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A STUDY ON THE EFFECTS OF ELECTRONIC BANKING ON CUSTOMER'S TRUST (CASE STUDY: YAZD MELLAT BANK BRANCHES)

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ABSTRACT

Electronic banking is a sub group of electronic commerce which gained so much attention in today world due to state of the art technologies, needing high speed communication and the importance of time in carrying out transactions. One important matter in electronic banking possibly more under the focus is customer's trust and all banks are continually trying to improve factors increasing customer's trust and in this way gain more popularity among society. The present research is to examine the effects of electronic banking features on customer's trust and the model of research is formed using electronic banking features' variables such as trust and oral advertisement. The methodology in the present research is operational and descriptive. After presenting the general framework of the research, hypotheses of study are presented using a questionnaire consisting 24 questions involving the customers of Mellat bank in Yazd, and totally 400 questionnaires were distributed. The data collected was analyzed using statistical and structural equations in LISREL software. The results obtained, showed that electronic banking features directly affects customers' trust, also there is a meaningful relation between customers' trust and oral advertisement.

Keywords: *Electronic Banking, Customers' Trust, Reputation, Oral Advertisement, Extension*

INTRODUCTION

It is worthy to mention that emerging internet caused electronic commerce developed. According to the nature of transactions, we can classify e commerce as: business to business (B2B), business to customer (B2C), customer to customer (C2C), customer to business (C2B). Lots of B2C websites are presenting popular e commerce online. However there are still lots of problems for B2C users. Generally finding a product is relied on right side of e commerce websites on Google or yahoo search engines. . In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. This is an exhausting and time wasting process. Also internet is turned to a necessary platform for commerce, distribution and selling among organizations and consumers. Trust is a basic principle in every commercial relation. Trust is an important factor in invoking purchases online. Due to strong role of costumer's trust in commerce we can put it along with pre requisites and consequences of bases, companies and even users of e commerce to study. Banks on one hand need to understand the concept of trust in virtual and online world and should detect the factors affecting on creation of trust in e banking on the other. So carrying out a functional research in this field and considering cultural and social situations of our country is necessary. The significance of this study is that it examines trust of customers to e banking. So in this study we are going to answer this question: how the features of e banking can affect on customer's trust?

Theoretical Background

E-banking

In recent years online banking, also known as internet banking or electronic banking, had a significant growth. Also, money changed its concept from a tangible one into a more abstract and intangible concept

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in a way that money can be shown anytime on a computer screen (Yap *et al.*, 2010). In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Photographic technology was so progressed that banks could exchange information related to payments, without using paper documents (Malhotra and Singh, 2010). Electronic banking has been studied by Totok and Karamcheti (2010) and Ho and Lini (2009). In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches.

Reputation

Trust and reputation concepts are paid lots of attention due to strong automatic tool need for web services. Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. Generally banks' duty are categorized into three groups: conserving customers' deposits, transference of deposits from one account to another, assigning loans to trusted customers who need it. . In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Reduction of ethical investments in society causes formation of a convenient condition for extending social relations and with weakening these relations, the conditions required for creativity is going harsher, because there would be no time to think (Bharadwaj and Al-Shamri 2009). While lots of organizations and their managers in various groups of society acknowledge the importance of creativity and innovation, and creative and innovative persons are lauded in society, innovation and creativity management is unknown in lots of societies and organizations. Reputation is investigated in Tingchi *et al.*, (2013). Also Gurau (2013) showed that there is a parallel relation between trust and reputation. So the first hypothesis is presented as:

H1: reputation significantly effects on customer's trust

Extension

Studies in conventional relations between industrial merchants and buyers show that, customer's understanding of merchant's reputation and the amount are both factors of reservation. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Due to the fact that reputation and the amount of capability of seller is presented by benign and trustworthiness, customer's understanding of reputation and the amount of internet stores affects on their trust on the store (Teo and Liu, 2007). So banks, like other organizations seek a way to survive, improve the present situation and increase the amount of capital. Extension is studied by Viitaharju and Lahdesmaki (2012). So the second hypothesis is presented as:

H2: extension has a significant effect on customer's trust.

