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Factors Affecting Customer Confidence in Using E-Banking

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Abstract

The aim of the present study is to identify and prioritize the factors affecting the level of customer confidence and attracting customers in electronic services. The study is statistically descriptive research with applied purposes. We used questionnaires to collect the data. The sample data were collected from different branches of City (Shahr) Bank and Tejarat Bank in Tehran, Iran. A total number of 10 factors affecting customer confidence were identified and surveyed. Factors such as predictability, security, bank reputation, ability and benevolence are the top factors to build confidence in customers in using electronic services.

Keywords: banking, customer's confidence, electronic banking, e-commerce, trust

Introduction

In today's world, service industries have accounted for a significant part of the economy. As the productive industries begin selling their products, service industries present some services to the customers, as well, but there is a difference, because in service industries not only attracting new customers the top priority, but also keeping former customers to achieve great profit is absolutely important. Banking industry is one of the most important services. Due to the massive competition in the industry, banks need to keep strategies to satisfy and keep their customers. In some countries, many customers are still hesitant to use these types of banking. New ways of persuading customers to use banking services is not simply possible with the massive growth of e-commerce; trust is considered as one of the important factors in the business environment, and increasing it is highly more important. The first issue at stake is customers' confidence toward new ways of providing banking services, so that the researches such as Quelch (Quelch & Klein, 1996) Johnston (Johnston et al., 2004) and Kaiser (Cazier et al., 2004) declare that lack of trust is one of the major obstacles to develop e-commerce. To understand the customers 'confidence and the factors which affect it provides a vital guide for the organization development. Banks need to understand confidence in the cyber environment and to identify the affected factors in order to make confidence. Therefore, considering the social and cultural features of the society, there is a need to survey an applicable research on the topic.

Review of literature

It is impossible to increase customer confidence without the attempt to identify factors that affect the formation of trust in electronic commerce, providing effective and reliable principles and conclusions. In this section, we discuss the related studies on trust in electronic commerce and electronic banking process. These studies and the results are sometimes called "pre-requisites", "infrastructure", and "the defining principles of confidence" in electronic banking.

Geffen in a study investigated confidence based on a multidimensional approach to e-commerce. According to Geffen, the ability, benevolence and integrity were raised as important prerequisites to build confidence in electronic commerce (Gefen, 2002).

In another study, three primary factors were studied: (a) electronic seller's ability to deliver goods or services as promised; (b) electronic sellers' willingness to refine its actions if the purchase would not satisfy the customer;(c) policies to keep customers' personal information confidential and not publishing it on the websites, which are all factors to increase costumers' perception of confidence in the Internet (Ang et al., 2001).

A survey was conducted in 2001, stressing the necessity of reliable Internet as a medium used in electronic shopping and pointing out four factors including reliability of the Internet marketer, the reliability of the Internet as a medium used in electronic shopping, infrastructural factors (underlying) as confirmation of other companies, and companies' size effect on consumers' confidence in effective online shopping. The study took into account factors usually ignored in other researches (see Lee et al., 2001).

In another paper, the necessity of legality and civil laws and strategies to build confidence in customers was supposed as the elements of confidence in e-commerce was emphasized (Hemphill, 2002). Shankar conducted a research on confidence in electronic commerce, and recounted three foundations of trust such as reliability, services quality of the company, and visual sensation (Shankar et al., 2002).

Hoffman regarded safety and information security as the crucial factors in confidence building in e-commerce. They believe that environmental controls and customers' ability to control the electronic supplier affects customers' perception of safety and security of the website (Hoffman, et al., 1999). Size and reputation of the electronic supplier is also considered infrastructures of the customers 'confidence (Tractinsky et al., 2000). Some factors such as company's reputation, customers' awareness of e-commerce, and the satisfaction of the previous experiences are surveyed by measurements and simulation, so the results ratify the positive relationship between customers' confidence and website services (Yoon, 2002).

In another research, the goal was to improve customers' confidence in e-baking and factors such as the definite declaration of firm's trust about information security and applying other organizations and websites were found to be effective (Palmer, 2000). A research was conducted on confidence in an online system, and personal characteristics performing transactions, the online system, and jobs of the system in use, and the information environment were found to be factors building confidence in the system (Choobineh & Kiani, 1998).

According to another study, presenting and articulating a confidence model in online e-banking, researchers suggested that shared values, communication variables, and opportunistic behaviors had a negative impact on confidence. Of course, this model assumes that more confidence inspires more commitment in the relationships (level of relationships, degree of relationships, and sense of belonging) (Mukherjee & Nath, 2003).

