

The Impact of Organizational Factors (The Variables Related to Websites and the Variables Related to Marketing Mix) on the Customer's Trust in Iran's Electronic Banking (Case Study: Sina Bank Branches in the City of Tehran)

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Abstract: The main aim of the current study is exploring the impact of organizational factors on customer's trust in electronic banking. The sample of the current study is the customers of Sina bank branches in Tehran that were investigated as the final sample using Cochran's C test including 388 individuals. To collect the data of the study, a questionnaire including 29 items is used and structural equations modeling method through likelihood maximum estimation is exploited to analyze the resulted data. The results of the model and hypothesis test illustrate that the organizational factors have a significant effect on the customer's trust in electronic banking. Likewise, organizational factors have a significant effect on the aspects of trust containing the perceived competence, predictability, the perceived truthfulness and goodwill. The given fitting indexes have also the clue of the appropriate fitting model.

Key words: Organizational factors, website, marketing mix, electronic banking, Sina bank

INTRODUCTION

Development and usage of information technology in different areas specially in banking real, is the result of the abilities of information technology that is nowadays welcomed abundantly in business world. Human of the third millennium is trying to increase the distance from the traditional pattern by increasing the rate of development and usage of information technology in different parts of social system and create a new pattern align with information era requirements. Align with this aim and similar to the most service suppliers the banking system through recent decades has gone towards investment on new technologies of service supplying to the customers, as a way to control the expenses, absorbing new customers, meet customers needs and using these technologies (Networking banking, calling banking, ATMs and ...) has placed in its instruction as a strategic necessity (Yaqubi and Shakeri, 2008). On the other hand, in spite of the current day to day increasing in electronic business, the customers don't have tendency towards the presentation of private and sensitive information on websites and usually they represent their general information facing the websites and when they are asked to represent their private and crucial information such as the number of the credit card they will be uncomfortable. This feeling shows the lack of trust of the customer towards the Internet banking (Bashiri and Joneydi, 2013).

So, the identification of the effective factors on the customers trust in electronic banking is essential and crucial and it will help develop and enhance this technology in our country. Thus, the main goal of this study is to explore impact of the variables related to website and variables related to marketing mix on customer's trust in electronic banking at Sina bank branches in Tehran.

Research background: Lotfi *et al.* (2011) conducted a research entitled electronic trust, to investigate the role of the internet purchasing experience and the knowledge of customers towards the using information and mechanisms to create security. In this study two factors of the customers level of knowledge towards using information and mechanisms to create security and the internet purchasing experience through effective factors on electronic trust has been concentrated and by conducting the field study the effect of these factors on Iranians customers trust has been studied. The results of the study showed that both mentioned factors are effective on Iranian customers' level of reliability.

Esmaeelpour *et al.* (2014) in their study explored of the factors relating to website and customer in creating trust to electronic banking. The sample of their study is the customers of Refah bank branches in city of Rasht that 429 people were selected randomly as research sample. The results of their study showed that individual

factors including view factors, skill factors and personality and also website characteristics have a meaningful (significant) effect on customers' trust in electronic banking.

Khodadad *et al.* (2010) conducted a research entitled "effective factors on customers trust in electronic commerce". In this study, the hypothesis of the study declared and investigated in individual, institutional and infrastructural factor's framework. The sample of the study are the customers that have bought of electronic shops available in Iranian virtual community, among them the random sampling was conducted. The results of data analysis showed that except the hypothesis related to individual factors, other hypothesis of the study were confirmed.

Samsudin have conducted a study entitled the effective factors on trust in technology and acceptance of electronic banking in Malaysia; they have declared communication or interaction as a crucial factor on electronic banking and meanwhile they have interpreted the role of customer's satisfaction as a mediator and they believed that those banks that implemented CRM (Communication with Customer), subsequently customers trust in their technology and they accepted electronic banking easier.

