

# **The Studying Quality of Electronic Services in the Improvement of Customer Relationship (Case Study: Melli Bank of Khorasan Razavi)**

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## **Abstract**

*Today, with the globalization and the competitive element, there are great developments in commerce and banking management. Therefore traditional methods change to the modern ones. Undoubtedly innovative organizations need to be equipped with the advanced information technology and administrative skills. This paper present the quality of electronic services in the improvement of customer relationship in the branches of Khorasan Razavi Melli Bank. 150 questionnaires are distributed among the customers that use electronic services. Data is analyzed by correlation coefficient, regression and SPSS. Results indicate the effect of electronic services on the customer satisfaction, reduction of customer costs and increase security for customers of Melli Bank. At the end some ideas recommend to these branches.*

**Keywords:** *quality of electronic services, customer satisfaction, costs of customers, customer relationship management, Security.*

## **1. Introduction**

With the development of information technology, e-commerce transaction is growing in the world day by day. One of the tools necessary for the development of e-commerce is e-banking system that facilitates operations and activities related to e-commerce. In fact, the implementation of e-commerce needs to achieve e-banking. Electronic bank provides services unlimited to specific geographical areas online, 24 hours a day and 7 days a week. Services of this type of banking merge different bank channels and integrate island systems. Thus information management, customer relationship management, customer satisfaction, cost savings improve [2].

Lee et al. described quality of services as a general attitude or belief associated with service excellence and believed that attention to the quality of services reflects the degree and direction of difference between perception and expectations of customer [6]. In a valid classification, customer needs consist of three classes or layers in terms of the expected quality and the achievement of each of these quality layers affects increasing continuous customer satisfaction, provided that the former quality layer is achieved. The layers are:

**Basic quality:** These are minimum values that prevent dissatisfaction. Some of them include safety, reliability, and durability of the product. These demands are implicit and the customer assumes that these features are included in the product.

**Performance quality:** represents a group of customers' needs that constitute the performance requirements of the product and failure in meeting them results in customer dissatisfaction

Excitement quality: are features that are hidden from the customer as a need or demand before providing services. In the case of failure in meeting them, they do not cause customer dissatisfaction; however, meeting those needs or demands by the product manufacturer leads to considerable satisfaction of customers. The characteristic of these requirements is that although the customer does not express them, they meet competitive advantage for the intended service if they could be identified, designed and delivered [7].

Acceptability of the cost of bank electronic services and a proper cost for sharing electronic services affect providing electronic services. Providing details about the transfer of money between clients' accounts and providing information about the exchange rate on a daily basis are those things that customers expect to receive through electronic services. Designing attractive and user-friendly web site [3] and the ease of working with the bank's website even at low speed Internet is one of the factors affecting the quality of electronic services. Building trust in the name and brand of bank cause the customers consider information on site as valid and also encourage them to use electronic services [5]. Bank guarantees to solve any problems for the loss of safety and security of electronic services [8], the speed of response to complaints [4], as well as provide facilities to help customers online [8]. Therefore, these improve the performance of banks to provide electronic services. The human force variable is of tremendous value in running the system; the human force variable is able to make change in financial capital as well as other capital. That is why the collection of human resources based on the competences is one of the most important principles of recruiting human force needed by the system. In fact, improvements system makes the manager to evaluate the staff, determine their raining needs with respect to the objectives of system, and provide organizations with banks and human forces in order to train staff and grow managers and supervisors of branches who have deeper insights, great knowledge and more power and skill. It is clear that if three major tools of leadership and supervision, motivation and good communication between employees of the banking system and establishment of order within the banking system are used correctly, they can lead to enthusiasm for doing tasks of staff, reduction of conflicts, good will, mutual trust, and better coordination and job [1]. Since this study focuses on the perspective of customers, it can play an effective role in deepening the knowledge base of public and private banks and financial institutions in order to plan for attraction and encouragement of customers to use new bank services and understanding the customer's concerns of adoption of new services and finally adoption of appropriate marketing and policies strategies from the banks.