Oral Advice

Oral advice refers to every positive or negative statement of potential or old customer about a product or a company which is accessible for lots of people and internet institutions. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches (Jalilvand *et al.*, 2012). Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Photographic technology was so progressed that banks could exchange information related to payments, without using paper documents. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and

Research Article

its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. What is shared in these three duties is concept "money". The revolutions banking is faced during two last decades caused general changes in money type and profit transition system and presented concepts such as electronic money and electronic transfer of sources. These two concepts in fact help building a new type of banking named electronic banking (Yap *et al.*, 2013). Electronic banking has unique features with the motto of every one, everywhere, via every media, that's why it's followed by various risks which can increase this type of banking and risk level related to conventional financial services, special / operational/ legal approaches and credit risks (Feng and Papatla, 2012). So detection of these kinds of risks and managing theme is necessary on the part of banks (Taherabadi *et al.*, 2011). In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. Reduction of ethical investments in society causes formation of a convenient condition for extending social relations and with weakening these relations, the conditions required for creativity is going harsher, because there would be no time to think. While lots of organizations and their managers in various groups of society acknowledge the importance of creativity and innovation, and creative and innovative persons are lauded in society, innovation and creativity management is unknown in lots of societies and organizations. General risks of electronic banking are investigated in terms such as approach risk, reputation risk, operational risk (Cheung and Thadani, 2012), credit risk, market risk and monetary risk. Oral advice is studied by Nguyen and Romaniuk (2013) so the third hypothesis is presented as:

H3: oral advertisement has significant effect of customer's trust.

Trust

Providing a definition for consumer's trust is receiving lots of efforts and attentions. Trust is a collection of "a learnt society and approved in terms of expectations" which people has to others or organizational institutions. Trust is a strong belief in manager being trustworthy (Park *et al.*, 2014). In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Also the initial trust is composed of interlocutions.

The composition of initial trust is caused by three dimensions: 1) according to the characteristic, we can call it confidence tendency 2) understanding or positive effect on trust 3) based on organizational trust (Bahmanziari *et al.*, 2009). In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches (Kim *et al.*, 2012). Trust is studied by Kassim and Asiah (2010) and Chen and Chou (2012). Limbu *et al.*, (2012) showed that there is a direct relation between trust and electronic banking.

Oral Advertisement

Oral advertisement is a sort of virus marketing and an informal way to communicate about the features and ownership of products and special services or a specific service among consumers. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. Reduction of ethical investments in society causes formation of a convenient condition for extending social relations and with weakening these relations, the conditions required for creativity is going harsher, because there would be no time to think (Li and Du, 2011). So speeches and statements of others about electronic banking is most valuable source among

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other data sources. Also oral advertisement is studied by Nguyen and Romaniuk (2013). So our fourth hypothesis is presented as below:

H4: customer's trust has significant effect on oral advertisement.

Conceptual Model

In the present study we tried to examine the relation between the features of e banking and customers' trust and the relation between customer's trust and oral advertisement. Customer's trust is considered and mediator. Given that, the below conceptual model is considered for this study which is presented in figure 1.

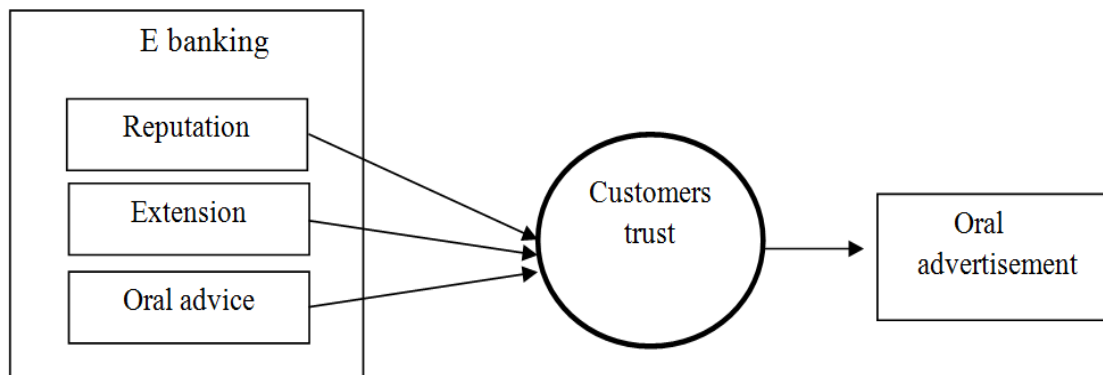


Figure 1: Conceptual model (Kim and Park, 2013; Lin et al., 2011)

MATERIALS AND METHODS

Methodology

Sampling and Data Collection

The present study in terms of type and nature of research purposes is considered as functional. This method is based on correlation approach. Population of the present study is composed of 400 customers of Mellat bank in Yazd which are selected randomly. To collect statistical data, we used a questionnaire. Population in this research among 400 people answering the questionnaire are 290 male (72.5%) and 110 female (27.5%) among which 47.5% are single and 52.5 % are married. Also 9% are under graduated, 20% high school degree, 24.8% AA, 38.7 % BA and 7.5% are MA. Table1 shows the population data of our sample.