Walczuch and Lundgren in their research entitled "the preliminary investigation of psychology from customers trust in electronic commerce", identified pre requirements of trust with psychological resources and then classified them in 5 categories. In fact, they tried to answer this question in their study that before making decision by the customers to trust in electronic seller, what does he/she think of. Hypotheses proposed by these two researchers have been approved in the current study specially in the areas of the investigated variables. Shumaila conducted a research entitled the proposed model for electronic trust in electronic commerce. They have extended the research of information system to fiscal areas and they have proposed a model that the main factors in them have effect on customers trust and they contain security, perceived private limit in the customer and in the areas of electronic banking and it knows the trust as a dependent of the degree of the risk in electronic banking and its consequences.

Electronic banking: The phenomenon of electronic banking is one of the achievements of the electronic commerce. By day to day increasing of the volume of electronic commerce in the world and by considering the business needs to do banking operations to transact the fiscal resources of electronic banking it has found a fundamental role in electronic commerce. Electronic

commerce consists of buying and selling goods and services within institutes, individuals, governments and also public governmental non-governmental sectors in a way that these operations (buying and selling) will be led through computer network (Akrami, 2010). In a simple definition the electronic commerce consists of doing the whole levels of commerce through computer and telecommunications without the physical presence at transaction (Mahdavi and Haqdoost, 2007). Electronic banking is one of the outcomes of electronic commerce that consists of representing the banking services through general accessible computer network (the Internet) that is benefited of high security (Gan and Clemes, 2006). Nowadays the customers' judgment in banking issues is based on the amount of bank ability in helping to solve problems and to develop the business. Security, the speed of transaction, friendship with customer and being comfortable, ease of using, trust and issues related to private areas are the most important factors for customers to choose a bank (Laforet and Li, 2005). So the acceptance of online banking is increasing in the most countries all over the world, in a way that the amount of electronic banking interactions has been over 50% in pioneer countries (Pikaaranen *et al.*, 2004). There had been abundant affairs in the context of electronic banking in Iran and services such as telephone bank, satellite current deposits, indebt cards, ATMs and POS are among them. But, it seems the service has not been as it should be welcomed by the customers (Moqli, 2007).

Trust in electronic banking: Trust is defined as the expectation, promise or other quote that is trustworthy (Poon, 2006). Electronic trust is the belief that let customers to be voluntarily vulnerable against him after investigation and consideration of the internet seller (Ha and Stoel, 2009). Trust is a complex concept that is widely investigated (Hassanein and Head, 2007). Barber (1983) claims that the concept of trust is like a conceptual marsh. In addition, Lewis and Weigert (1985) pose a conceptual confusion in the literature of trust. According to the definition of Oxford English Dictionary, trust means confidence in some of the attributes and characteristics of a person or even the correctness and trustworthiness of a theory. In spite of the definition of Oxford English Dictionary, trust is defined by researchers and with specific characteristics (Wang and Emurian, 2005). Rooter (1980) defines trust as general expectations that we can rely on others talk, promise, oral and written statements. In another definition trust is as the belief or expectation from that the utterance or the commitment stated by seller and it is reliable and the seller wont abuse the customer (Geyskens *et al.*, 1996).

Trust is also defined as the believing that another person aligns with our aims is trying to meet our demand. According to Morgan and Hunt (1994) trust occurs when a person feels relaxed and comfortable while establishing a business relationship with the other.

Internet marketing mix: Dan and Dan define the internet marketing as a set of five components as follow:

Promotion: It includes advertisement and any designed activity to raise customers awareness. The Internet allows a wider distribution and more sophisticated rather than traditional modes and it provides and makes possible the supply of the ordered catalogues, one by one contact: the purpose of one by one contact is that simultaneous contacts of the firms customers through electronic list and postal lists of the firm all over the world.

Finalize the deal: To do the deal means to determine the price and bilateral agreement.

