the evaluation and judgment after the selection and consumption of a particular shopping situation. 2) Total satisfaction which is an overall assessment and judgment of customer from all his experience of the service provider organization. However, since marketing is the relationship based on long-term relations, so the overall satisfaction is more appropriate variable to assess (Spiteri and Dion, 2004).

Customer: In this study, customer was meant to the person (natural / legal) that has an account at least in one of the private banks. In the traditional view, client is a person who buys products of the company or organization, or in the other word the client is a person who receives goods or services. This definition is not clear and complete thence. A better definition from customer is as follows: "A person who the company or organization wants to affect his behavior by creating the value" (Tanner and Ditoro, 1997).

2. Customer satisfaction.

The success of all organizations and institutions such as productive or services, profitable or non-profitable, governmental or non-governmental is influenced by several factors in which customer satisfaction is one of the most important one in order to achieve sublimity in business (Nooralsana' and Saghaie, 2008). It is believed that customer satisfaction will affect their future reactions toward the organization including the willingness and enthusiasm to reuse, tendency to recommend the product to others and willingness to pay the price without bargaining or trying to find suppliers who provide the same product with lower price (Kavoosi and Saghaie, 2005). Customer satisfaction is achieved when the performance of the company could meet the expectations of a customer. If the performance would be lower than expectations, the customer will be dissatisfied and if the performance would be equal to expectations, he will satisfy. If the performance would be higher than expectations, he will be very pleased and happy (Kotler and Armstrong, 2005). Customer satisfaction is the amount of utility that customer obtains because of different characteristics of the product and is the source of profitability and a reason for continuing activities of the organization (Paolini et al., 2006).

3. Service.

Service in the context of economy is said to the activity that its accomplishment is based on the existence of a demand and there is a price for it in the relevant market. Service means the economic and non-physical commodity that a person, firm or industry has produced it for others to use, and any firm that its product is invisible and intangible goods is known as a service firm (Seyed-Ali-Akbar, 2002). Services include invisible and impalpable activities and cause interest or the satisfaction but it does not also cause the owning of things (Ranjbarian, 2002). In service engineering, service is defined as an activity that happens between the provider and the recipient and will change the recipient's state (Kimita and Shimura, 2009).

4. Electronic banking.

In fact, it can be said that the phenomenon of e-banking is one of the advantages of e-commerce and has a very essential role in e-commerce with the growing volume of e-commerce in the world and with regards to the needs of business to conduct easy, quick and precise banking operations to transfer funds. Electronic banking essentially regards to providing customers' access to the banking services through safe intermediates and without physical presence (Kohzadi, 2003).

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5. The concept of services.

Defining the service is always difficult because of its diversity. What makes it more complicated is the fact that it is not often easy to understand and identify ways to implement and delivery of services because of the intangible nature of most inputs and outputs. The word of the service has broad extent and variety of meanings and this feature has led to a great uncertainty in its concept in the management literatures (Johns, 1999). Gronroos (2001) defined the service as follows: a service is a more or less intangible activity or series of activities that takes place usually but not necessarily in the interactions between customer and service personnel

or physical resources or goods or service supplier systems as well as they are presented as solutions for customer problems.

6. The concept of quality.

Quality is a common and familiar word that different interpretations have been done from its concept and how to use it. But the common mode of all these definitions is compatibility of the product or service with the needs and expectations of customers. Quality starts from the customer and any notice to the product or service doesn't necessarily follow the quality regardless to the customer's opinion, so the quality is usually defined based on the compliance of the product with features that the customer desires, or the extent that the product can meet prior expectations of the customer (Johnson and Nilsson, 2003).

Quality does have no meaning and concept other than what the customer really wants. In other words, a product is qualified when it has complied with the wants and needs of the client. Quality should be defined as conformity to the customer's requirements (Crosby, 2004). Quality consists of the set of activities, processes, actions and interactions that are provided in order to meet customers' problems to them (Vargas, 2004).

7. The concept of services quality.

In the service sector, assessment of its quality is done during the process of providing services. Every customer's call is accounted as a moment to build reliance and an opportunity to satisfy or dissatisfy (Simmons et al., 2003). Since the role of services became apparent in everyday life, the issue of "services quality" was noted as the main characteristics of the competition between the organizations, so that attention to the service quality makes the organization different from its competitors and leads to competitive advantage (Ghobadian, Speller and Jones, 1994).

8. The concept of quality of banking services.

The desire to the q. uality plays an important role in service industries such as insurance, banking and other services, because the service quality is vital for the survival and profitability of the organization (Jabnoun & Khalifa, 2005). The definition of quality in banking services includes: services quality as costumers' belief or attitude about the priority of the service that is provided in the Bank (Al-Hawari, Ward & Newby, 2009).

9. Methodology.

The present study was in an applied type considering the nature and aims of the research and was correlation-descriptive with regards to the method of collecting data for the hypothesis test.

The population of this research was all the people that had a bank account at least in one of the branches of Keshavarzi Bank in Golestan, Iran. Currently, there are 40 active branches in Golestan, Iran. A number of 10 branches from them are the main branches. And all branches of Keshavarzi Bank have e-services.

The population of this study has been formed from customers Keshavarzi Bank in Golestan, Iran, in 2002 that used electronic banking services. Since 10 main subsidiaries were active in the towns of Golestan province, Iran, the cluster sampling was used for sampling that the sampling has been done in the same extent at any branch. Golestan province has been divided into three main sections: the central part with the center of Gorgan, the eastern part with the center of Gonbad and the western part with centrality of Kordkouy. Thus 135 people were selected as samples for each part and were interviewed.