Poon [8] showed that features of speed and cost affected the acceptability. The French National Institute in cooperation with Zilina University, Slovakia concluded that several effective factors contribute to increase the quality of Internet banking services: response time, scope of service, ease of use, security, designing a suitable graphical interface.

According to the above review, the problem of research and important challenge of the study is that: to what extent does the promotion of quality of electronic services at the Melli Bank improve the customer relationship with Melli Bank of Khorasan.

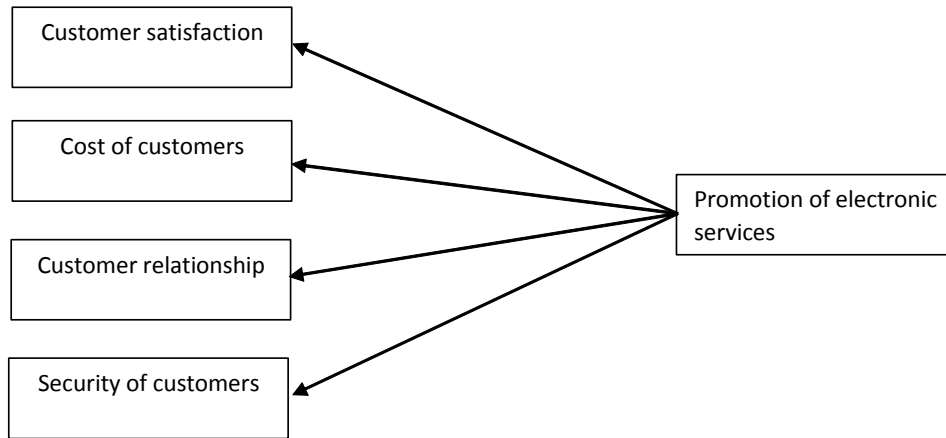
## **2. Methodology**

This study is descriptive and correlational research. Statistical population of the study is all of the customers of Melli Bank of Khorasan (Sabzevar) who have used electronic services of Melli Bank (July and August 2014).

In this study, Sabzevar was divided according to the division of supervision of Melli Bank. A branch was randomly selected in each district. Since the study was seeking those customers who have used electronic banking services, the customers were first asked some questions orally on the use of electronic banking services of Melli Bank. If the answer was positive, the customers were selected as the final sample. Hence, judgmental or purposive sampling was selected as the final sampling. Considering the

probability of excluding some questionnaires, additional 50 questionnaires were distributed and finally 150 questionnaires were analyzed after elimination of incomplete questionnaires. Independent variable of the study is electronic services and dependent variables are customer satisfaction, reduction of customer costs, customer relationship, and increase of safety. Five point Likert scale was used to answer the questionnaires. Validity of the questionnaires was confirmed by the professors.

Conceptual model of the relationship between the variables are as follows (Figure 1):



**Figure 1. Conceptual Model of the Study**

### 3. Results

In this study, data was analyzed by SPSS using descriptive and inferential statistics. Data was coded and entered SPSS, and means, frequency, percentage of frequency, standard deviation, and mode were used to obtain the results. Due to the level of measurement of variables, Pearson correlation coefficient was used to investigate the relationship between variables and regression analysis was employed to examine the effect of independent variables on dependent variables.

Table 1 shows the effect of promotion of electronic services on customers' satisfaction of Melli bank that was obtained by correlation coefficients, determination coefficient, adjusted coefficient, and standard error. Correlation of the variable promotion of electronic services on customers' satisfaction was found to be 0.676. Moreover, the determination coefficient was equal to 0.457 and adjusted coefficient was 0.450 or about 45%; that is, over 45% of the changes in the variable customer satisfaction was explained by this variable and the remaining changes (55%) belonged to other variables that were not observed in this study and in hypotheses of the study. F-value was calculated as the ratio of average variance of regression to the mean residual variance that was equal to 71.46 and sig=0.000; that is, it was significant at 99% level of significance. Therefore, the adjusted determination coefficient was statistically significant. In other words, over 4% of the changes in dependent variable (customer satisfaction) was explained by the variable of promotion of electronic services.

