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AN INVESTIGATION ON THE EFFECTS OF ELECTRONIC SERVICES QUALITY ON CUSTOMERS COMMITMENT IN BANKING INDUSTRY (CASE STUDY: TEJARAT BANK OF ZANJAN PROVINCE)

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ABSTRACT

The present organizations should pay attention to the quality of their services and products to keep their maintenance in the markets. This will help the organization to satisfy their present customers and to attract new customers. Also, they can increase and guarantee their income sources. Thus, the aim of the present research is to investigate the effects of electronic services quality on customers' commitment in Tejarat bank of Zanzan province. To achieve this goal, six hypotheses have been proposal and to collect data we made use of researcher questionnaires. The questionnaires were distributed among the customers of Tejarat bank of Zanzan province. Since, there were many participants in the study, simple random sampling was used. The final number of participants based on Cochran formula was 384 participants. Finally, because of the normality of variables and independency of errors from one variable regression, we made use of Spss 20 software. The results of the study showed that the quality of electronic services has positive and significant effects on the customers' satisfaction, trust, and commitment. Also, satisfaction of services has positive and significant effect on the commitment and trust of customers and customers' trust has positive and significant effect on the commitment of customers.

Keywords: *Electronic Services Quality, Satisfaction of Services, Customers' Commitment, Customers' Trust*

INTRODUCTION

In the recent years, the banks have taken basic measures to improve electronic services quality and have replaced most of the traditional methods of banking with modern methods of information technology in banking. The manner of services presentation, the quality of services and the features of electronic services in banking can be effective for two reasons.

The first reason is that it has a direct relationship with the rate of customers' tendency to make use of these services.

The second reason is that has a direct effect on the customers' satisfaction of electronic banking system. On the other hand, there is a competitive competition among the banks to offer electronic banking services which is on increase day by day. In this condition, the customers of the banks will have higher expectations about high-qualified services (Rasouli and Manian, 2012).

On the other hand, the perspective about financial services is changing quickly in the world. Many moderative, structural, and technological changes are in the direction of an integrated type of international banking in the banking industry.

The banks with different types of competitive services and structural changes in their services are developing to satisfy their customers' needs.

Because of the mentioned measures, the nature of banking services and communication with customers has changed. The competitive and changing environment of the banks has made them revise their attitudes to increase customers' satisfaction and services quality efficiency. But the affairs which are called virtual banking nowadays are designed to achieve better quality of the services. So the quality of services can be used as a milestone in bank transactions (Hosseini and Ghaderi, 2001).

So, the banks are trying to offer their new services completely efficient. The present research deals with the effects of electronic services quality on the commitment of customers.

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Literature Review

In this section, a brief description of research variables has been presented.

1. Quality of Electronic Services

The most complete and comprehensive definition about the quality of automatic services has been presented by Santoos (2003).

This definition states that the quality of electronic services is the general evaluation of customers about the quality of services via electronic networks such as Internet, ATM machines, and telephone bank systems.

According to the study of Ibrahim *et al.*, (2006) there are five important factors to evaluate automatic quality of the services that are the following ones: personalization, queue management, responsiveness, security, and convenience (Al-Hawari, 2011).

Personalization

Personalization is referred to any type of services arrangement or creation based on customers' individual needs (Ball *et al.*, 2006).

In personalization, there is a strong correspondence between the customers and services (Huang & Lin, 2005).

Queue Management

Queue management refers to the time that is spent on bank transactions. Since customers do not have enough time and have time limitations, they tend to use electronic services that need less time. The speed in the presentation of services is an important factor that is effective on the perspectives of customers about the quality of the services.

Responsiveness

Responsiveness refers to the capability of electronic services in solving problems, responding to customers' questions in the high time and in the relationship with the systems (Zhou, 2001). In fact, it refers to the efficiency of the company to present appropriate information for the customers about the problems (Bikzad and Molavi, 2009). According to Yong *et al.*, (2004), responsiveness is the most important factor in the quality of electronic services (Chiu *et al.*, 2004).

Security

Security is referred to physical, and financial security and also is considered as a type of confidence and risk free activity in electronic services (Al Hawari, 2011).

