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A STUDY OF THE EXTENT OF RECOGNITION AND THE INFLUENTIAL FACTORS ON THE USE OF ELECTRONIC SERVICES OF MELLAT BANK BY THE STAFF IN KERMANSHAH PROVINCE

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ABSTRACT

The electronic banking is one of the important factors in the banking industry; the electronic banking is providing all the facilities for the staff in order to raise the pace and efficiency in presenting the banking services in the place of branch and the interbranching and interbanking processes throughout the world and presenting the hardware and software services to the customers for using the method of nonphysical presence at bank at per hour through safe and certain channels. In this article it is tried to study the extent of recognition and the influential factors on the use of types of electronic services of Mellat Bank by the staff in Kermanshah province. The research method, regarding the objective, is practical and regarding the method of data collection, it is a descriptive survey. For testing the hypotheses, the required data were ranked from 0-100 in a questionnaire; the number of questions in the research questionnaire was 30 which covered the hypotheses and the statistical population involving the staff and managers of Mellat Bank in Kermanshah. The results were evaluated by AMOS and SPSS, for which Kolmogorov-Smirnov test, the linear correlation coefficient and the regression coefficients were used. The results confirmed that the influential factors had a direct and significant relationship with the electronic services and they should consider engendering the developed systems for raising quality, and developing the balanced programs for a superior management with the aim of more security.

Keywords: *Electronic Banking, Security and Trust, Profitable Receipts, Security Receipts, Hidden Receipts, Internet Quality*

INTRODUCTION

Introduction and Problem Statement

In general, you can say that the electronic banking involves preparing the facilities required by the staff in order to raise the pace and efficiency in providing the banking services in the location of branch, the inter branch and the interbank processes throughout the world and providing the clients with hardware and software facilities by which they can do their desired banking operations with confidence through the secure communication channels at per hour without being required to be physically present in the bank. In other words, the electronic banking is using the advanced software and hardware technologies based on network and telecommunications for exchanging resources and financial information electronically and the customer is not needed to be present in the branch; for knowing any phenomenon, it is necessary to present a specific definition of that and the relevant factors and variables (Alisha, 2010).

Among the influential and useful financial services, the banking industry plays an important role in expanding the economy, almost all the banks have a tendency to develop and improve the information technology and also to give rise to new banking services, at the same time, the acceptance of the electronic banking depends on the quality of the banking services, as security, customer friendship, availability, time and financial independence are important factors in electronic banking (Wendy, 2005). The electronic banking can also make the customers able to do their financial activities in a virtual environment through technology and internet. This industry plays an important role in developing the economy (Rastgar, 2008). Identifying the factors that may affect the intention of people in using the electronic banking services can help the banks respond appropriately to these factors and apply their marketing strategies to promote the electronic banking which can satisfy the requirements of customers,

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and regarding the discussions in the present paper, we are in seek of studying the factors affecting the use of types of electronic banking industry to identify and introduce them.

Backgrounds of Research

Bakhshali (2010) studied "the effects of customers' viewpoint about the electronic banking in an emerging economy" in Arak city. His results confirm the relationship between trust and the structure of banks and the acceptance and use of their electronic services by customers. The most important reason for rejection and lack of use of the electronic banking by customers is said to be getting accustomed to using the traditional services.

Gilaninia *et al.*, (2009) studied "the effects of the perceived security on accepting the electronic banking" among the customers of various bank branches throughout Gilan province. For that, they distributed 465 questionnaires among the customers. The results showed that one of the main reasons in accepting the electronic banking is the security perceived by customers. Security in the internet banking, from the perspective of customers, is capable of protecting their information against hackers.

Karimzadeh *et al.*, (2012) evaluated "the challenges of electronic banking in India", the results of which showed that law and security, the social and cultural factors, management and the banking issues had been recognized as the challenges in developing the electronic banking in India; the poor knowledge of the customers of the modern technology and inappropriate applications were respectively accepted as the most and the least challenging factors in the electronic banking, however.

Abdolhamid *et al.*, (2007) studied "a comparative analysis of electronic banking" in India and Malaysia. The results showed that the providers of the internet electronic services should be more responsive for the security issues rather than other factors in the internet banking.

The Objectives of Research

The main hypothesis is to identify the factors influencing the use of electronic services.

Particular objectives are:

- 1- identification of the structures influencing the use of electronic services
- 2- measurement of the structures influencing the use of electronic services
- 3- ranking the structures influencing the use of electronic services
- 4- designing an optimal model of the structures influencing the use of electronic services

The Research Hypotheses

The main hypothesis: there is a direct and significant relationship between the factors influencing the use of electronic services.