Exchange: It includes the payment for the purchased product. Payments of the deal received through digital tools such as credit cards. Supplying order: includes transportation of goods and services from traditional system or digital tools (Kim *et al.*, 2008). Mohammed (2001) also align with investigating the concept of internet marketing, introduce 5 factors in the Internet marketing: process: the internet marketing is a process such as traditional marketing, establish and maintain relationships with customers: nowadays the main target of marketing has been changed to find customers and boosting enough numbers of responsible and loyal customers. Being punctual: the internet marketing deals with the levels that are accessible in the Internet and they are just in time. Exchange: the main core of the whole programs of marketing, both traditional and internet are being just in time of the concept of exchange and transaction, meeting the objectives of both parties (buyers and seller).

The factors related to website: In most cases of electronic commerce of company with customers, only the mediator between customer and seller is website. Website has an essential effect on perception of users and customers. So, the quality of website has effect on the perceived usefulness of website by the customer. Poorly designed websites lead to the loss of large amount of contributions of the potential selling of the firm that it is caused by the disability of the customer to find what they find (Chang and Chen, 2008). Also, poorly designed website would lose a large percentage of the visitors which is also

caused by the negative experience of users and customers. Firms must design and conceptualize their websites in a way that improve firms' condition and help in customers absorb in the long term (Liao *et al.*, 2006). However, virtual milieu of the Internet doesn't provide opportunity for face-to-face interaction between electronic sellers and buyers. So, an important matter in the electronic trade is that how trust will be formed between customers and sellers (Ho and Oh, 2009). High degree of trust not only meets high expectations of the customers, but also it enhances satisfaction and pleasure of transaction among customers.

But also it omits the lack of reliability, perceived risks and interactional dependencies in the most of online studies. In addition the higher level of trust of consumers leads to increase the intention of consumers purchase and to help the firms in saving the customers (Chen and Barnes, 2007).

The indexes related to website in this study consist of the represented framework by Wang and Emurianin four different dimensions that are represented as follow: the dimension of graphic design: this dimension defines the factors of graphic design in website that consumers faced for the first time. The dimension of design's structure: this dimension defines the total arrangement and the way to accessible to the available information on website. Content dimension: this dimension defines the informational components that exists in texture or graphical. Social factors' dimension: this dimension defines the requirement to consider social factor on website such as the existence of face-to-face interactions and also using the supplying communicative tools on website (Khodadad *et al.*, 2010). In the current study considering the patterns of marketing mix factors of Carthy and Jerome, (1996) and also the conducted studies related to the way of influence of these factors on customers trust in electronic business, four factors of cost, product, promotion and distribution have been considered. To measure the truthfulness of the customers also based on McKnight *et al.* (2002) and Bashiri and Joneydi (2013), Khodadai *et al.* (2010), McKnight *et al.* (1998) and Gefen *et al.* (2003) the dimensions of the predictability, competence trustfulness and goodwill will be used. Based on the discussed issues above, the implemented method in the study is as follow (Fig. 1).

Hypotheses:

- Hypothesis 1: Organizational factors have significant impact on customer's trust in electronic banking
- Hypothesis 1.1: Organizational factors have significant impact on the perceived competence by the customers