It means that security shows the general belief of uses based on this fact that bank transactions should be based on security (Maenpaa, 2006).

Convenience

Lavalak *et al.*, asserts that convenience is the most important factor, which leads the customers to make use of bank electronic services. In addition, convenience is a determinant factor in the quality of services and is considered as a type of critical factor in the satisfaction of the customers (Al Hawari, 2011).

2. Trust

When the organizations, give the priority to their personal and customers, they will trust in the organization and will have continuous achievements and benefits in the banks. Trust in all the periods of business is one of the key concepts in the transactions (Javanmard and Soltanzadeh, 2009). When an organization trust in its partner, a kind of security will be created and it can have a positive effective in the rate of security (Hau & Ngo, 2012).

According to Ba trust means "An individual tries to satisfy our needs". According to Rotter, trust means "having trust in the words and promises of one side in the transactions (Lympelopoulous *et al.*, 2010).

Commitment

In the relational marketing, commitment has been investigated by many researchers and currently is considered one of the central variables in its effects on the marketing (Salciuveene *et al.*, 2011). Based on Bevyer *et al.*, commitment is "direct or indirect commitment between transactional parties".

Moorman *et al.*, has described commitment in the following manner "constant tendency to maintain a type of valuable relationship" (Ranjbarian and Berari, 2009).

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Customer Satisfaction

Customer satisfaction is a type of positive feeling toward the services that are higher than his expectations (Al Hawari, 2001). Customer satisfaction refers to over satisfaction of customers about services. In fact, customers' satisfaction is higher than customers' expectations (Torres & Kline, 2006).

Research Hypotheses

Nowadays, competition is considered as a type of key point for the organization in the improvement of services quality. In this regard, banks try to pave the ground in the field of information technology and to follows new methods to improve the quality of their services. So, the goal of this research is to investigate the effects of electronic services quality on the commitment of customers. To fulfill this goal, six hypotheses have been proposed in the following manner:

1. Electronic services quality is effective on customers' satisfaction.
2. Electronic services quality is effective on customers' trust.
3. Electronic services quality is effective on customers' commitment.
4. Satisfaction of services is effective on the commitment of customers.
5. Satisfaction of services is on customers' trust.
6. Customers' trust is effective on customers' commitment.

The hypotheses of this research are based on Al Hawari (2011) model and Vazifeh doost and Omidzade (2013) that is presented in Figure 1.

