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INVESTIGATION TRUST FACTORS AT ELECTRONIC TRANSACTIONS IN THE CONTEXT OF E-COMMERCE

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Abstract- Studying trust in online environment has especial importance for researchers, engineers, managers, economic investors. E-Commerce has recently been one of the new solutions in the efficiency function of business firms. Trust is a complex concept that has been studied by many disciplines, such as laws, business, political, sociology, psychology, among others. Therefore, in business, factors affecting the relationship between customers and vendors in trade either small or large scale, such as security, satisfaction, loyalty and trust must be examined in each form. In addition, the behaviors before purchase, during purchase, after the purchase are also different with each other in three forms of commercial transactions, and the topic of trust is brought up in a chain of trading processes. In other words, to assess the trust of the people or customers to any electronic trading system, we have to review and compare factors of trust and security in the chain of electronic business. Trust is a factor whose establishment is influenced by the type of the business, because the business type is actually the way of interaction between the two parties involved in exchange and its chain. The flow of information in any type of business has its diversity and difference. In this research, we investigate trust factors at electronic transactions in the context of e-commerce.

Keywords - E-Transaction; E-Commerce; Investigate ; Assessment; Trust ; Security;

I. INTRODUCTION

In the context of E-Transactions, managing and implementation of EC (E-Commerce) transactions or delivering EG(E-Government) services and continuity of operations and transactions is subject to trust between both parties. Drawing trust of the two sides depends on numerous factors whose analysis may lead to an increase in trust for E-Transactions in the context of EC and EG. In EC, creation of trust and electronic assurance is dependent on external and internal features of EC Websites such as having a safety seal, appearance proper with the objective of the site, products with high quality, meeting obligations, ease of searching and fast-loading properties of the site, etc. In EG, the influential factors in EC act similarly in order to build trust and confidence for the two sides; and somehow it can be said that EG can be can be supposed as a special case of EC in which one of the parties is the government and the second party may be one of the governmental partners or consumers or merchants. Since EC and EG are one of the applications of modern ICT, studying the factors affecting the growth of trust are also helpful in drawing trust in E-Transactions of EG and EC. Therefore, addressing the features of applying ICT in various fields as well as reviewing the effective factors and exploring and extracting other factors play a prominent role in developing the trust in ICT applications.

Exploration to find the factors affecting the consumers' trust in E-Transactions in the template of introducing the factors leading to an increase or decrease in the level of trust and

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analyzing the positive impact of existing factors concerning rising trust so that the results of the research will identify these factors in the E-Transaction context and based on the findings, reasons are to be suggested simplification and acceleration of the development of EC and EG and improvement of trading, commercial, and service providing processes will be provided. And deep attention to factors increasing trust in the E-Transaction context under EG and EC reduce the number of hazardous consequences of applying this technology.

But despite the existing limitations and obstacles, the process of development and application of EG and EC has been followed in the country and scientific and research institutes has constantly provided suitable plans and strategies for developing the use of IT in the country. Also several researches have been carried out in all the fields associated with the development and application of IT, including the two challenging areas of security and trust in e-management, EC and EG. In this research, the methods, findings and ideas of previous researchers in Iran as well as other countries have been exploited so that the previous could be considered in the present work. A number of studies about e-trust have been conducted in recent years in Iran is as follows[1].

1- Jalili Rasool, 2007, Security and Trust in Electronic Commerce,

2-Khodadad Hosseini et al, 2009, Factors influencing the customers' trust in e-commerce

3 - Azmi Reza and Kordiain Masoumee, 2010, The reputation-based trust model on in the P2P ecommerce

communities with the ability to identify and deal with a malevolent attack

4 - Mirzapur N. and Baraan Dastjerdi A., 2010, a trust model based on reputation, trust Tour

5 - Sanaee Ali, 2012, The role of trust in e-commerce, Sixth But, a number of studies have been conducted in recent years in others is as follows about trust or e-trust.

