

A survey of e-banking on the customers' trust (case study: Damghan agricultural bank)Golnar Shojaei (PH.D.)¹, Mohammad reza babakhanian (MA)²¹.Department Of Management, Shahrood Branch, Islamic Azad University, Shahrood, Iran².Department Of Management, Shahrood Branch, Islamic Azad University, Shahrood, 3671698945, Irangolnar.shojaei@gmail.com, iranianman2010@yahoo.com

Abstract: Nowadays, e-banking is one of the most important priorities in the present era. All of top managers use from equipment and resources for e-banking. Meanwhile, we are going toward e-banking specially marketing and so on. Thus, every bank attempt to reach toward e-banking quickly. In this paper, we try to survey a set of banking G variables such as security, speed, up to date, confidence, trust, on time, availability, and so on. We study also relationship between e-banking and customers trust using electronic channels. We distribute 278 questionnaires among customers from central branch of agricultural bank (Damghan). In this paper, we survey on the education, old, sexuality. Finally we find significant relation among aforementioned variables. Moreover, we observed differences from trusteeship and truthfulness at two men and women societies toward e-banking variables too.

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Key words: trust ; availability ; banking system ; electronic banking

1. Introduction

In present era, the most important idea is easy and speeds at all of life aspects especially in the organizations and offices, banks and so on. Bank managers always try to implement the newest technologies and methods e.g e-banking. They provide various equipments such as ATM, mobile bank, phone bank, POS, credit cards... After this step, they should persuade and absorb customers for to use from these services. In IRAN, BANKS start to extend e-banking, recently. Agri cultural BANK tries to create customers satisfaction and more attraction. They developed core banking system and their advantages. One of the vital components is creation of trust among customers. If customers don't have any trust to Bank activities, Banks don't reach their goals and consequently, they become bankrupt. One of the aspects of E. commerce is e-banking. e-banking affects on the level of productivity and it is useful for the people, government and banks too (Esinger, 48, 1999). Thus, major goal of this paper is identification of relations among e-banking system and trust among bank customers (Damghan).

We survey to this question: Is there a relation between e-banking and trust customers (agri. bank of Damghan)?

2. Materials and Methods

There are numerous definitions in the E.banking. But in this paper, we present some of them:

- e-banking is optimization and consolidates all of the activities of a bank via using information technology. Moreover, it meets all of the customer's services. (blunth et al, 2005, IRAN management sciences quarterly, two year, 81-98, no 7).

- e-banking includes all of electronic channels that customers use from these channels e. G telephone, Internet, mobile, Digital TV.

- In short, E.banking refers to provide a set of the possibilities for bank staff to raise speed and efficiency to present bank services for customers. So customers can use from bank services without present at physical branches (electronic banking monthly, 1378, 22)

e-banking at the world:

E.payment starts since 1918, i.e. when American banks move money through telegraph. Internet developed by academic professors for to share receipts since 1970. Then in later years, Internet became more popular for the people especially for businessmen like to extend their customers. A set of reasons were that lead to increase bankers interests toward Internet as follows:

-to encounter with huge amount Bankrupt customers.

-competition among non – bankers.

At 1994, Banks start to research in the Internet. They tried to suggest Internet services to their customers. Internet Banks offer lower prices in compared with physical banks. Moreover, these banks showed more interest to global markets and customer welfare.

Up to January 1995, there were only 24 hours banks on the internet. One year later, there were 800 banks to use from internet. Industrial experts estimated extra ordinary development of internet in the future. Therefore, new services and modern possibilities offer to the people, and customers can use bank services without present in the physical branches. Related theories with e-banking listed in the table 1 as follows:

Table 1- related theories with e-banking

Row	Researchers and approximate	Research
1	Fishbin and ajzen (1975)	They suggested «T R A » theory.this theory said cause – effect relation. Based on this theory, every behavior originates from purpose and aim. Purpose originates from internal norms and attitudes. In the e-banking system regarding this model, personal purpose and interest have a relation with to use from e-banking.
2	Devise (1989)	He offered «T A M » model. In this theory, to admission a technology, we should have two perception, usefulness and easy. In the other words, we admit informational systems and e-banking because of rational actions.
3	Ajzen (1991)	Planned behavior theory «T P B » said that often customers face with several selections and rarely should they use only one technology. There is high competition in to e-banking. This theory gives us better understanding about admission of a system.
4	Vankatesh et al (2003)	They present admission and application of technology U.T. A. U. T.
5	Amarji gill and alen flacnecher and michi sacher (2008)	They offer e-banking admission theory. This theory is based on a set of factors such as: competency of manager and staff, speed, up to date, to meet customers' needs by bank staff and customers.
6	Chi ping li, Gogang li and hisophen lin (2010)	e-banking is based on some variables such as: accessibility, accuracy, safety, speed, up to date, secrecy in the banking services.