Yousafzai surveyed the factors affecting customer confidence in e-banking and proposed a model. This model is based on two factors: perceived security and perceived confidentiality. Of course, the accepted factors by bank systems including benevolence, integrity, and competence have a positive effect on two main factors in confidence-building; consequently leading users to utilize e-banking services (Yousafzai, et al., 2003). In a survey on *Key characteristics in e-banking*, the factors affecting electronic trust including perceived security, perceived privacy, and quality of offered service were proposed (Taleghani, 2011).

Research objectives

The purpose of this study is to investigate the factors affecting customer in confidence in using e-banking.

Research questions

The main purpose of the research questions of this study are as follows:

1. What are the most important factors affecting customer confidence in using electronic banking?

2. How can the most important factors affecting customer confidence in using e-banking are prioritized?

Identifying the effective factors

According to the studies and review of literature, 10 effective factors (perceived risk, perceived security, perceived confidentiality, perceived honesty, perceived benevolence, perceived predictability, perceived capability, bank reputation, bank size, individual's willingness to have confidence) were identified to be an influence on confidence in using e-banking.

Research hypotheses

Hypotheses of this research are as follows:

1. Perceived risk affects customer confidence in using e-banking.
2. Perceived security affects customer confidence in using e-banking.
3. Perceived confidentiality affects customer confidence in using e-banking.
4. Perceived honesty affects customer confidence in using e-banking
5. Perceived benevolence affects customer confidence in using e-banking.
6. Predictability affects customer confidence in using e-banking
7. Perceived capability affects customers' confidence in using e-banking.
8. Bank reputation affects customer confidence in using e-banking.
9. The size of the bank affects customer confidence in using e-banking.
10. Individuals' willingness to have confidence affects customer confidence in using e-banking
11. The priorities of factors affecting customer confidence in using e-banking are different.

The theoretical research model

According to the related theoris on e-banking and hypotheses, the visiotheoretical model was designed based on these factors. The 10 factors crystalize electronic confidence, which in turn affects electronic services use (Figure1).

