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STUDY OF FACTORS AFFECTING CONSUMERS TRUST IN E-COMMERCE AREA, REGARDING IRAN TEJARAT ONLINE STORE, IN TEHRAN

Ali Yazdkhasty[1] and *Mohammad Javad Khani Arani[2]
[1]Department of Educational Adminstration, University of Kashan, Kashan, Iran
[2]Department of Management, Naragh Branch, Islamic Azad University, Naragh, Iran
*Author for Correspondence

ABSTRACT
Customers trust is one of the key factors and main elements of success in E-Commerce. Many experts believe in deploying a secure and reliable process of purchasing for buyers as the key to success in e-commerce. So, the purpose of this study is to identify factors affecting consumer trust of Iran Tejarat online store in Tehran in e-commerce area. This study is developmental in purpose and a descriptive survey regarding data collection method. Statistical society of this study includes all customers who did at least once online shopping in the first four months of the year 2013 from Iran Tejarat online store. The mentioned statistical society has 1,300 members, which 297 samples were selected of them using simple random selection through possibilities method. Researcher-created questionnaire was used to collect the related data, and two-variable linear regression and single-sample T-test were used for hypotheses testing through SPSS software. Results from data analysis indicated that all hypnoses are confirmed, except the hypothesis related to personal factors.

Keywords: E-commerce, Customer Trust, Personal Factors, Business Factors, Infrastructural Factors

INTRODUCTION
E-commerce has been defined as sales through internet. Report and Jaworski introduced 4 different types of e-commerce in cyber environment, regarding start and end point of the exchange, which includes B2C, C2B, B2B and C2C (Sanayei, 1999).

Access of a large number of people to the World Wide Web, and the expansion of electronic communications between individuals and organizations through virtual world, have provided a suitable ground for establishing commercial and economic dealings. E-commerce is the major achievement of using Information and communication technology (ICT) in economics (Wang and Emurian, 2005).

Using this technology has led to the development of trade, facilitating economic factors communications, providing a ground for small and medium-sized enterprises activities, improving productivity, costs reduction and time saving. ICT has increased the possibility of competitiveness among enterprises and also has led to the new jobs emergence .Volume of e-commerce dealings is growing throughout the world due to ICT expansion. According to the reports published by Forester Institute between years 2002-2006, volume of e-commerce dealings has been grown over 58 percent annually and has reached to 12,837 billion dollars in 2006 through these years from 2,293 billion dollars in 2003 (Corbit *et al.,* 2003).

On the other hand, despite the increasing usage of internet in Iran, e-commerce and online purchase is still less common and have not been that much appreciated by the people. One of the greatest obstacles in deploying of e-commerce in Iran maybe is the public distrust, in one hand, and unfamiliarity of the institutions involved in this field with trust-establishment mechanism on the other hand (Hasani, 2010). This study aims to identify these obstacles and suggest some solutions to overcome them by investigating the related factors affecting consumers trust in e-commerce area, with the focus on Iran Tejarat online store as the biggest online store in Iran.

Background
- Salehi *et al.,* (2005), in a study titled "Customer Relationship Management in E-Commerce through Enterprises" attempt to provide a classification of CRM packages and choose the most appropriate to be integrated with business through enterprises. For this purpose, the hierarchical analysis technique has

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been applied. The results show that the CRM packages focusing on web-based front-end office services are more potential for integration with e-commerce through enterprises.

- Khodadad *et al.,* (2009), in a study titled "Factors Affecting Consumers Trusts in E-Commerce (C2B Model)", studied the research hypotheses in the context of individual, business and infrastructure. The statistical society includes the customers who have had some purchases through existing online stores in the Iranian Virtual Community, and some of them were randomly selected as samples. The results of the data analysis show that all the research hypotheses are confirmed, except those of individual factors.