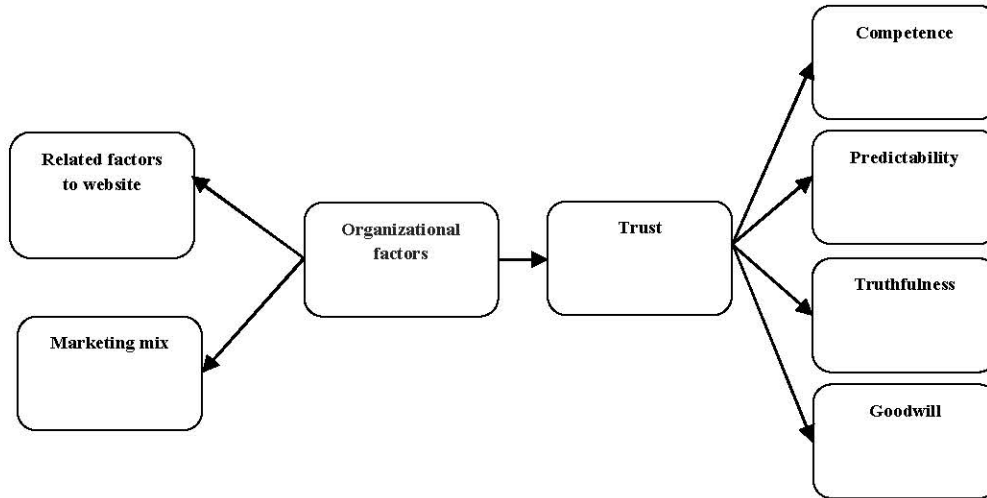


Fig. 1: Conceptual model (Khodad *et al.*, 2010)

Table 1: Cronbach’s alpha amount for each variable

Variables	Question numbers	Mean	Standard deviation	Cronbach’s alpha	AVE
Marketing mix	9	3.2511	0.47866	0.883	0.571
Related factors to website	9	3.8334	0.66430	0.884	0.512
Trust in electronic banking	11	3.5772	0.69899	0.908	0.567
Competence	3	3.3498	0.57767	0.790	0.622
Predictability	2	3.0835	0.64533	0.813	0.613
Truthfulness	3	3.1211	0.71230	0.892	0.529
Goodwill	3	3.9880	0.68223	0.880	0.504

- Hypothesis 1.2: Organizational factors have significant impact on the perceived Predictability by customers
- Hypothesis 1.3: Organizational factors have significant impact on perceived trustfulness by customers
- Hypothesis 1.4: Organizational factors have significant impact on perceived goodwill by customers

MATERIALS AND METHODS

The current study is based on applied-goal-oriented and its nature is descriptive and analytical method. The sample of the current study is the customers of Sina bank branches in Tehran. Utilizing the Cochran’s C test and non-probable sampling method 388 individuals were investigated as the final sample of the study. The questionnaire is modified in two parts that the first part consists of general information related to respondents and the second part involves twenty nine questions that measures the variables of the study. To measure the variable related to website the questionnaire of Wang and Emurian (2005) including nine items is used. To measure marketing mix (Carthy and Jerome, 1996) questionnaire

including nine items and to measure the dimensions of trust of concepts (McKnight *et al.*, 2002; Bashiri and Joneydi, 2013; Khodadad *et al.*, 2010; McKnight *et al.*, 1998; Gefen *et al.*, 2003) containing 8 questions are used. The validity of the questionnaire has been investigated through confirmatory factor analysis and AVE indicator. Its reliability also has been investigated by Cronbach’s alpha. To analyze data in this study, descriptive statistics method and structural modeling by maximum likelihood using Lisrel Software has been used (Table 1).

RESULTS AND DISCUSSION

Descriptive findings: Table 2 has illustrated the demographic characteristics of the sample based on age, gender and educational level.

Before entering to test the hypothesis, it is necessary to be aware of the accuracy of the measurement of exogenous variable (marketing mix and characteristics of website) and endogenous variable (trust in electronic banking). Therefore, the measuring models by confirmatory factor analysis will be investigated ahead. The fitting model indexes of the study represents that the model has a great fitting with the collected data of the sample of the study (Table 3).

Table 2: Sample description

Variables	Frequency	Percent
Gender		
Male	241	62.1
Female	147	37.9
Age		
Under 30	129	32.2
Between 31 and 40	123	31.7
Between 41 and 50	99	25.5
Over 50	39	10.6
Education		
Diploma or less	110	28.4
Higher diploma	61	15.7
BA/BSc	157	40.5
MA/MSc	60	15.4

Table 3: Indices of model fit

Index	RMSEA	χ^2/df	NFI	NNFI	CFI	GFI	AGFI
Achieved amount	0.062	2.33	0.92	0.92	0.96	0.93	0.93
Allowable amount	>0.080	<3.00	<0.90	<0.90	<0.90	<0.90	<0.90