The sub-hypothesis:

- 1- There is a direct and significant relationship between trust and the use of electronic services.
- 2- There is a direct and significant relationship between the qualified services and the use of electronic services.
- 3- There is a direct and significant relationship between the qualified networks and the use of electronic services.
- 4- There is a direct and significant relationship between security and the use of electronic services.
- 5- There is a direct and significant relationship between the beneficial receipts and the use of electronic services.
- 6- There is a direct and significant relationship between the hidden receipt and the use of electronic services.
- 7- There is a direct and significant relationship between the qualified internet and the use of electronic services.
- 8- There is a direct and significant relationship between the secure receipt and the use of electronic services.

The Methods and Tools of Data Collection

Concerning the objectives, this research is practical and regarding the data collection method, this is a descriptive survey. In codification of the theoretical foundations, the libraries, documents, articles and dissertations were studied, and for the evaluation stage, the field method and questionnaires were applied.

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The data collection tool in the research was using closed- ended questionnaires valuing 0-100 which were distributed and gathered after being filled out; the questions in questionnaires were categorized in eight sections. The following table shows the relationship between each question and the research variables.

Table 1-1: The relationship between the questions in questionnaire and each variable of the research

Hypothesis	Variables	Questions
1	trust	1-5
2	security	6-8
3	Qualified networks	9-10
4	Beneficial receipts	11-13
5	Qualified internet	14-17
6	Hidden receipts	18-23
7	Qualified services	24-26
8	Security services	27-30

In this study, in order to measure and increase the validity, 35 questionnaires were distributed among the professors and experts at first, the comments of bank staff, statistical experts and the bank customers were sought and then the questionnaires were gathered and after confirming the validity, 96 questionnaires were distributed among the staff and managers of Mellat Bank. In order to evaluate the extent of the questionnaire validity, the obtained data were at first evaluated using Cronbach's alpha, the coefficient of Cronbach's alpha accords with the following formula and table:

$$\alpha = \frac{n}{n-1} \left[1 - \frac{\sum S_i^2}{S_x^2} \right]$$

Table 1-2: The coefficient of Cronbach's alpha

Row	Hypothesis	Cronbach's alpha
1	Trust	0.782
2	Qualified services	0.798
3	Qualified networks	0.873
4	security	0.751
5	Beneficial receipts	0.786
6	Hidden receipts	0.892
7	Qualified internet	0.792
8	Security receipts	0.886
9	Electronic services	0.814
--	Total	0.761

The Statistical Population and the Sampling Method and the Sample Size

The statistical population involves the complete set of possible measures or recorded information of an attribute about the whole collection of units that we are going to have some inferences about. Simply, a statistical population involves all the measuring or hypothetical members of a group of individuals, events and items the researcher will generalize his findings to (Saroukhani, 1994). In this research, the staff and managers of Mellat Bank throughout Kermanshah province were involved in the statistical population.

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The method is simple stratified random sampling. In determining the sample size of the intended bank, using the Morgan table, the following information was obtained:

Table 1-3: The statistical population and the sample size

Banks	Statistical population	Sample size
Mellat	156	96

Data Analysis

In this paper, the demographic particularities as the sex of responders, their educational status, years of active service and their position were studied using the descriptive statistics and according to the information obtained from questionnaires, it was found that 80.2 per cent of the responders were male while 19.2 per cent were female; the educational status of responders showed that 3.8 per cent had high school diploma, 30.2 per cent had associate degree, 44.8 per cent had bachelor, 11.5 per cent had master and 5.2 per cent had PhD;

the status of service showed that 32.3 per cent had between 1-10 years, and 43.8 per cent had between 20-30, and 24 per cent had between 20-27 years of active service; and their occupational status stated that 11.5 per cent were branch presidents, 24 per cent were branch assistants, 46.9 percent were tellers, and 17.7 per cent had other positions.

In order to use the statistical techniques, you should at first determine whether the collected data enjoy a normal or an abnormal distribution.

Because in case the collected data are distributed normally, the parametric test can be used for hypotheses testing.

Table 1-4: The Kolmogorov-Smirnov test for evaluating the normality of variables

Factor	Significance level	Error value	Hypothesis affirmation	Results
Trust	0.125	0.05	H ₀	Normal
Service or quality	0.079	0.05	H ₀	Normal
Qualified networks	0.162	0.05	H ₀	Normal
security	0.408	0.05	H ₀	Normal
Profitable receipts	0.423	0.05	H ₀	Normal
Hidden receipts	0.129	0.05	H ₀	Normal
Internet	0.083	0.05	H ₀	Normal
Security receipts	0.210	0.05	H ₀	Normal
Acceptance of the electronic banking	0.730	0.05	H ₀	Normal

We are going to evaluate the simultaneous effects of the variables of trust, qualified services, qualified networks, security, profitable receipts, hidden receipts, qualified internet, and security receipt on the dependent variable of using the electronic services (or acceptance of electronic services).