1-Gefen & Straub, 2004, Consumer Trust in B2C EC and the importance of social presence : Experiments in e-products and e-services, Omega, 32 [2].

2-Olmedilla et al.(2005) [3]: Trust of a party X to a party Y for a service Z is the measurable belief of X in that Y behaves dependably for a specified period within a specified context (in relation to service Z).

3-M. Lee & Lee , 2006, Consumers' initial trust toward second hand products in the e- markets. Journal of Computer Information Systems, 46(2) [4].

4-Ayass, 2008, The consumer's willingness to accept the risks against an internet seller, based on positive expectations about the future behaviors of the seller[1].

5-Wang,2009,e-trust is a multi-faceted and context-dependent construct that involves cognitive, behavioral, psychological, cultural, uncertainty and risk factors, among others. Perceived trust can be built and reshaped before, during and after the e-transaction[5].

According to the fact that the main purpose of this research is to study the EC CSF(critical success factor) or effective factors on trust in E-Transactions critical factor for trust on the EC Context. Since each transaction including E-Transaction is originated from a minimum two-party interaction, so in this kind of interaction the subjective and objective behaviour of parties, possibly influenced by environmental conditions, affects the way of interaction. In an E-Transaction on EC Context which is affected by the new conditions of internet or virtual environment, there are several influential factors in accomplishing the interaction. One of the major factors is fulfilment of the E-Trust before making intention to participate in E-Transaction. The main objectives of this research is to expanse the utilization of E-Transactions and facilitate and expedite the built of E-Trust, online trust building mechanism, online trust management for growth of trades, and consequently the growth of EC and EG in the country. Therefore this study is fully applicable and in order to collect the information related to the research literature, the library method is used including review of academic resources such as books, articles, scientific and research journals, and information of sites and online scientific journals.

Surveys capture the level of trust by means of both observations or introspection, but without engaging into any experiments. Respondents are usually providing answers to a set of questions or statements and responses are e.g. structured according to a Liker scale. Differentiating factors are the underlying theoretical background and contextual relevance.

For a particular research area a more specific survey can be developed. For example, the interdisciplinary model of trust,[6] has been verified using a survey while [7] uses a survey to establish the relationship between design elements of the web site and perceived trustworthiness of it.

II. TRUST , E-TRANSACTION AND E-COMMERCE

Many EC activities are classified as B2C (business-toconsumer) in which individual consumers purchase goods or services from online merchants. C2C (consumer-toconsumer) is another popular EC model, in which consumers sell to each other at popular online auctions[1]. B2B (business-to-business) EC involves one enterprise buying goods or services from another enterprise. B2G(business-togovernment) EC aims to help businesses sell to government. Usually, when in e-trade employs a network to put individuals in direct contact with each other in some form. this class of e-business, It is called P2P E-Commerce. EC has become a universal trade event in the world. By creating trade more competitive and productive, EC is main factor for both developed and developing every countries in restorative their economies and in supporting national economic growth. In fact it is, as respects, that after more than a decade of growth, EC diffusion and adaptation is still dissimilar between different countries and a digital divide of EC adoption is broaden in the world. Here researchers have some challenges such as, policy-makers and practitioners to better understand the event and to certify the potential and opportunity presented by EC is taken and realized in all trades. EC Dimensions are involve: (Market or Business Models, Communication Protocols, Product Ontology's, Personalization, Marketplace Visualizations, Trust & Reputation, Privacy Policy & Information Security, Payments Systems & Transaction Processing, Intermediaries, Legal & Laws Issues). Services quality in the area of products and physical goods has long history but the quality discussion has not too long history within the scope of services. Services have characteristics that make them different from the goods. EC can take several forms depending on the degree of digitization (the transformation from physical to digital) involved. The degree of digitization can relate to: the product (service) sold, the process and the delivery agent (or intermediary).