Research variables measuring models exploring

Table 4: The summary of the research hypothesis test results

Path	Path coefficient	t-statistic
Organizational factorsto trust in e-Banking	0.74	9.23
Organizational factorstoperceived competency by customer	0.46	5.06
Organizational factorsto perceived predictability by customer	0.69	8.11
Organizational factorsto perceived truthfulness by customer	0.51	6.33
Organizational factorsto perceived goodwill by customer	0.56	7.72

Exploring research hypotheses: To test the hypotheses of the research the impact of independent variables on dependent variables through modeling of structural equations by likelihood maximum estimation has been investigated. All hypotheses are accepted in 99% confidence level. In relation with the main hypothesis of the study in which the exploring of the impact of organizational factors on customer's trust to electronic banking has been mentioned, the attained results of the analysis of the path represents the corroboration of this hypothesis. The path coefficient is (0.74) and t-statistic is (9.23) with error level of 0.01, statistic is significant. These results show the main hypothesis of the study is corroborated consequently. The other secondary hypothesis has been examined in this way and the results have been represented in the Table 4.

CONCLUSION

Regarding the organizational factors including characteristics of website and marketing mix as an effective factor on customer's trust in Internet banking has been corroborated. Therefore, Sina bank authorities and specially bank's information technology department can improve trust making characteristics by more considering organizational factors Sina bank. Regarded to factor analysis of used indexes to measure the factors related to website and also the attained mean for each

suggested index is represented as follow: the results of the attained data analysis of customers show that Sinabank should represent more comprehensive, more accurate and more meticulous information in a simpler and more transparent way on its website to the customer. Having accurate, comprehensive and meticulous information of Sina bank is one of the most important indexes to measure being propitious of website for customers that in the current study did not attain high mean that shows more emphasis on this characteristic of website can have a positive effect to improve the attitude and trust of customers to use the internet banking services of Sina bank.

In addition it is suggested considering the kind of designation of website and ease of accessibility to different pages is very important. Information technology and informatics department of Sina bank should pay more attention to this realm and although the customers have a partial satisfaction of the condition of Sina bank site from the aspect of the ease of transaction among different working-sheet, innovation in this index can also increase the desirability of using bank services through internet website.

Other factors that disturb using the services of different institutes including banks through the internet are happened disconnections via using the services that have a negative effect on customer's trust in the bank's website enormously. The results show that site of Sina

bank enjoys desirable situation in this field and the crews carry out the improvement of the speed and decrease more the disconnections of website as it is possible while maintaining the quality.

It is also suggested that the available data on site will be updated coherently and also the sense of privacy in information will be inspired to the customer and using informational systems enjoy enough security to save the customers information.