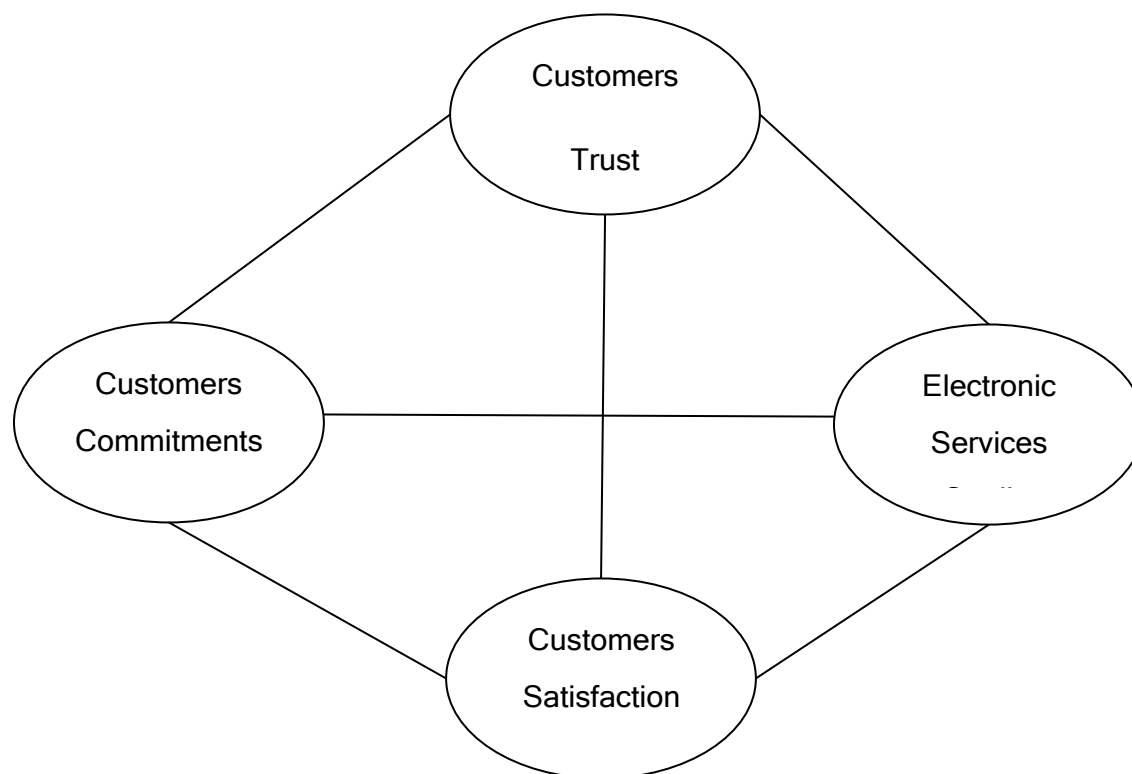


Figure 1: Research Model of (Al Hawari, 2011) and (Vazifehdoost and Omidzadeh, 2013)

Participants of the Study

The participants of the study were all the customers of Zanjan province Tejarat Bank. There were 185200 participants and because of having problems in the consideration of all of them, simple random sampling

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method was used and to determine the total number of participants, Cocran formula was used and total number of participants became 384 participants.

Data Collection Instruments

In this research, the instrument of data collection is the questionnaire of the researcher that has been used to evaluate the variables of the research after determination of conceptual model of research. Based on basic research questions, the first version of questionnaire was designed and after the first revision, it changed to the final version.

The questions were in the following manner. Electronic services quality, customers' trust, customers' satisfaction, and customers' commitment had respectively 6, 7, 7, and 7 questions. To validate the questionnaire, the rate of reliability and validity was investigated and its validity was confirmed by many university masters and some of the managers and clerks of Tejarat bank branch. To measure reliability, we made use of Cronbah Alpha test. In the pretest, there were 35 participants that for the electronic services quality with 6 questions, the rate of reliability was 0.8005, customers' trust with 7 questions had the reliability of 0.8311, customers' satisfaction with 7 questions had the reliability of 0.8511, customers' commitment with 7 questions had the reliability of 0.8271 and for the questionnaire with 27 questions, the rate of reliability was 0.9322. Since the rate of Cronbach Alpha variables and questionnaire was over and higher 0.7, it can be concluded that the questionnaire has really high reliability.

Data Analysis

Since in this research, each of the hypotheses are trying to investigate the effects of independent variables on the dependent variables, we made use of regression analysis, and since there is one independent variable in each of the hypotheses, we made use of one variable regression method. So, there are two assumptions about using regression analysis.

1. *Independency of Errors*: To investigate independency of errors we made use of Watson Dorbin test 2. Normality of variables: to investigate normality of variables, we made use of colomogrof isirnof. To analyze the data we made use of Spss version 20 software.

Regression null hypotheses

In this survey, we made use of Watson Dorbin test and colomogrof esmironof test respectively to investigate the independency of the variables and normality of the variables. The results are the following ones.

1. Colomogrof esmironof test

To investigate the normality of the variables, we made use of colomogrof esmirnof test. The results of this test can be observed in the following table.

Table 1: The Results of K.S Test

Variables	Statistics of K.S Test	Significance Level
The Quality of Electronic Service	1.012	0.121
Customers' Trust	0.850	0.325
Satisfaction of Services	1.105	0.072
Customers' Commitment	0.941	0.169

In table 1, based on the statistics of K.S test and significance level of the test for all the variables such as the quality of electronic services, customers' trust, satisfaction of services, and commitment of customers was significant and the rate of acceptable error was $\alpha = 0.05$. Hence, all the variables of this research are classified as normal ones.