A product can be physical or digital, the process can be physical or digital, and the delivery agent can be physical or digital. In traditional commerce all three dimensions are physical, an in pure EC all dimensions are digital. All other combinations include a mix of digital and physical dimensions. If there is at least one digital dimension, we consider the situation EC but only partial EC. For example, buying a shirt at Wal-Mart Online, or a book from Amazon.com is partial EC, because the merchandise is physically delivered by FedEx. However, buying an e-book from Amazon.com or software store from gentari.com is pure EC, because the product, its delivery, payment, and transfer agent are all done online[1].

In EC A Managerial Perspective [8], reference is made to a model representing the dimensions of EC. This model, originated by Choi et al in 1997 [9], argues that there are three constituent factors in EC, namely Product (or Service), Process and Delivery Agent. These three dimensions can be categorized as either physical or digital. In traditional trade all dimensions are physical whereas in pure e-commerce all dimensions are digital [8]. This allows for eight possible combinations, each of which, with the exception of where all three dimensions are physical, can be legitimately termed as EC. EC framework of six levels has been formed as follows.

1) Application services. / 2) Brokerage and Data services, Data or transaction management. / 3) Interface and Support Layers. / 4) Secure Messaging, Security, and Electronic Document Interchange. / 5) Middleware and Structured document interchange. / 6) Network infrastructure and basic communications services.

Incorporation and integration of the three levels in another six levels, three levels of framework to be discussed is summarized. This framework of three levels of EC infrastructure, services and products has been established. The infrastructure includes hardware, software, database and communication are, for duty in the form of services through the Internet, EDI and other forms of support and messages Mark Booth messages through the Internet or other networks are used in. Services, including messaging and messagemaking and investment and a wide range of abilities needed to find and provide information (if needed in the form of its business) and search for potential business partners as well, negotiation and agreement on the trade be. Products, forecast and provision of goods and services directly related to business information for customers and business partners, cooperate and share information inside and outside the organization and organize electronic market environment for doing business with the final disposition of consumer (purchase of remote banking operations, stock broker, advertising), trade between companies or major business activities, business affairs within the organization, is formed. Responsibility to make sure security in EC systems in EC application layer, the custodian or owner of the EB enterprise is. But the layers and other surface infrastructure, security talk a little more complicated and responsible custodians of a series of matters, including Internet service providers, software engineers and security systems and information is. High security and appropriate EC system, the most important element of creating trust in EC or E-Transactions and makes the same point of the East, the customer decides to purchase goods or services in the context of E-Transactions and socalled deal is welded.

With a little careful in the framework of three levels of EC, which is clearly mentioned factors, the process chain in EC business transactions and make up. Hazards or reduce the trust of this chain, synonymous with trying to maximize the amount of satisfaction from both sides and secure the proper functioning of each system components and provide marketing and advertising of products or services ranging from sales, financial settlement and transportation and delivery goods, after sales service is. In a large part of EC business processes in the chain EC transactions by the occurrence of joins. In other words, each of the three components in the context of EC, includes the following major systems are a significant role in providing security and have the trust of the system. EC websites are a critical part of firms brand and business. As they are becoming more and more complex, visibility levels are decreasing for EC directors. We live in an information and knowledge economy that values finding information in an increasingly web world. B2B portal is a Business Platform to Ultimate Productivity Improvement. A Web-portal is defined as an access point to WWW. A portal is a combination of web pages, features and services which become a primary destination for users. A B2B portal is a distinct kind of website with features to conduct e-business and manage significant parts of corporate business processes. Main components of a B2B portal are SCM, Marketplace, E-Auction, Reverse Auction, Storefront for Participants, Forum, Internal Messaging System, Classified, Directory of Firms, E-catalog, Product Content Adding System, Product Notification.

The commercial cycle includes the processes to find goods and services that fit the needs and requirements finding ways to trade and make agreements (search and negotiation)ordering the transport and paying the price (applying the agreement and paying)- after sales activities such as guarantee and other after sales services.