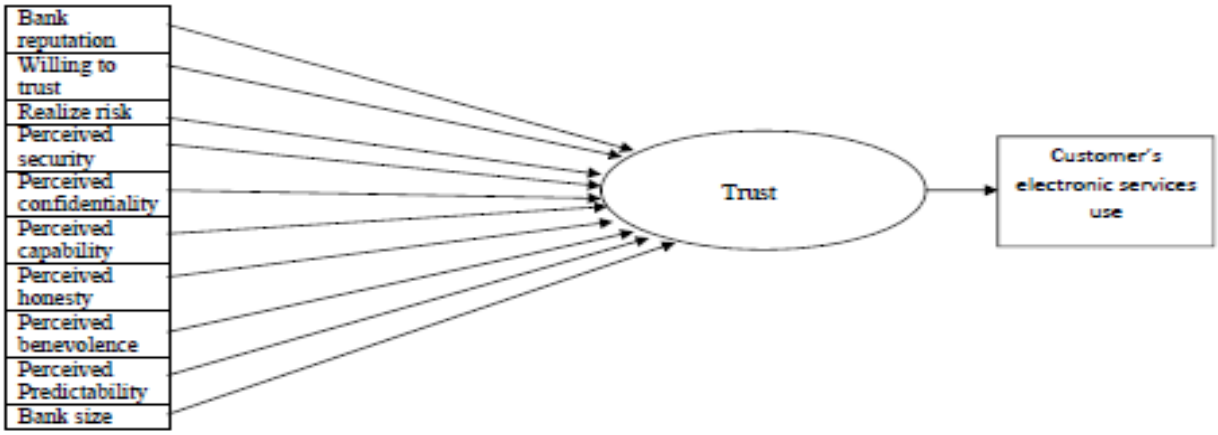

Figure 1. **The theoretical research model**

Materials and Methods

The research objective is applied and data collection was based on descriptive statistics. Data were collected using a questionnaire, based on the research and the theoretical literature using the same questionnaire. The survey questionnaire contains 38 items including 7 questions about respondents' gender, age, education, occupation, electronic banking service use times, satisfaction and duration of the services of Internet. The remaining 31 questions include 3 questions about perceived risk, 7 questions on perceived safety, 2 questions unperceived confidentiality, 3 questions on perceived honesty, one question about perceived benevolence, 7 questions on perceived ability, one question about the predictability, 3 questions on bank size, 2 questions about bank's reputation, and 4 questions on individuals willingness to have confidence. The questions were stated based on the model, existing literature in this field, and other questionnaires. Questions were formulated according to a 5-item Likert scale. The regular scale items were developed in certain order. To revise the statements, we used "good" or" bad" statements to define equally the measured points. The respondents show their agreement by using one scaled statement, normally graded from one to five. The study was carried out manually. In this study, Cronbach's alpha coefficient was used to assess the reliability of the questionnaire. This method is used to check the internal consistency of questions. The reliability of the questionnaire was analyzed in SPSS using Cronbach's alpha coefficient, which was found to be to 86%. So, it is acceptable. To determine the validity of the questionnaire, expert opinion was used. The research population included various branches of City Bank and Tejarat Bank customers Tehran city, Iran. The sample population calculated by Karjsay-Morgan table was determined to be 384 individuals. Of course, as we predicted that some questionnaires might not have returned, to compensate the loss, we distributed 600 questionnaires among Saderat bank customers randomly and they were asked to fill out the questionnaire if they had experience of using electronic banking. Totally, 190 people replied. Then, the deficient responses were removed, and 150 questionnaires were collected and analyzed (Response rate is 25%).

Results

In this research, we applied descriptive statistics methods to survey participants' general information then we classified the collected data by using inferential statistics techniques to examine research hypotheses. Personal and vocational features of participants are presented in Table 1.

According to personal features statistics, 1.3 of people were aged 30-35, and the mean of electronics service use experience was 3 years. Also, the majority of individuals were males with 129 people (86%) and more than half of people held a B.A or higher academic degrees. Based on the data, more than 60% of them had used e-banking seven times or more with a satisfaction rate more than 90%.

Data analysis

First, in order to specify the applied test type, we should control the normality or abnormality of data for each identified factor. Then, by using results with proper parametric or non-parametric statistic techniques, we examined the hypothesis.

According to Table 2, although P is greater than the error level (α), the normality of data was approved and t-test was accordingly applied. T-test results are available in Table 3.

As Table 3 illustrates, H_0 is rejected and H_1 is confirmed. In other words, all of the identified factors are effective in customer confidence in using e-banking, except bank size. So, all of the factors affect the development of operational inspection, therefore, we applied Friedman test to investigate the priority of identified factors. The results are sown in Table 4.

Table1.Personal and vocational features

Variable	Levels	Frequency	Percentage
Gender	female	20	13.3
	male	129	86
	unanswered	1	0.7
Age	25>	14	9.3
	25-30	45	30
	30-35	56	37.3
	35-40	21	14
	40<	14	9.3
Educational level	Under high school	3	2
	High school diploma	22	14.7
	sophomore	36	24
	B.A	69	46
	M.A and higher	20	13.3
Internet experience	Under 1 year	13	8.7
	Between 1-3 years	30	20
	More than three years	107	71.3
Electronics service use	once	20	13.3
	Up to six times	35	23.3
	More than seven times	92	61.4
	unanswered	3	2
Electronics service satisfaction	yes	129	86
			13.3
	no	20	0.7
	unanswered	1	

Table2. Kolmogorov–Smirnov test

Identified factors	(α)Error	P-Value	Test result
Security	0.05	0.054	acceptedH_0
Confidentiality	0.05	0.09	acceptedH_0
Capability	0.05	0.221	acceptedH_0
Honesty	0.05	0.051	acceptedH_0
Predictability	0.05	0.074	acceptedH_0
Benevolence	0.05	0.091	acceptedH_0
Risk	0.05	0.058	acceptedH_0
Willing to confidence	0.05	0.051	acceptedH_0
bank reputation	0.05	0.061	acceptedH_0
Bank size	0.05	0.069	acceptedH_0

Conclusion

According to data analysis, hypotheses results were tested. Test results reveal that all hypotheses affected customer confidence in using e-banking except the 9th hypothesis. Thus, the

assumption of bank size effect on customer confidence in using e-banking is not approved. The confirmation of other hypotheses indicate that individual factors and personality characteristics of system features and the bank structure, environmental factors and the risk of building customer confidence consequently affected-banking use. Figure 2 shows the final research model. Moreover, the identified factors affecting customer confidence are prioritized in Table 4. Due to the fact that these factors affect differently customer confidence, we are able to prioritize them. The first priority is predictability, it means as the customer anticipates the organization's positive performance, normally desires to interact with the organization. The second is security. Customers must be persuaded about e-banking concerns because they think online payment portals are not safe and could be threatened. The third priority is bank reputation which is regarded as the structural characteristic of the bank. The fourth priority is to enjoy a set of skills and competencies that enables a party to affect the other one. The fifth priority is benevolence, so that a custodian believes to perform well the investor's trustee demand regardless of the profit. The 6th priority is tendency to have confidence. The 7th is honesty, thrusters' perception of the set of principles that trustees adhere to. The 8th priority is confidentiality which includes perception of customer confidentiality of the facilities for monitoring and controlling the information about themselves. The 9th priority is risk, which exists in all human activities, so it is absolutely important since in online trading, the consumer will be vulnerable to these types of transactions.