Table 1: The population data of sample under study

Variable	Group	F	%
Gender	Male	290	72.5
	Female	110	27.5
marriage	Single	190	47.5
	Married	210	52.5
education	Under high school	36	9
	High school	80	20
	AA	99	24.8
	BA	155	38.7
	MA	30	7.5

The questionnaire is used Likert scale. The reliability of research is approved by instructors and consultants and higher degree professionals. To investigate the validity, 30 questionnaires were distributed among people and after collecting data, chronbach alpha was calculated. In table 2 chronbach alpha and the number of questions pertaining to the whole questionnaire and the variables is presented. Because the chronbach alpha of variables is higher than 0.7, so the test has an acceptable validity.

Research Article

Table 2: Chronbach alpha of model elements of questionnaire

Variable	No. of questions	Ch. alpha	Source
Reputation	4	0.98	
Extension	4	0.90	
Oral advice	4	0.81	Kim, Park (2013)
Trust	8	0.91	Kim, Park (2013)
			Lin et al. (2011)
Oral advertisement	4	0.90	Kim, Park (2013)
total	24	0.904	

Data Analysis

In this research the data was analyzed using SPSS18 software and the analysis to confirm the relation between variables and elements via agent analysis and structural equations using LISREL software was carried out to examine hypotheses to simultaneously measure direct and indirect relations between variable.

Model Confirmation

We have several features to evaluate the model. As we can see, χ^2 with degree of freedom equal to 1.76 , is lower than 3 which is acceptable. Low amount of this index shows minimal difference between conceptual model of research and observable data. RMSEA is 0.032 which is lower than 0.08. The lower the RMSEA is, the more suitable the model will be. The indices NNFI - NFI -GFI-IFI- CFI are all higher than 0.9 so the model shows an approval suitability. The data is presented in table3.

Table 3: Suitability indices of conceptual model

Index	Amount
Kay square	154.54
Degree of freedom	88
Kay square/ DF	1.76
RMSEA	0.032
GFI	0.90
AGFI	0.76
NFI	0.97
NNFI	0.97
IFI	0.97
CFI	0.97

RESULTS AND DISCUSSION

Findings

Structural Model of Research (Path Analysis)

After confirming the model we examine the research hypotheses via structural analysis. To examine research hypotheses we used structural equations model. Figure 2 shows the standard structural model used in this research. The lower part of the figure indicates the suitability of the model. The possibility of

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comparison between observed variables determining pseudo variables is only in standard status. In this situation, the model shows that how much of variance is indicated by observed variable.

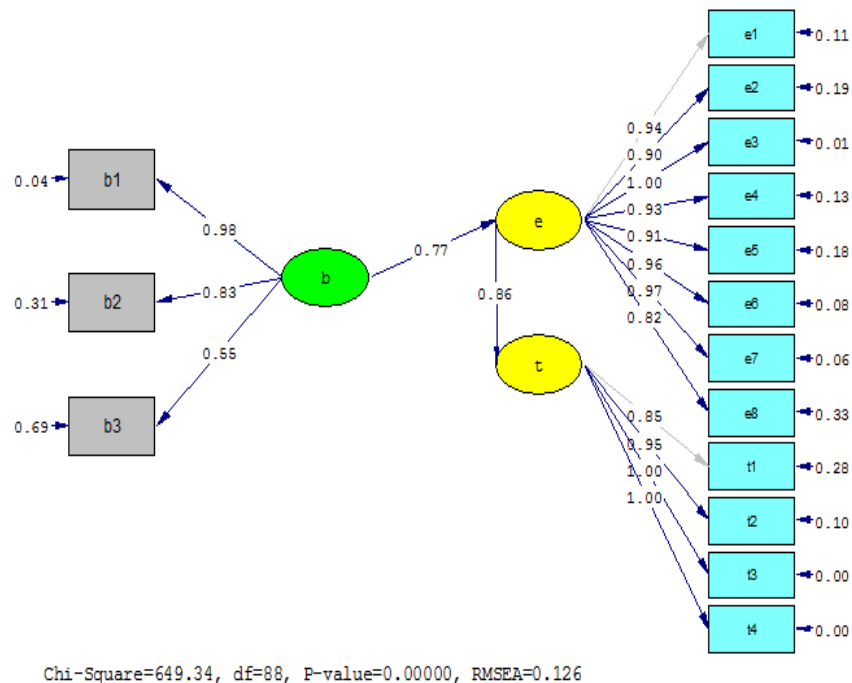


Figure 2: Model in standard estimation status

According to standard coefficient we can see that effective coefficient of e banking on customer trust is 0.77 and trust on oral advertisement is 0.86. Structural model of the present study is shown in fig3 in significant status. The numbers on the paths shows t-value of every path. According to significance numerical pattern, all significance numbers pertaining to pattern parameter are higher than 1.96 and are significant.