In order to study the factors of trust in EC based on trust process approach, we must first pay attention to discussing the stages of the EC process. In the following, we will explain the stages of the transaction process in EC models, including B2B and B2C.

In the B2B type of EC, each transaction consists of five main phases namely, research and planning (checking out that what the company needs, to what extent, under what conditions and with what quality), identification (searching the Internet to find the right partner to supply the needs), negotiation (initial negotiation with the partner for the formal exchange of information leading to the final agreement), implementation of the trade commitments (accomplishing the agreement and establishing the B2B exchange process), and post-trade services (post-transaction operations such as recoupment of account, final inspections, exchange of the documents and finalizing the commitments of the parties). Each phase is consisted of a set of business processes. Some of these processes are intra-organizational processes that are performed between different units of the firm and some of them are carried out between the firm and business partner. From the applied software's point of view, the software that are associated with the internal process of the firm are called behind the counter systems, and the software that are related to the exterior processes of the firm are called front counter systems. In each phase, particular applied software is used to perform the process. In this model, the process of relation between two or more organizations, suppliers, raw material suppliers and service providers of various types are of main concern [10].

In the B2C type of EC, each transaction is typically consisted of four phases namely, information phase (getting the information required by the buyer from the internet), negotiation phase (the initial negotiations for intention to conduct a transaction between parties and bargaining which is usually with the aim of the best possible price), transaction phase (the most important step of conducting a transaction process) and finally the phase of post-transaction services (after-sales service operations, providing up to date information by the seller to the buyers). In this model of EC the tasks of each phase of the transaction are done by particular software. This model expresses the interactive relationship between the producer and the final buyers of products and services.

The stages of EC of type C2C include four steps. This model of EC mainly focuses on the retails of used domestic merchandise, where the buyers and sellers are both from the final group and there is no trace of a producer or intermediate party in the middle. A common example of this style of trading can be observed in Friday markets or local and regional auctions in which, each person exposes his produced goods as a retail to the buyers. The most famous examples of this model of EC is the ebay website.

The G2C model that is suggested for the relationship between the people and government has four stages. In this model, the relationship is more of a service nature rather than a commercial one, and includes services that the government can offer to the people, or is a context to facilitate the financial connections of citizens and government in taxation issues, or acquiring services that are offered by the citizens to the government in the form of C2G model which can include a variety of demands in the field of economy and business.

Despite some similarities in the process of EC in its various types, there are significant differences. It is certain that the way of creation and formation of trust will also be different in these types of transactions.

III. TRUST, RISK, REPUTATION, PRIVACY AND SECURITY

The concepts, Trust, Risk, Reputation, Privacy and Security, are widely used in various studies done by multiple disciplines, and they are often incorrectly referred to almost as synonyms. The aim is to clarify the concepts from the consumer viewpoint in EC. One of the importance parameters on the context e-transaction considerations is, of course, security. The hardware, software, and physical plant developed and used by Business companies services are carefully coordinated with an aggressive set of best practices to provide maximum protection and integrity at the transport, system, and physical levels. on the other hand Security is one of the most important features of a business site or EC portals. Electronic settlement, signatures, and electronic money flow are essential for any EC business. Therefore, more sophisticated cryptography and authentication technologies must be developed and deployed. In addition, key issues in the security administration function of service management must be addressed. There is a widely perceived risk attached to payments made via the Internet, and this perception is in some circumstances justified. The information sent from the customer to the Web server may pass through many different stages before being delivered. The information is in digital form, and at any stage an unauthorized individual may scan every message looking for credit card numbers (which are easily identified). Therefore, any EC site must be secure to prevent fraud. In the etransaction context all companies should be try to safe the transport Security (for data and information transport, goods transport), System Security and Physical Security.