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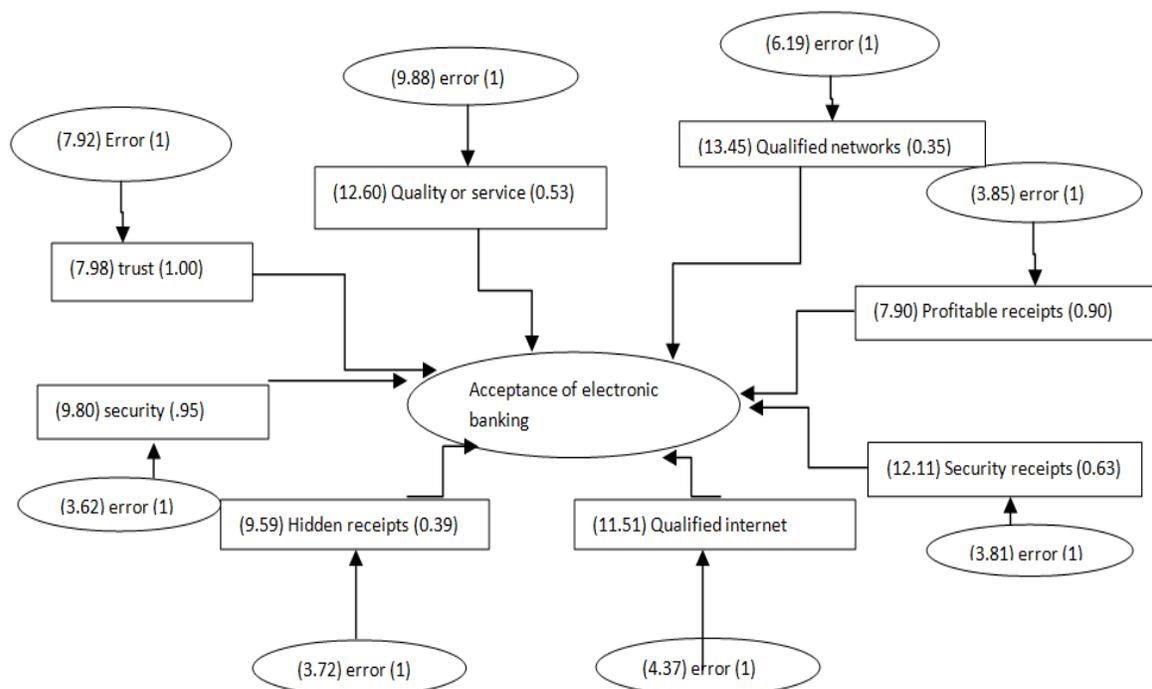


Diagram 1-1: The regression coefficients of variables

The Regression Coefficients of the General Model of Research

The statistics for this model is $\chi^2 = 45.026$, the degree of freedom is 20 and the significance level equals 0.001. Because the significance level is less than 0.05, we can conclude that the regression model fitted between the independent and dependent variables is significant and proper.

As you can see in the above picture, the regression coefficients of the dependent and independent variables are respectively as follows:

The regression coefficient of trust and use of electronic services equals 7.92, the qualified services with the acceptance of electronic banking equals 9.88, the qualified networks and use of electronic services equals 6.19, security and acceptance of electronic banking equals 3.62, the profitable receipts and use of electronic services equals 3.85, the hidden receipt and acceptance of electronic banking equals 3.72, the qualified internet and use of electronic services equals 4.37, the security receipt and use of electronic services equals 3.81.

In order to study the appropriateness of the model, the following scales can be used. The closer the values to one, the more appropriate the model will be. As you can see in the following table, the model of fitting the data is not appropriate.

Table 1-5: The criteria for measuring the appropriateness of the general model

Model	NFI	RFI	IFI	TLI	CFI
General model	0.779	0.691	0.864	0.801	0.858
Independent model	0.000	0.000	0.000	0.000	0.000

The Linear Corelation of the Dependent Variable with the Independent Variables

The result of testing the linear corelation of the independent variables and the dependent variable is shwon in table 1-5. Regarding the corelation coefficients between the dependent and independent variables, you can say that there is a positive and significant corelation between the independent variables and use of electronic services (dependent variable).

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Table 1-5: The result of testing the linear correlation of the independent variables and the dependent variable

Independent variable	Pearson's correlation coefficient	Significance number
Trust	0.622	0.000
Qualified services	0.509	0.000
Qualified networks	0.457	0.000
Security	0.801	0.000
Profitable receipts	0.761	0.000
Hidden receipt	0.505	0.000
Security receipt	0.632	0.000

Evaluating and Testing the Hypotheses Based on the Pearson's Correlation Coefficient

First hypothesis: there is a direct and significant relationship between trust and use of electronic services. In order to analyze the first hypothesis, the Pearson's correlation coefficient of trust and use of electronic services is calculated.