REFERENCES

- Akrami, M.E., 2010. Identification and ranking the effective factors on successful implementation of the electronic banking. MSc Thesis, M.A accounting college, Islamic Azad University of Yazd, Yazd, Iran.
- Barber, B., 1983. *The Logic and Limits of Trust*. Rutgers University Press, New Brunswick, New Jersey.
- Bashiri, M. and M. Joneydi, 2013. Investigate the effect of Customer's trust on acceptance of Internet banking based on TAM model. *Commer. Strategies J.*, 1: 443-462.
- Carthy, M.E. and A. Jerome, 1996. *Managerial Approach*. Homewood IL, London, England, Pages: 134.
- Chang, H.H. and S.W. Chen, 2008. The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online. Inform. Rev.*, 32: 818-841.
- Chen, Y.H. and S. Barnes, 2007. Initial trust and online buyer behavior. *Ind. Manage. Data Syst.*, 107: 21-36.
- Esmailpour, R, M Akbari and M. Mojdehi, 2014. Surveying the factors relating to website and customer in creating trust to electronic banking. *Int. J. Innovative Res. Sci. Eng. Technol.*, 3: 9830-9836.
- Gan, C. and M. Clemes, 2006. A logic analysis of electronic banking in New Zealand. *Int. J. Bank Marketing*, 24: 360-386.
- Gefen, D., E. Karahanna and D.W. Straub, 2003. Trust and TAM in online shopping: An integrated model. *Manage. Inform. Syst. Q.*, 27: 51-90.
- Geyskens, I., J.B.E.M. Steenkamp, L.K. Scheer and N. Kumar, 1996. The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. *Int. J. Res. Market.*, 13: 303-317.
- Ha, S. and L. Stoel, 2009. Consumer e-shopping acceptance: Antecedents in a technology acceptance model. *J. Bus. Res.*, 62: 565-571.
- Hassanein, K. and M. Head, 2007. Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *Int. J. Hum. Comput. Stud.*, 65: 689-708.
- Ho, B.C. and K.B. Oh, 2009. An empirical study of the use of E-security seals in e-commerce. *Online Inf. Rev.*, 33: 655-671.
- Khodadad, H.S.H., K.A. Naej and S. Meysam, 2010. Surveying the factors affected on customer's trust in E-business. *Modarres Q.*, 13: 93-118.
- Kim, D.J., D.L. Ferrin and H.R. Rao, 2008. A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk and their antecedents. *Decis. Support Syst.*, 44: 544-564.
- Laforet, S. and X. Li, 2005. Consumers attitudes towards online and mobile banking in China. *Int. J. Bank Market.*, 23: 362-380.
- Lewis, J.D. and A. Weigert, 1985. Trust as a social reality. *Soc. Forces*, 63: 967-985.
- Liao, C., P. Palvia and H. Lin, 2006. The roles of habit and website quality in E-commerce. *Int. J. Inf. Manage.*, 26: 469-483.
- Lotfi, F. M. Kashani and N. Movahhedi, 2011. Electronic trust: Investigation the role of internet purchase experience and Customer's knowledge into information using and mechanism of security making. *Commer. Res. Q.*, 55: 253-262.
- Mahdavi, A.M.H. and S.R. Haqdoost, 2007. The necessity of the electronic commerce in Iran considering its role in productivity of the pioneer countries firms. *J. Sci. Improv.*, 21: 97-120.
- McKnight, D.H., L.L. Cummings and N.L. Chervany, 1998. Initial trust formation in new organizational relationships. *Acad. Manage. Rev.*, 23: 473-490.
- McKnight, D.H., V. Choudhury and C. Kacmar, 2002. The impact of initial consumer trust on intentions to transact with a web site: A trust building model. *J. Strat. Inform. Syst.*, 11: 297-323.
- Mohammed, R., 2001. *Internet Marketing*. McGraw Hill, New York, USA.
- Moqli, A., 2007. Accepting of electronic banking among customers of Shiraz banks. *Iran. J. Manage. Sci.*, 7: 81-98.
- Morgan, R.M. and S.D. Hunt, 1994. The commitment-trust theory of relationship marketing. *J. Market.*, 58: 20-38.
- Pikkariainen, T., K. Pikkariainen, H. Karjaluo and S. Pahlila, 2004. Consumer acceptance of online banking: An extension of the technology acceptance model. *Internet Res.*, 14: 224-235.
- Poon, J.M., 2006. Trust-in-supervisor and helping coworkers: Moderating effect of perceived politics. *J. Managerial Psychol.*, 21: 518-532.
- Rotter, J.B., 1980. Interpersonal trust, trustworthiness and gullibility. *Am. Psychologist*, 35: 1-7.
- Wang, Y.D. and H.H. Emurian, 2005. An overview of online trust: Concepts, elements and implications. *Comput. Hum. Behav.*, 21: 105-125.
- Yaqoubi, N.M. and R Shakeri, 2008. The analytical comparison of technology acceptance models by emphasizing on internet banking acceptance. *Iran. J. Manage. Sci.*, 11: 21-44.