Table 3. Test results of analysis of the identified factors affecting the customer confidence on electronic services

Identified factors	Critical point	Test statistics	Test result
Security	1.645	12.0448	H_1 approved
Confidentiality	1.645	3.110	H_1 approved
Capability	1.645	14.536	H_1 approved
Honesty	1.645	5.996	H_1 approved
Predictability	1.645	26.377	H_1approved
Benevolence	1.645	6.737	H_1 approved
Risk	1.645	2.098	H_1 approved
Willing to confidence	1.645	3.691	H_1 approved
Bank reputation	1.645	7.285	H_1 approved
Bank size	1.645	-0.048	H_0 approved

Table 4. Priority of the affected factors on customer's confidence in e-banking

Priority	Factors	Mean
1	Predictability	8.2
2	Security	5.70
3	Bank reputation	5.58
4	Capability	5.36
5	Benevolence	5.03
6	Willing to trust	4.03
7	Honesty	3.88
8	Confidentiality	3.77
9	Risk	3.31

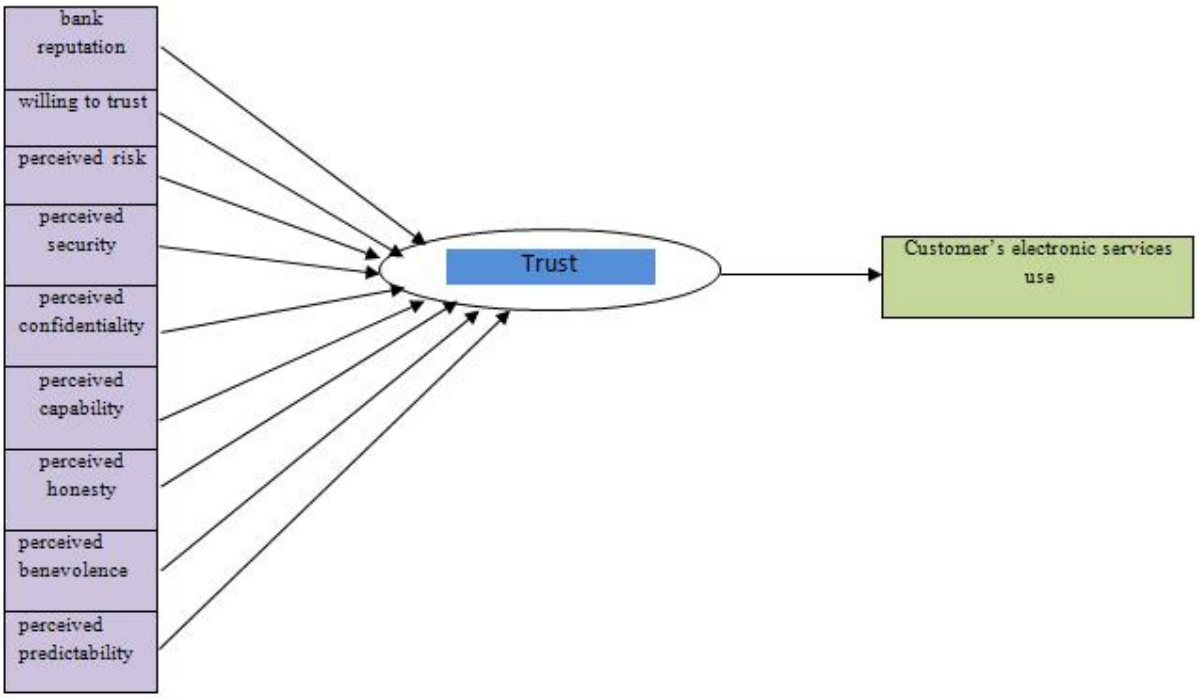

Figure 2: The theoretical research model

Recommendation of the study

As a suggestion, we propose to survey the cause-effect relationship between the mentioned variables and their effect on e-banking for future researches. This article can contribute to other features of e-commerce and provide comparable results.

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