2. *Independent Test of Errors*

The other hypothesis of regression is the independency of errors. To test the independency of the errors, we made use of Watson Dorbin test. The results of Watson Dorbin test for each of the hypotheses are in the following table.

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Table 2: Waston Dorbin Test

Number	Hypothesis	Watson Dorbin Test	Test Result	
1	Electronic services quality is effective on customers' satisfaction.	2.119	No correlation	error
2	Electronic services quality is effective on customers' trust.	1.825	No correlation	error
3	Electronic services quality is effective on customers' commitment.	1.951	No correlation	error
4	Satisfaction of services is effective on the commitment of customers.	1.895	No correlation	error
5	Satisfaction of services is on customers' trust.	1.736	No correlation	error
6	7. Customers' trust is effective on customers' commitment.	2.082	No correlation	error

As it is observable in table 2, it can be concluded that there is no correlation between the errors. Because the range of Waston Dorbin statistics for each of the variables is between 1.5 to 2.5.

Test of research hypotheses

Since there are two hypotheses such as normality of the variables and independency of the errors, so we can make use of one variable regression to investigate the hypotheses of the research with the conduction of one variable regression for 6 hypotheses the following results were obtained.

Table 3: The Results of Hypotheses Test

Test Result	Regression Model				Variance analysis		Indices		Hypothesis
	Significance Level	T-Statistics	B1	A	Significance Level	F-Statistics	Determinant Index	Correlation Index	
Support	0.000	15.840	0.669	0.867	0.000	250.920	0.396	0.630	1
Support	0.000	13.418	0.536	1.572	0.000	180.031	0.320	0.566	2
Support	0.000	15.159	0.619	1.057	0.000	229.781	0.376	0.613	3
Support	0.000	19.323	0.668	1.070	0.000	373.375	0.494	0.703	4
Support	0.000	16.149	0.568	1.618	0.000	260.792	0.406	0.637	5
Support	0.000	13.652	0.611	1.102	0.000	186.386	0.328	0.573	6

In the first column of table 3, Pearson correlation index equals 0.630 that indicates the relationship between the quality of electronic services and customers' satisfaction. The rate of determinant index is 0.396 that indicates the quality of electronic services can justify 10% of all the changes. In variance analysis test, since the significance level of the test equals 0.000 and is lower than $\alpha=0.05$, it can be concluded that regression is statistically significant. Also F statistics can confirm the mentioned fact. In regression model, since the Significance level of the study is lower than $\alpha=0.05$ and β_1 is positive, it can be stated that electronic services quality has direct and positive effect on the satisfaction of the customers. Regression model is in the following manner.

Customers' satisfaction= $0.867 + 0.669$ (the quality of electronic services)

In the second column of table 3, the rate of Pearson correlation index equals 0.566 that shows the relationship between the quality of electronic services and customers' trust and the rate of determinant index is 0.320 that shows the quality of electronic services can support 0.032 of customers' trust.

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In variance analysis, since the significance level of the study equals 0.000 and is lower than $\alpha = 0.05$, it can be concluded that regression analysis is significant statistically. F statistics can support the mentioned point. In regression model, since the significant level of the study is lower than $\alpha = 0.05$ and β_1 is positive, it can be stated that electronic services quality has direct and positive effect on the customers' trust. Regression model is in the following manner.

Customers' trust: $1.572 + 0.536$ (the quality of electronic services)

In the third column of table 3, the rate of Pearson correlation index equals 0.613 that shows the relationship between the quality of electronic services and customers' commitment and the rate of determinant index is 0.376 that shows the quality of electronic services can support 38% of all changes of personal performance and the rest relates to the other variables. In variance analysis, since the significance level of the study equals 0.000 and is lower than $\alpha = 0.05$, it can be concluded that regression analysis is significant statistically F statistics can support the mentioned point. In regression model, since the significance level of the study is lower than $\alpha = 0.05$ and β_1 is positive, it can be stated that electronic services quality has direct and positive effect on customers' commitment regression model is in the following manner.