- Sohrabi and Khanlari (2010) in a study titled "Identification of Factors Affecting the Successful Deployment of E-Commerce in Small and Medium-Sized Enterprises in Iran", after the classification of indicators using exploratory factor analysis, tested the structural relations of the related model through structural equations modeling technique. According to the findings, all fitting model indexes were in the acceptable range and approved. The results showed that the maturity of online markets and IT infrastructure of the business have the most impact and correlation. In the final section, implications of this model along with scientific and administrative suggestions were discussed.

- Rasoulian and Javadi (2006) in a study titled "Obstacles and Driving Factors of E-Commerce in Iran" ranked these factors and also answered to the following questions in this regard. 1. What are the development barriers in e-commerce in Iran? 2. What are the driving factors affecting e-commerce in Iran? 3. How can we improve the level of e-commerce in Iran? Consequently, 24 factors were defined in 5 distinct groups as dissuasive factors, including communications and IT infrastructure (9 factors), economic (9 factors), political and social (9 factors) cultural and educational (9 factors) legal and juridical (6 factors). Moreover, 71 other factors were introduced as driving factors, categorized in 5 distinct groups, resulted in the current situation of e-commerce in Iran, which include technology and communications (6 factors), economical (3 factors), socio-political (2 factors), cultural and educational (4 factors), legal and juridical (2 factors), and some strategies for the development of e-commerce in Iran were suggested at the end of the study with respect to the research results.

Success in business relations is formed based on trustful relations. Trust is a multidimensional construct which has two related elements: Trust-making believes (competence, benevolence and Integration) Trust-making decision or tendency to dependence, where the person accepts the risk of loss. In an economic relationship, three factors of trust-making with customers include structural guarantee (sales and advertising environment security), amount of vendor or salesperson`s famousness and supply quality (quoting from McNight *et al*, 2002).

- Wells and Spinks (1999) believe that organizations try to reach their target audiences using different communication channels and following the principles of "effective communication systems". Image and reputation of an organization, inhale the blood in the arteries of commerce, and the mere commerce is the governments` lifeblood in turn (quoting from Firestone, 2000). Living without media and communication technologies is no longer possible. So, relations through media play a valuable role, and transfer media messages to the public at the same time. Hence, relations through media help organizations to enhance their fame and trustfulness affectively, which are defined along with their business strategies. Therefore, they identify their strategic goals using variant (quoting from Hanafi Zadeh *et al*, 2010).

Definition of Concepts

E-Commerce (Electronic Commerce): Process of buying, selling or exchanging products, services and information via computer networks and the internet (Ba & Paulo, 2002)

Business (General Definition): Any type of goods or services supply, usually (but not always) done for money (Theo and Leo, 2007).

End Users (Consumers): Those who buy goods or services from retailers for consumption (Disse, 2000).

Distributors and Brokers: Those who buy goods in a huge amount in order to distribute them (Disse, 2000).

Enterprise Customers: Organizations or enterprises that buy the goods and consume them for production or completing a productive process (Disse, 2000).

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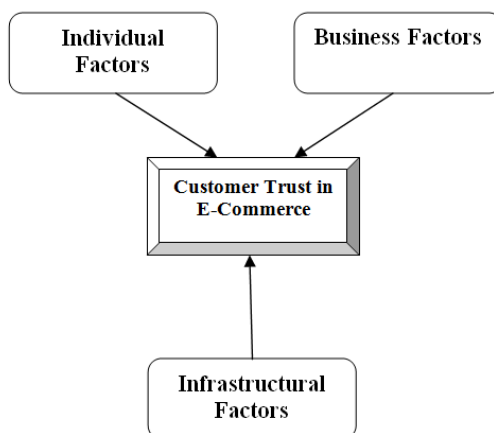
Research Conceptual Model
Source: Curbit et al., (2003)

Research Hypotheses
- There is a significant positive relationship between customers` individual factors and customer trust in e-business.
- There is a significant positive relationship between business factors and customer trust in e-business.
- There is a significant positive relationship between infrastructural factors and customer trust in e-business.
- Customers who do online purchase, trust in an online (electronic) store or market.