**Table 1. Multiple Correlation Coefficients, Coefficient of Determination, Adjusted Coefficient and Estimated Standard Error of the First Hypothesis**

Sig	F	estimated standard error	adjusted coefficient	coefficient of determination	Multiple correlation coefficients
0.000	71.461	5.37	0.450	0.457	0.676

The regression coefficient (b): the results indicated that regression coefficient of the variable of promotion of electronic services was 1.255. Standardized regression coefficient for this variable was estimated to be 0.676. The amount estimated for the t-test was 8.45 that was significant with respect to its significance value (0.000) at 99% level of confidence. Therefore, the first hypothesis is confirmed.

**Table 2. Standardized and Non- standardized Coefficients of Regression of the Variable Affecting Customer Satisfaction**

Level of significance	t-test	Standardized coefficient	non-standardized coefficient		model
		B-value	Standard deviation	B	
0.010	-0.373		2.99	1.114	Constant
0.000	8.45	0.676	0.148	1.255	Promotion of electronic services

Table 3 shows correlation coefficients, coefficient of determination, adjusted coefficient and standard error for the effect of promotion of electronic services on the reduction of costs of customers of Melli Bank. Therefore, it could be said that correlation of the variable of promotion of electronic services on the reduction of customer costs was equal to 0.607. Moreover, the coefficient of determination was 0.369, and the adjusted coefficient of determination based on the variable entered the analysis was equal to 0.362 or about 45%; that is, over 36% of the changes in the variable of reduction of customers cost was explained by these variables and remaining changes (64%) belonged to other variables that were not observed in this study and hypotheses of the study. F-value was calculated as the ratio of average variance of regression to the mean residual variance that was equal to 50.88 and sig=0.000; that is, it was significant at 99% level of significance. Therefore, the adjusted coefficient of determination was statistically significant. In other words, over 36% of the changes in dependent variable (reduction of customers cost) was explained by the variable of promotion of electronic services.

**Table 3. Multiple Correlation Coefficients, Coefficient of Determination, Adjusted Coefficient and Estimated Standard Error**

Sig	F	estimated standard error	Adjusted coefficient of determination	coefficient of determination	Multiple correlation coefficients
0.000	50.88	4.57	0.362	0.369	0.607

The regression coefficient (b): the results indicated that regression coefficient of the variable of promotion of electronic services was 0.876. Standardized regression coefficient for this variable was estimated to be 0.607. The amount estimated for the t-test was 7.133 that was significant with respect to its significance value (0.000) at 99% level of confidence. Therefore, the second hypothesis is confirmed.

**Table 4. Standardized and Non- standardized Coefficients of Regression of the Variable Affecting the Customer Cost**

Level of significance	T-test	Standardized coefficient	Non- standardized coefficient		Model
		B-value	Standard deviation	B	
0.000	0.597		2.49	1.488	Constant
0.000	7.133	0.607	0.123	0.876	Promotion of electronic services

Table 5 shows correlation coefficients, coefficient of determination, adjusted coefficient and standard error for the effect of promotion of electronic services on customer relationship with Melli Bank. Therefore, it could be said that correlation of the variable of promotion of electronic services on the customer relationship was equal to 0.726. Moreover, the coefficient of determination was 0.528, and the adjusted coefficient of determination based on the variable entered the analysis was equal to 0.522 or about 52%; that is, over 52% of the changes in the variable of customers relationship was explained by these variables and remaining changes (52%) belonged to other variables that were not observed in this study and hypotheses of the study.