Table 2- A complete comparison between traditional and E-banking (sanayei, 1380)

Traditional banking	E-banking
-Limited market	-Unlimited market
– competition among banks	-Competition among trade marks
– limited services	-Various services
-Focus on the cost	-Focus on the income
-Official time	Unlimited time (24 hours)
-Structure based on the paper and human personnel	-Mutual relations among banks
-revenue via profit margining	-Revenue via interest rate
-Relay on the physical branches	Services based on the innovation and creativity

2.1. Comparison between traditional and E-banking:

A complete comparison between traditional and E-banking as Table 2 above.

2.2. Technology model and effect of trust:

This model is underlying of technology acceptance percept of useful1: the people use from a technology, when it is useful and easy. Thus personnel percept affects on behavior and technology acceptance. «Sharif camel 2003» argues that, trust is a mutual relations based on optimistic. Meanwhile, avoidance of uncertainty is very important at determination of behavior.

Model2. It leads to better understanding from customers' options (selections). In this model (Deivis et al 1989), two factors is important at to select a technology by customers as follows:

-Percept of easy usage3: I can use from this technology because of easy learning.

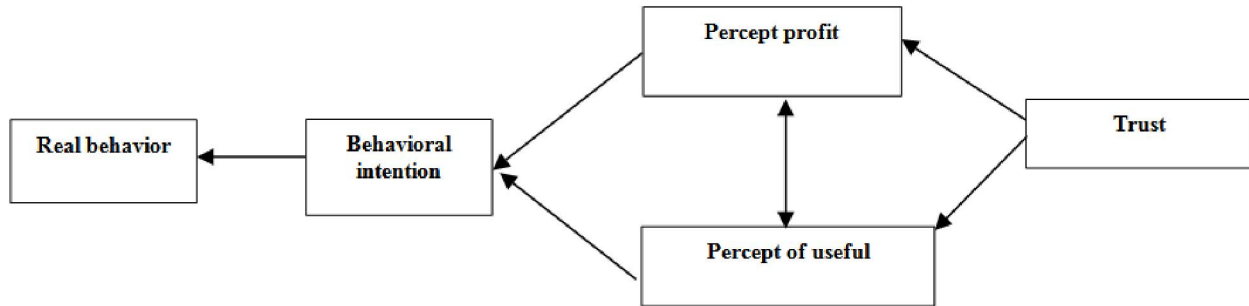


Figure 1- Technology model and effect of trust

A research assumption is as follows:

- There is a relation between accuracy and customers trust in the E-banking.
- there is a relation between secrecy and customers trust in the E-banking.
- there is a relation between safety and customers trust in the E-banking.
- there is a relation between E-banking services speed and customers trust.
- there is a relation between up to date and customers trust in the E-banking.
- there is a relation between customers' accessibility to E-banking services and customers trust.
- variables of E-banking vary among demographic elements (sexuality, age, and education levels).

2.3.Methodology

This research is applied and it has two parts. Library studies use for edition of theoretical fundamental and literature. Then we use questionnaire and field studies for collection of information and testing of assumptions. At first, we identify theoretical resources and definitions and so on. Then, statistical society includes 1000 people (agricultural bank customers in Damghan branches) with different year's groups. To determine of statistical sample, we calculate below formula: $n = (N \times t^2 \times p \times q) / (N \times d^2 + t^2 \times p \times q)$.

Our samples are 287 people. We collect data by question air (made by ourselves).

Of course, we study several questionnaires (chi ping li, gogiang li, hisophen li and bomill sa model and in go Han) too. We consider effective factors on the e-banking in the questionnaires.

More over we use central indexes methods such as averages, frequency, mode, distribution indexes, percents, variance deviation. Meanwhile we use statistical parameters, for example regression test (step by step), affect coefficient and Mann – Whitney test and Kreskas Wallis Test.

2. Result Analysis

Descriptive statistics showed that customers' years' mode and average (the most frequency) is between 30 to 39 years old at our sample. Then, the lowest frequency is related with 50 to up (year's group). Women have the most frequency among our sample. In the other words, women are the biggest group among bank customers. In this sample, the most frequency customers are related whit license educational group and the lowest frequency is related with top license educational group and higher group. Other statistical tests as follows:

We observe at table 3, significant level of these variables (accessibility, safety, secrecy, up to date) is higher than five percent. Thus, we conclude that there between men and women at confidence level 95% at this variable (accuracy, speed).

Table 3- Mann-Whitney u test

	Accessibility	Accuracy	Safety	Secrecy	Speed	on.time
Mann-Whitney U	8823.500	8134.500	9499.000	9121.500	7732.000	8595.000
Wilcoxon W	17208.500	16519.500	17884.000	17506.500	16117.000	16980.000
Z	-1.218	-2.227	-.168	-.738	-2.835	-1.531
Asymp. Sig. (2-tailed)	.223	.026	.867	.461	.005	.126

0: E-banking variables are similar for different year's groups.