Customers' commitment: $1.057 + 0.619$ (the quality of electronic services)

In the fourth column of table 3, the rate of Pearson correlation index equals 0.703 that shows the relationship between the satisfaction of customer and customers' commitment and the rate of determinant index is 0.494 that shows customers' satisfaction can support 0.49 of customer's commitment. In variance analysis, since the significance level of the study equals 0.000 and is lower than $\alpha = 0.05$ and β_1 is positive, it can be stated that customers' satisfaction has direct and positive effect on the customers' commitment. Regression model is in the following manner.

Customers' commitment: $1.070 + 0.668$ (customers' satisfaction)

In the fifth column of table 3, the rate of Pearson correlation index equals 0.637 that shows the relationship between customer's satisfaction and customers' trust and the rate of determinant index is 0.406 that shows the quality of customers' satisfaction can support 41% of customers' trust. In variance analysis, since the significance level of the study equals 0.000 and is lower than $\alpha = 0.05$, it can be concluded that regression analysis is significant statistically. F statistics can support the mentioned point. In regression model, since the significance level of the study is lower than $\alpha = 0.05$ and β_1 is positive, it can be stated that customers' satisfaction has direct and positive effect on customer's trust. Regression model is in the following manner.

Customers' trust: $1.618 + 0.568$ (customer's satisfaction)

In the sixth column of Table 3, the rate of Pearson correlation index equals 0/573 that shows the relationship between the customers trust and customers commitment and the rate of determinant index is 0/328 that shows the customers' trust can support 33% of customers' commitment. In variance analysis, sine the significance level of study equals 0/000 and is lower than α : 0/05, it can be concluded that regression analysis is significant statistically.

F statistics can support the mentioned point. In regression model, since the significance level of the study is lower than 0/05 and B1 is positive, it can be stated that customers' trust has direct and positive effect on the customers commitment.

Regression model is the following manner:

Customer's commitment: $1/102 + 0/6111$ (customer's trust)

RESULTS AND DISCUSSION

Results

The aim of the present research is to investigate the effects of electronic services quality on customers' commitment in Tejarat bank of Zanjan province to Zanjan province. To achieve this goal, six hypotheses have been proposed and to collect data we made use of researcher questionnaires the questionnaires were distributed among the customers of Tejarat bank of Zanjan province. Since, there were many participants in the study, simple random sampling was used the final number of participants based on

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Cochran formula was 381 participants. Finally, because of the normality of variables and independency of errors from one- variable regression, we made use of Spss 20 software. The results of the study showed that the quality of electronic services has positive and significant effects on the customers' satisfaction, trust and commitment.

Further Suggestions of the Study

1) Since the quality of electronic services is the general evaluation of customers about the quality of services via electronic networks such as Internet, ATM machines, and telephone bank systems, it can be stated that there are five important factors to evaluate automatic quality of the services that are the following ones:

Personalization, queue management, responsiveness, security and convenience.

Thus, it is suggested that they use more modern bank services such as sending messages and the other ways to encourage using of electronic services.

2) Customers will have commitment toward the bank on the condition that they receive services with good qualities from the banks. So, it is suggested that banks with following some strategies to show their commitment toward the customers that leads to a type of mutual commitment between the bank and the customer.

Also, bank cloaks should have enough information about automatic services of the banks to guide the customers upon the appearance of some problems that finally the commitment of bank to the customers will lead to the customers' commitment toward bank.

3) It is suggested to the banks and other financial institutions that offer their electronic services in a safe and secure place.

Also they can deal with bank affairs interruptedly and they can assure their customers to follow and do their bank affairs securely.

4) Since the quality of banking services can lead into the increase of customers' Satisfaction directly, it is suggested to the banks that they offer different types of electronic services in comparison with other banks. This will increase customers satisfaction and by exchanging ideas about the services and customers' expectations, they can Increase and create customers' satisfaction in the customers minds.

5) Since, customers' trust has positive effect on the commitment of the customers, so it is suggested to the banks that they offer their electronic services at any time and in a very short time for the customers. Also the customers should feel secure enough to have and follow electronic services and in this manner the customers trust will be attracted to these types of services and this trust will lead into customers' commitment.

6) It is suggested that banks offer different types of electronic services to increase customers' trust toward modern electronic services and it is because of the positive effect of customers' satisfaction on customers' trust.

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