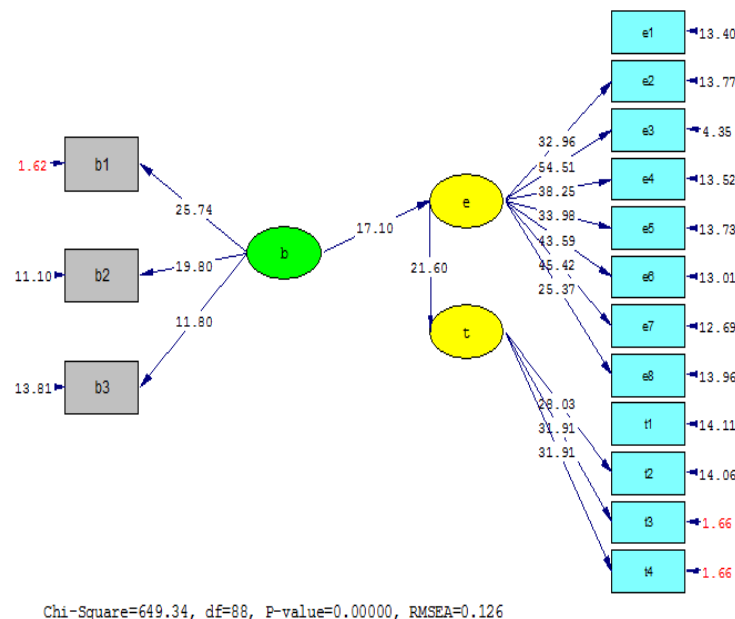


Figure 3: The results of structural equations in significance status

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The standard coefficients of research model are summarized in table4 along with t-value. Table 4 shows that determinant coefficient for customer trust variable by 0.69 is met and shows that e banking can explain 69% of fluctuations of customer trust. According to determinant coefficient for oral advertisement by 0.74, we can see that trust can explain 74% of fluctuations of oral advertisements.

Table 4: Results obtained from examining hypotheses

Main hypotheses	Standard coefficient	t-value	Determinant coefficient	The result of hypothesis
E banking → customer trust	0.77	19.04	0.69	Confirmed
Trust → oral advertisement	0.86	21.45	.074	Confirmed

According to standard coefficient and t-value we can say that features of e banking has significant effect of customer trust and also the effects of customer trust on oral advertisement is significant.

Examination of Hypotheses

After investigation and confirmation of model, the research hypotheses were analyzed and tested according to the model.

H1: e banking features affects customer's trust

According to modulus of t-value equal to 19.04 which is higher than 1.96, we can say that e banking features has significant effects on customer's trust and the effect is direct and positive.

H2: customer's trust affects on oral advertisement

According to modulus of t-value equal to 21.45 which is higher than 1.96, we can say that customer's trust has significant effect on oral advertisement and the effect is direct and positive.

Conclusion and Suggestions

The first hypothesis of the research says that reputation has significant relation with customer's trust. This hypothesis was confirmed according to the direct relation between reputation and customer's trust in population under investigation. This is important that improvement in reputation of Mellat bank can increase customer's trust. Hypothesis results are consistent with the study by Kim and Lennon (2013). Usage of reputation and good notion of bank in people's minds by banks is effective for acceptance of e services provided. The second hypothesis shows that there is a significant relation between customer's trust and extension. This hypothesis according to direct relation between extension and customer's trust in population is confirmed. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. So e banking creation to provide high speed services and trouble shootings is useful to create more attraction and commitment of today customers. The third hypothesis says that oral advice is related to customer's trust. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. Reduction of ethical investments in society causes formation of a convenient condition for extending social relations and with weakening these relations, the conditions required for creativity is going harsher, because there would be no time to think. While lots of organizations and their managers in various groups of society acknowledge the importance of creativity and innovation, and creative and innovative persons are lauded in society, innovation and creativity management is unknown in lots of societies and organizations. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. According to the results we can see that the relation between variables of e banking features with customer's trust is 0.77 which is acceptable. T-value is 19.04 which show that correlation observed 95% confidently is significant. Photographic technology was so progressed that

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banks could exchange information related to payments, without using paper documents. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches. In addition, banks can provide services more efficiently and at substantially lower costs. In recent researches on banks and financial institutes, the focus is generally on electronic banking advantages and its positive effects on gain; but the matter on the effects of e banking on bank risk is neglected in researches.

Also, money changed its concept from a tangible one into a more abstract and intangible concept in a way that money can be shown anytime on a computer screen. The factors affecting on customer's trust in e banking services field can be various in a way that some of them might be neglected in the present research.

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Research Article

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