MATERIALS AND METHODS
Research Methodology
This study is developmental in purpose and a descriptive survey regarding data collection method. Statistical society of this study includes all customers who did at least once online shopping in the first four months of the year 2013 from Iran Tejarat online store.

The mentioned statistical society has 1,300 members, which the samples were selected of them using simple random selection through possibilities method. Researcher-created questionnaire was used to collect the related data. In order to access to the desired statistical society, the questionnaire was sent to all of them, after receiving their e-mails. Finally, 297 questionnaires were returned, which 252 out of them were accepted.

The questionnaire had 62 questions, each having a seven-scale answer as the amount of consumers` agreement on the scale, ranging from 1, i.e. totally disagree, to 7, i.e. totally agree.

For questionnaire validity testing, we used experts' ideas. It means we first determined the questionnaire indexes in respect to research literature and background, and then confirmed the validity of them through 10 sessions of discussion with experts in e-commerce field, who had experiments and also some studies in the area. In the end, questionnaire reliability was estimated through Cronbach`s alpha test, as accepted as 90 percent. Moreover, two-variable linear regression and single-sample T-test were used for hypotheses testing through SPSS software.

RESULTS AND DISCUSSION
Research Findings
Hypothesis 1: There is a significant positive relationship between customers` individual factors and customer trust in e-business.
Results of Table 1 shows that, according to the calculated β coefficient and given that β ratio of significance test between table variables and the customers` trust in e-commerce, the significance level is bigger than the error`s, so H0 is accepted. In other words, we can`t say, with 95% of confidence, that

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there is a significant positive relationship between customers` individual factors and customer trust in e-business, in the statistical society.

Table 1: Results of β Significance Test through Linear Regression, for H1

Variables	F detaluclaC tneiciffeoC	level ecnacifingiS	tluseR tseT	detaluclaC tneiciffeoC
srotcaF ytilanosreP	0.085	0.625	H1 Rejection	-0.34
srotcaF lanidutittA	0.073	0.085	H1 Rejection	-0.184
srotcaF llikS	2.835	0.096	H1 Rejection	-0.188
laudividnI sremotsuC`s srotcaF	2.866	0.076	H1 Rejection	-0.191

Hypothesis 2: There is a significant positive relationship between business factors and customer trust in e-business.

Results of Table 2 show that, according to the calculated β coefficient and given that the significance level is smaller than the error`s, H0 is rejected. Therefore, we can confirm a significant positive relationship between business factors and customer trust in e-business.

Table 2: Results of β Significance Test through Linear Regression, for H2

Variables	F detaluclaC tneiciffeoC	ecnacifingiS level	tluseR tseT	detaluclaC tneiciffeoC
Website srotcaF	11.650	0.002	H0 Rejection	0.372
Marketing Mix Factors	22.215	0.001	H0 Rejection	0.494
Business (Corporate or Enterprise) Factors	26.850	0.001	H0 Rejection	0.505

Hypothesis 3: There is a significant positive relationship between infrastructural factors and customer trust in e-business.

Results of Table 3 show that the significance level is smaller than the error`s, except the case of legal and juridical infrastructures, so H0 related to Telecommunication, financial, transportation and credential and also the whole infrastructural variables, is rejected. Therefore, we can confirm a significant positive relationship between infrastructural factors and customer trust in e-business, except legal and juridical ones.

Table 3: Results of β Significance Test through Linear Regression, for H3

Variables	F detaluclaC tneiciffeoC	ecnacifingiS level	tluseR tseT	detaluclaC tneiciffeoC
Telecommunication infrastructure	12.003	0.001	H0 Rejection	0.372
Financial infrastructure	28.142	0.001	H0 Rejection	0.546
Legal and Juridical infrastructure	2.761	0.712	H0 Rejection	0.171
Transport infrastructure	5.468	0.022	H0 Rejection	0.256
Credential infrastructure	3.445	0.045	H0 Rejection	0.206
Infrastructural variables	18.397	0.001	H0 Rejection	0.437

Hypothesis 4: Customers who do online purchase, trust in an online (electronic) store or market.