The questionnaire consisted of three parts. The first part of the questionnaire helped to collect demographic information of respondents such as gender, age, education, familiarity with the Keshavarzi Bank and so on. The second part of the questionnaire consisted of six parts that are variables of the research perceived by the customer (efficiency, fulfillment, system availability, privacy, assurance/trust and service quality aesthetics). And the third part is the survey of customer satisfaction.

The article (Parasuraman et al. 2005, pp. 230-23) was used for designing questions about the variable of customer satisfaction. It has considered six indexes for service quality in this article including efficiency, fulfillment, system availability, privacy, assurance/trust and service quality aesthetics (Sun Quan, 2010).

Another variable which was discussed in this research was customer satisfaction. Statistical methods and techniques were used in this research were from regression test. Data analysis was conducted using SPSS 19 software and charting has been done by EXCEL software.

10. Data analysis.

Descriptive statistical techniques such as tables and the frequency graphs were used to analyze demographic data in this study. Recognition of demographic characteristics of the population and sample examined in the study can offer researcher the basis for future analysis by raising his awareness of the population and sample studied.

To verify the assumptions in this study, it was used inferential statistical methods including Pearson's correlation coefficient and regression test, variance analysis and inferential analysis. The reliability and validity of the questionnaire were also examined by obtaining Cronbach's alpha.

11. Demographic characteristics of the sample.

From the total of respondents (405 persons), there were 241 persons as male (59.51%) and 164 persons as female (40.49%). In terms of marital status, number of 268 people was married (66.17%) and 137people was single (33.83%). Age of participants was included 136 persons aged from 18 to 29 years (33.58%), 157 persons

aged between 30 to 39 years (38.76%), 95 person aged between 40 to 49 years (23.46%) and 17 persons were above 50 years old (4.2%). The academic degree of respondents was under Diploma for 39 people (9.63%), diploma and associate degree for 131 people (32.34%), Bachelor degree for 172 persons (42.47%) and Master degree and higher for 63 persons (15.56).

In terms of familiarity with the bank, 39 people were familiar less than 5 years (9.63%), 129 persons from 6 to 10 years (31.86%), 116 persons between 11 to 15 years (28.64%), 64 people between 16 to 20 years (15.8%) and 57 people were client more than 20 years (14.07 %) in the Keshavarzi Bank. From the total respondents (405 people), 132 persons (32.59%) used Internet bank, 191 persons used Mobile Bank (47.16%), 239 people used SMS bank (59.01%), 288 people used telephone Bank (71.11%) and 337 persons used ATM (83.21%).

12. Description of research variables.

Table 1. Results of describing the research variables

Variable	Frequency	Minimum	Maximum	The mean	Variance	Standard deviation
Efficiency	405	18	40	31.30	21.686	4.657
Fulfillment	405	18	34	26.63	14.579	3.818
System availability	405	10	29	20.07	22.683	4.763
Privacy	405	3	15	8.47	6.646	2.578
Assurance/Trust	405	4	20	12.20	15.210	3.900
Service quality aesthetics	405	2.00	10.00	6.1000	3.802	1.94999
Customer satisfaction	405	4	15	9.66	6.275	2.505

Table 2. Results of Kolmogorov - Smirnov test on research variables

Variable	Significant level	Result of the test
Efficiency	0.163	Data distribution is normal.
Fulfillment	0.081	Data distribution is normal.
System availability	0.128	Data distribution is normal.
Privacy	0.095	Data distribution is normal.
Assurance/Trust	0.066	Data distribution is normal.
Service quality aesthetics	0.074	Data distribution is normal.
Customer satisfaction	0.089	Data distribution is normal.

As can be seen in Table 2, data were normal according to Kolmogorov-Smirnov test and Pearson's test was used.

Table 3. Results of data analysis for variables on customer satisfaction

Variable	Efficiency	Fulfillment	System	Privacy	Assurance/Trust	Service

			availability			quality aesthetics
Regression	803.598	769.780	520.839	562.379	971.945	465.640
Residual	1153.8	1187.618	1436.558	1395.019	985.453	1491.758
Total	1957.398	1957.398	1957.398	1957.398	1957.398	1957.398
Degrees of freedom	404	404	404	404	404	404
F statistic	280.681	261.213	146.112	162.463	397.467	25.793
Significant level	0.000	0.000	0.000	0.000	0.000	0.000

As can be seen in Table 3, obtained correlation levels are significant between each of the variables individually with the customer satisfaction in level of 99%. And since a significant level (sig) is smaller than 0.01, it can be concluded that these two variables are not separated or in other words hypotheses are significant in this study.

13. Discussion and conclusion.

Results showed that there was a significant relationship between the qualities of electronic services with satisfaction of customers of the Keshavarzi Bank's branches in Golestan, Iran. In other words, there was a significant relationship between the quality of electronic services and its six dimensions including of efficiency, fulfillment, system availability, privacy, and assurance/trust and service quality aesthetics. So whatever the Keshavarzi Bank increases the quality of offered electronic services, customer satisfaction will be increased. The research literature also showed the relationship between the qualities of electronic services with customer satisfaction. Results of researches of Lee and Torben (2001), Mills (2002), Bauer and Gerter (2002) and Molavi (2009) indicated a significant relationship between the quality of electronic services with customer satisfaction that were correspond to the current results. Pour-zandi and Najafi (2012) conducted a study entitled "evaluation of the effect of electronic banking service quality on customer satisfaction" and the results showed that all aspects of the quality of e-banking services had positive impact on customer satisfaction that was consistent with the present results. Thus, banks using modern technologies in services would believe that increasing customer satisfaction requires offering a high quality electronic service. Also in reviewing the priorities of aspects of service quality from the customer perspective, assurance/trust had the high priority and aspects of efficiency, fulfillment, privacy, system availability and service quality aesthetics were ordered respectively.

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