In E-Transactions buyers should reassurance that the information they secure and private key into the system. In Internet interaction importance packages support with industry standard SSL (Secure Socket Layer) protocol. The SSL protocol encrypts (or scrambles) every message on the network making it extremely difficult for anyone who intercepts the message to extract your customers' information. The US government views encryption technology as munitions, and therefore the only version of SSL available worldwide is the relatively weak 40-bit version [11]. A second example of an existing and widely used security mechanism is the SET (Secure E-Transaction) protocol that is developed in partnership by Visa and MasterCard. SET ensures a secure payment infrastructure for EC by using public cryptographic keys and providing the user with a

special code that can be used anywhere and is unique to the holder. Trust appeared with the humanity and the development of social interaction. Almost every aspect of a person's life is based on one or another way in trust. So, trust is a very rich concept, covering a wide range of relationships, conjoining a variety of objects. The concept of trust is intimately linked to risk and expectations: trust is used as a substitute for risk, but it also creates risk for the truster [12]. Risk also reoccurs as a topic in business-related literature. Risk is defined as a consumer's perceptions of the uncertainty and adverse consequences of engaging in an activity [13].

However the trust differs from security, since the term "trust" is used when there is going to be an interaction in a relationship of which on one side is a person or company referred to as "the truster" and on the other side is a person or company as "the trustee". The truster acquires confidence about the fact that his general expectations on the words, promises, written and unwritten statements of the trustee will be met. In other words, the onset of the trust subject is built on an interactive Context or basis between at least two correspondents.

Trust and security are two basic keywords in an online trading environment. The transactions at an e-environment in comparison with the traditional trading environment, has two basic challenges namely, lack of possibility to verbally or face to face meeting between the transaction parties and lack of possibility to physically touch or sense the goods in trade during purchase. These challenges make the process of building trust between transaction parties in an electronic environment more complex and riskier. Management of this risky environment requires the establishment of security and trust in the e-commerce system. The term "security" in an online environment is referred to as the issues of protection of information and information systems. Trust is taken into consideration when in regard to a transaction, which is conducted from one party individual or company as the truster (who has some special psychological, personal, experimental or cultural characteristics which may affect the possibility of his/her/its trust to others) to another party individual or company- as the trustee (who has the of eligibility, characteristics ability, benevolence, predictability and integrity of thoughts and opinions), the truster side tries to gain confidence that his/her/its overall expectations about the speech, promises, oral and written statements will be met by the other party. These two roles of trust can be undertaken by an individual, a company or even a product. In the electronic environment, unlike the real environment, the truster is a customer or person who conducts e-commerce activities through a website and on the other side, the trustee is the website itself[1].

This reputation value is calculated for a user in some ways through the amount of trust the other users have in that particular user. But in the topic of trust measurement for online trading systems, there exist some major challenges that seriously impede the issue of measurement or estimation of trust.

Some of these challenges are explained as follows.{Little motivation for rating (many users may not have enough motivation to vote about a subject) / Tendency to vote positively/ Unfair votes/ Change of the username (a user may enter the site through another username after his rating is dropped). In order to deal with this problem, the rating of the

new users can be reduced to the lowest possible level.}. Deviation from the quality over time (the amount of an individual's reputation may be reduced by passing time). Voting multiple times (it may be possible a user exceeds the allowable limit of rating times or privilege for another user). In order to deal with this challenge, a mechanism must be implemented that only after the transaction the parties are able to vote for each other.

Formal metrics focus on facilitating trust modeling, specifically for large scale models that represent trust as an abstract system (e.g. social network or web of trust). Consequently, they may provide weaker insight into the psychology of trust, or in particulars of empirical data collection. Formal metrics tend to have a strong foundations in algebra, probability or logic.

There is no widely recognized way to attribute value to the level of trust, with each representation of a 'trust value' claiming certain advantages and disadvantages. There are systems that assume only binary values,[14] that use fixed scale,[15] where confidence range from -100 to +100 (while excluding zero),[16] from 0 to 1 [17][18] or from [-1 to +1);[19] where confidence is discrete or continuous, one-dimensional or have many dimensions.[20] Some metrics use ordered set of values without attempting to convert them to any particular numerical range (e.g.[21] See [22] for a detailed overview.