H1: E-banking variables aren't similar for different year's groups.

We conclude that sigs are higher than 5%. Then, we prove assumption H0. In the other words, aforementioned variables are different among various years group.

Of course, accuracy and speed variables had sigs lower than 5%. Then these variables (accuracy-speed) were very important for 30 to 39 years group. (The lowest answer for 50 to up year's group).

Table 4- Kruskal Wallis Test- Grouping Variable: age

	Accessibility	Accuracy	safety	Secrecy	Speed	on.time
Chi-square	2.867	7.800	.052	3.169	3.993	2.604
Df	3	3	3	3	3	3
Asymp. Sig.	.413	.050	.997	.366	.262	.457

H0: E-banking variables are similar among the customers with different educational levels.

H1: E-banking variables aren't similar among the customers with different educational levels.

We showed that (table 5), sigs are higher than 5%, then we prove assumption H0.in the other words,

e-banking variables are similar among different year's groups. Accuracy and speed variables showed that the most frequency for education is related to top license and doctoral.

Table 5- Kruskal Wallis Test- Grouping Variable: education

	Accessibility	Accuracy	Safety	Secrecy	Speed	on.time
Chi-square	2.659	7.984	2.945	2.553	5.476	4.848
Df	3	3	3	3	3	3
Asymp. Sig.	.447	.046	.400	.466	.140	.183

We conclude that (table 6) there are mutual relations between e-banking variables and customers trust. Sigs amount is lower than 5%, then we can say that there is a relation with confidence level 95%

Table 6- relations between e.banking variables

		Trust	Accessibility	Accuracy	Safety	Secrecy	Speed	On. Time
Sig. (1-tailed)	Trust	.	.000	.000	.000	.000	.000	.000
	Accessibility	.000	.	.003	.000	.000	.000	.002
	Accuracy	.000	.003	.	.000	.000	.000	.004
	Safety	.000	.000	.000	.	.000	.000	.000
	Secrecy	.000	.000	.000	.000	.	.000	.000
	Speed	.000	.000	.000	.000	.000	.	.000
	on.time	.000	.002	.004	.000	.000	.000	.

Assumptions of regression test suggest that: How much e-banking affects customer trust? We observed (table 7) determination coefficient (R2) equals 0/45. In the other words, dependent variables (e-banking factors), F sig equals 0/000 and it has it has significant

effect.

Thus, there is a relation between independent and dependent variables. Therefore, at least one of the independent variables factors can change on the dependent variables.

Table 7- Regression test

Model	Correlation coefficient	Determination factor	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.671a	.450	.438	.46740	.450	36.994	6	271	.000

- a. Predictors: (Constant), on. time, accuracy, accessibility, safety, secrecy, speed
 b. Dependent Variable: trust

4. Discussions:

In our country, e-banking has considerably progress recently. Customers and banks need to modern technology (e-banking). e-banking has several advantages e.g. decrease of cost and expenditure, decrease of transportation in the physical branches and so on. Agricultural bank start to extend underlying structures for e-banking. Thus, we try to absorb the more customers. One of the most important problems is to create trust among customers to use from e-banking services. In present era, personal information. Bank is one of the places that save this information. Then, secrecy, confidence, safeties are very important for customers and their opinions (norms and attitudes).

Banks have numerous mechanisms to improve processes of trust-making. In short, customers should feel confidence and secrecy, safety.

Behavior and services.

In the paper titled, "A survey of relations e-banking services on the customers trust at the agricultural bank", we use from various theories and several researches. We conclude that agricultural bank can be success somewhat at the trust-making among its customers. Effective factors on the e-banking include speed, on time, secrecy and confidence. These factors should improve to increase trust levels to e-banking. Meanwhile, we understand that (with considering Krooskal Walis test) there aren't any difference among customers (with different years groups and with different education levels) regarding to e-banking variables. More over there aren't any difference among men and women (after Mann-Whithney test) at the aforementioned variables. Of course we observe somewhat difference among men and women at the accuracy and speed variables.

Finally, recommendations for better electronic banking services offered by the author:

1-if we can eliminate a set of weaknesses and problems at e-banking; we can persuade and foster customers to use from these services and possibilities.

2-we suggest to branches managers to increase customer's trust, for example improvements for accessibility variable (to provide high speed internet for customers additionally), we can use professional

planners to establish diverse program e.g. web pages planning, mobile software, phone bank and so on.

On the other hand, to increase security, we can use fire walls, anti-virus, passwords production equipments (TOKEN) with powerful algorithms (high efficiency). Our bank should use from foreign banks experiences and modern electronic sciences to increase users accessibility and their trust.

Note that banks should not allow to unauthorized personnel to access to customers information.

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