If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables.

As you can see in the table above, the correlation coefficient between the two variables is 0.622 and the significance level is 0.000 which is less than 0.05 and the correlation coefficient is positive and direct. Therefore, the trust will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

Second hypothesis: there is a direct and significant relationship between the qualified services and use of electronic services.

In order to analyze the hypothesis above, the Pearson's correlation coefficient of the qualified services and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the table above, the correlation coefficient between the two variables is 0.509 and the significance level is 0.000 which is less than 0.05 and the correlation coefficient is positive and direct. Therefore, the qualified services will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

Third hypothesis: there is a direct and significant relationship between the qualified networks and use of electronic services.

In order to analyze the third hypothesis, the Pearson's correlation coefficient of the qualified networks and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the table above, the correlation coefficient between the two variables is 0.457 and the significance level is 0.000 which is less than 0.05 and the correlation coefficient is positive and direct. Therefore, the qualified networks will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

The fourth hypothesis: there is a direct and significant relationship between the security and use of electronic services.

In order to analyze the fourth hypothesis, the Pearson's correlation coefficient of the security and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the table above, the correlation coefficient between the two variables is 0.801 and the significance level is 0.000 which is less than 0.05 and the correlation coefficient is positive and direct. Therefore, security will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

The fifth hypothesis: there is a direct and significant relationship between the profitable receipts and use of electronic services.

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In order to analyze the fifth hypothesis, the Pearson's correlation coefficient of the profitable receipts and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the table above, the correlation coefficient between the two variables is 0.761 and the significance level is 0.000 which is less than 0.05 and the correlation coefficient is positive and direct. Therefore, the profitable receipts will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

The sixth hypothesis: there is a direct and significant relationship between the hidden receipt and use of electronic services.

In order to analyze the sixth hypothesis, the Pearson's correlation coefficient of the hidden receipt and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the table above, the correlation coefficient between the two variables is 0.505 and the significance level is 0.000 which is less than 0.01 and the correlation coefficient is positive and direct. Therefore, the hidden receipt will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

The seventh hypothesis: there is a direct and significant relationship between the qualified internet and use of electronic services.

In order to analyze the seventh hypothesis, the Pearson's correlation coefficient of the qualified internet and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the above table, the correlation coefficient between the two variables is 0.605 and the significance level is 0.000 which is less than 0.01 and the correlation coefficient is positive and direct. Therefore, the qualified internet will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

The eighth hypothesis: there is a direct and significant relationship between the security receipt and use of electronic services.

In order to analyze the eighth hypothesis, the Pearson's correlation coefficient of the security receipt and use of electronic services is calculated. If the significance level is less than 0.01, we can conclude that there is a statistically significant relationship between the variables. As you can see in the above table, the correlation coefficient between the two variables is 0.632 and the significance level is 0.000 which is less than 0.01 and the correlation coefficient is positive and direct. Therefore, the security receipt will influence the use of electronic services, and the relationship between the two variables is significant, so the aforementioned hypothesis is supported.

RESULTS AND DISCUSSION

The electronic banking is regarded as a necessity and the driving motor of economy in the electronic government, being away from which will not only ban our progress, but can reverse the economical trend in countries and will bring about the irreparable damages also; considering what was mentioned above, the electronic banking is a way in engendering the virtual cities and it might be one of the best places that can be virtualized because presence at bank is not so pleasing (Seyed, 2006). In order to be successful in the electronic world and in the electronic commerce, the first and most important stage is planning for identification of the obstacles in applying the electronic commerce. The electronic banking with use of technology and internet allows the customers to do their financial activities in a virtual environment. The research conducted on the acceptance of electronic banking by the customers shows that understanding the customers' beliefs about using the electronic services can promote the customers' perception of the electronic banking and these beliefs and thoughts will influence the customers' treat in using the electronic banking (Chang, 2002).

According to the results of studying the effective factors relevant to the electronic services in banks, one can conclude that the model suggested by this research is a practical and appropriate model, and its

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variables have a direct and significant relationship with the electronic services, among which trust, qualified services, qualified networks, security, qualified internet and profitable receipts have the highest impact on the electronic services, while the hidden receipts and the security receipts have the least effects. Some reasons for lower effects of this variable can be the lack of familiarity of staff with these receipts because they may have insufficient knowledge about that variable. This research will present some practical suggestions for future involving: identification of the requisites of customers and satisfying the needs for their trust on the bank, the quality evaluation for presenting the services through recognizing the objectives, codification of balanced programs for a superior management for more security, informing the customers to promote investments, engendering developed systems to enhance the quality, engendering updated systems and easy access to them, studying the relationship between trust and the reputation of banks and ascertaining the customers of the security of electronic tools.

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