There is also a disagreement about the semantics of some values. The disagreement regarding the attribution of values to levels of trust is specifically visible when it comes to the meaning of zero and to negative values. For example, zero may indicate either the lack of trust (but not distrust), or lack of information, or a deep distrust. Negative values, if allowed, usually indicate distrust, but there is a doubt [23] whether distrust is simply trust with a negative sign, or a phenomenon of its own.

IV. RESEARCH HYPOTHESES

The Main Hypothesis

H1-The e-trust has a positive significant impact on the decision making for carrying out E-Transactions.

The Sub-Hypotheses

H2- Regarding the trust aspect, the perceived quality from the incorporate EM variables and perceptions of multi channel coordination (MCC) of EC companies has a positive influence on the increase of E-Trust of the truster to make decision for committing in e-Transaction on the EC Context. H3- Regarding the trust aspect, the perceived capabilities and potentials of the confidence on the vendor such as benevolence, honesty, integrity, competence, etc. and pervious experiences of the customers about the advantages like satisfaction and adhesion of the past dealers, reputation and quality of the vendor services, etc. have a positive influence on the E-Trust to make decision for committing in e-transaction exchanges on the EC Context.

H4- Regarding the trust aspect, the perceived quality of information systems or infrastructure of technical quality, financial and payment, infrastructures of the vendor and the perceived quality of information security and privacy policies has a positive influence on the E-Trust of the truster to make

decision for committing in E-Transactions on the EC Context.

H5- Regarding the trust aspect, the perception of professional certificates (E-Trust signatures, insurance of the exchanges, certificates of authenticity, letters of appreciation, approval and appreciation notes in the social networks, amount of likes and recommendations in the social networks affiliated to the corporate's website link or its products) and support or warranty and the introduction of a well-known and reliable third party have a positive influence on the E-Trust to make decision for committing in E-Transactions on the EC Context.

H6- Regarding the trust aspect, perceptions from the development strategies, policies and guidelines of the corporation considering the market competitors and product improvements and perception of EC government general or public master plan in IT context has a positive influence on the E-Trust to the corporate's online transactions.

V. METHODOLOGY AND ACTUALLY OF RESEARCH

Since in internet mensuration the amount of replies to questions of the questionnaire are undetermined, and comparing to traditional mensuration (interview, postal or telephonic) its implementation is simpler and has lower cost, hence usually in this method the sampling is not done and the research is performed over the whole statistical society.

Statistical society of this research is the customers of computer tools and equipment shops in Iran-Khorasan province who have bought their demanded goods and services online from these shops since December 1^{st} 2010 to June 30^{th} 2013.

The number of this statistical society is about 3620 individuals whom were electronically invited to fill an online questionnaire after their establishment of online purchase. After the determined deadline for online poll, the unrelated and unclear answers were deleted and the usable data dropped to 3440 filled forms. Then by using LISREL software, the collected data were statistically analyzed and arranged.

Statistical analysis of the usable collected data from the online poll shows that due to first part of questions, 76 percent of the participants were between 19 to 40 years old and 56 percent of the participants have college educations. The results also show that 68 percent of them are male and 32 percent are female.

After analyzing the collected data from the questionnaire, it can be stated with 95 percent certainty that there is a significant cause and effect relationship between the amount of customers' E-Trust and their tendency to commit in an E-Transaction (internet purchase) on the EC Context.