In order to investigate whether the mean trust of respondents is significantly bigger that 3 (the mean trust according to questionnaire structure) or not, T-test was done with one sample and the scores of customers trust questionnaire. According the results shown in Table 4, sample mean is 4.6543 and the related

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standard deviation is 0.72926, which has a meaningful difference with the figure 3. The significance level is smaller than the error`s, so, H0 is rejected, and we can confirm the trust of the customers to e-commerce with 90% confidence.

Table 4: Student`s T-Test Results

Calculated T	eergeD modeerF	Significance Level	leveL rorrE	tluseR tseT
65.974	251	0.001	0.05	H0 Rejected

Conclusion

In the first hypothesis we investigated the relationship between individual factors and customers trust in e-commerce. According to results of data analysis, no linear relation between individual variables of personality, skill and attitudinal factors was confirmed. So, there is no sufficient reason to confirm a significant positive relation between these variables and customers trust in statistical society. Moreover, when all the indexes related to customers` individual variables were tested, the linear relation test was not confirmed.

So, it cannot be said that there is a significant positive relationship between customers` individual factors and the issue of trust in e-commerce. These findings are not in line with the study of in which the researcher believes the root of the difference in other not investigated variables; factors like cultural issues, differences in interests and the same, which can affect the personal view toward e-business.

In testing the second hypothesis, no linear relation was found about business factors, website factors and marketing mix factors. So, one can say that there is a significant positive relationship between every two groups of these variables and customers trust in e-business. Furthermore, the positive relationship between business factors and customers trust in e-business is totally accepted. This confirmation refers to huge effect of business used tools, like website, and marketing mix related factors, like product, promotion, place and price, on customers trust. These findings are in line with the studies of Fountain, Results also show a positive relationship between telecommunication, financial, transportation and credential infrastructures and customers trust in e-commerce, though this relation was not confirmed between legal and juridical infrastructures and customers trust.

On the other hand, the whole infrastructural variables were confirmed to have a positive relationship with customers trust. This relation shows not only the huge effect of these factors on customers trust, but also confirms the extremely important role of governments as the responsible entity to provide appropriate e-commerce infrastructures.

Besides, disconfirmation of the relationship between legal and juridical infrastructures and customers trust in e-business can be interpreted through this fact that e-commerce is still a young and newly emerged type of sales, and also this fact that customers are not paying close attention to the possible legal problems in the context of e-commerce. These findings are also in line with those of Abbas Zadeh (2004). It was mentioned in hypothesis 4 that customers who do online purchase, trust in an online (electronic) store or market. To test this hypothesis we used Student`s T-test (one-sample test). Test results indicated the existing of this trust. This confirmation is indicating that customers trust has an important and affecting role in doing online (electronic) business.

Recommendations

• Developing secure telecommunication infrastructures in order to increase the trust in cyber space by the Ministry of Communications and Information Technology.
• Developing needed infrastructures to complete settlement of technologies related to electronic payment.
• Developing and enhancing the delivery system of the purchased goods in post office and also the facilities of transporting goods purchased from a variety of Web sites and online (electronic) stores.
• Introducing and defining some responsible entities for verification, validation and monitoring the active companies in the field of e-commerce.
• Applying suitable security system and policy (confidentiality of customers` information) in e-commerce websites, by the related active companies in the field.

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• Supplying quality and variant products and services, under reliable and well-known brands and with the appropriate prices, for online sales, and also providing appropriate after-sales services.
• Providing comprehensive, sufficient and correct information about products and services supplied, and also designing the needed products and serviced suggested by the customers.

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