F-value was calculated as the ratio of average variance of regression to the mean residual variance that was equal to 94.93 and sig=0.000; that is, it was significant at 99% level of significance. Therefore, the adjusted coefficient of determination was statistically significant. In other words, over 36% of the changes in dependent variable (customer relationship) was explained by the variable of electronic services.

**Table 5. Multiple Correlation Coefficients, Coefficient of Determination, Adjusted Coefficient and Estimated Standard Error**

Sig	F	estimated standard error	adjusted coefficient of determination	coefficient of determination	Multiple correlation coefficient
0.000	94.92	5.008	0.522	0.528	0.726

The regression coefficient (b): the results indicated that regression coefficient of the variable of application of electronic market was 0.911. Standardized regression coefficient for this variable was estimated to be 0.726. The amount estimated for the t-test was 9.74 that was significant with respect to its significance value (0.000) at 99% level of confidence. Therefore, the third hypothesis is confirmed.

**Table 6. Standardized and Non- standardized Coefficients of Regression of the Variable Affecting Customer Relationship**

Level of significance	t-test	Standardized coefficient	non-standardized coefficient		model
		B-value	Standard deviation	B	
0.000	3.52		1.84	6.499	Constant
0.000	9.74	0.726	0.094	0.911	Promotion of electronic services

Table 7 shows correlation coefficients, coefficient of determination, adjusted coefficient and standard error for the effect of promotion of electronic services on the increase of customers' security in Melli Bank. Therefore, it could be said that correlation of the variable of promotion of electronic services on the increase of customers' security was equal to 0.535. Moreover, the coefficient of determination was 0.518, and the adjusted coefficient of determination based on the variable entered the analysis was equal to 0.517 or about 57%; that is, just 57% of the changes in the variable of increase of customers' security was explained by these variables and remaining changes (64%) belonged to other variables that were not observed in this study and hypotheses of the study.

F-value was calculated as the ratio of average variance of regression to the mean residual variance that was equal to 1.62 and has not  $\text{sig}=0.01$ ; that is, it was not significant at 99% level of significance. Therefore, the adjusted coefficient of determination was not statistically significant.

**Table 7. Multiple Correlation Coefficients, Coefficient of Determination, Adjusted Coefficient and Estimated Standard Error of the First Hypothesis**

Sig	F	estimated standard error	adjusted coefficient	coefficient of determination	Multiple correlation coefficients
0.000	1.62	19.19	0.577	0.518	0.535

The regression coefficient (b): the results indicated that regression coefficient of the variable of promotion of electronic services was 0.458. Standardized regression coefficient for this variable was estimated to be 0.357. The amount estimated for the t-test was 1.275 that was not significant with respect to its significance value (0.206) at 95% level of confidence. Therefore, the fourth hypothesis is confirmed.

#### 4. Discussion and Conclusion

This study aimed to investigate quality of electronic services in the promotion of customer relationship in the branches of Khorasan Razavi Melli Bank. Results indicated that promotion of electronic services affected Melli Bank customers' satisfaction.

In general, it is recommended to the braches of Melli Bank in Sabzevar that usefulness of the electronic services and advantages of new services of banking over traditional services that should be greatly considered in people's life. Because customers' understanding of the benefits of receiving electronic services would decrease their tendency to receive services by attending the branches. Thus, due to the effect of electronic banking on the cost reduction, it is recommended to develop the services at all branches of city. It is necessary to promote the culture of using electronic banking services through information and encouragement of customers in order to use these services. Moreover, installation and running software of customer relationship management in the branches of bank could play a very effective role in collecting and analyzing data of customers.

#### 5. Suggestions for Future Research

- To study the factors affecting satisfaction of customers of Melli Bank and determine the contribution of electronic services provided in other branches of Melli Bank,
- To study the level of people's familiarity with electronic banking services in all branches of Melli Bank,

- To study of the level of customers satisfaction with electronic banking services in other branches,
- Longitudinal or continuous study on a periodic basis for examining quality of electronic banking services provided by Melli Bank and determining the development and promotion trend of the services.

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