It is an explanatory one mainly; however to support hypotheses as well as developing a conceptual model, it can be an developing research. There is also used survey method based on research strategy. The theoretical part of this study is based on secondary data obtained from library study while. The empirical part is based on gathered primary data from statistical population which are online trustors who have more one experience online purchasing. The instrument of this research is a online questionnaire. SEM (Structural equation modelling) technique is very general and powerful multivariate analysis, regression and precise extended family "general linear model" (General linear model). The steps of research methodology includes:

- 1- Introducing e-Trust Factors
- 2- Creating Conceptual Models
- 3- Using SEM For Solving
- 4- Results & Conclusions

VI. DATA COLLECTION TOOLS

In this study, the researcher needed to gather a number of data. The most important category was collection of data regarding to the hypotheses testing. In order to collect data for hypotheses testing, the method of online survey was used in such a way that according to the author's suggestion and by collaboration of a number of authoritative and active EC websites of the country (12 websites that in addition to traditional sales, sell goods and services online in the setting of computer items such as hardware, software, computer peripherals, electronic data carriers, electronic tools dependent on the field of computer, as well as web and internet services such as domain registration, web space and internet bandwidth provision) an online survey was conducted in the sales portal of the studied companies and by using online questionnaire, the information of the survey was collected in about a two-years period.

This questionnaire had two main parts. The first part was related to demographic information and some personal characteristics of the respondents. Due to the fact that in all of these websites the sale process was carried out through their membership mechanism, some of the customers' demographic data was already available in the database of EC websites and the individuals only needed to update them or fill the uncompleted fields if necessary.

This part was consisted of 10 questions indicating the demographic properties and some personal characteristics of the users of chosen websites.

But in the second part of the questionnaire 62 statements are included to study the customers' opinions about the importance of each of the specified features in the value of the discussed factor (which was typically the E-Trust in this study). In each of these statements the customers rate the importance value of a feature or specified criterion on a 5 level LEKERT SCALE (from 1 meaning utterly unimportant to 5 meaning totally important) includes: Unimportant (Very Unimportant),Of Little Importance(Unimportant),Moderately Important(Neither Important or Unimportant) ,Important and Very Important .

VII. RELIABILITY AND VALIDITY OF QUESTIONNAIRE

Since for each exam the validity and reliability of the utilized tools such as questionnaire should be determined, a procedure for testing the tools is needed. Validity means that the tools or designed questions included in the tools can accurately measure the variables and parameters of each considered criterion. Also reliability or credibility of measurement tool implies that if the measurement is repeated under the same conditions, the resulted outcomes will be pretty similar and authentic. Since the data collection tool in this research is a web based questionnaire whose reliability and validity was checked and confirmed by masters and experts in the area of EC science, it can be stated that the questionnaire outcome is reliable. The confirmation process was in such a way that first, due to resources and theoretical bases of the study, the indicators of questionnaire was derived and then after several meetings with 10 individuals who were specialists and experts of IT, particularly having proficiencies and scientific and practical skills in the field of EC, the validity of research was approved.

	Variable	Hypothesis	Hypothesis Questions			
	Name	#	Trypomesis Questions			
1	TDSET	H1	TDSET01-TDSET10			
	E-Trust and E-Transaction related decisions; and the					
	factors affecti	ng them.				
2	MMC	H2	MMC01-MMC12			
	Relationship b	between electron	nic marketing mix,			
	electronic con	nmercial compa	ny's multiple channel			
	coordination a	nd E-trust				
3	BSL	H3	BSL01-BSL08			
	Relationship b	between the feat	tures inspiring trust toward			
	the vendor (se	ller) and E-trus	t, as well as previous			
	experience of	customers with	regard to reputation,			
	satisfaction ar	d loyalty.				
4	PSP	H4	PSP01-PSP10			
	Relationship b	etween information	ation security policy, data			
	confidentiality	, qualitative fea	atures of EC			
	infrastructures and credibility of EC execution					
	processes					
5	CAG	H5	CAG01-CAG12			
	Relationship between the third guarantor, the					
	commercial company's rating of goods and services					
	(certificates and signs of E-trust) and effectiveness of E-					
	commerce credibility.					
6	PEG	H6	PEG01-PEG10			
	Relationship b	between the stat	e and private			
	establishments' support systems, strategies and E-trust.					
Fi	Figure 1: A brief of the concepts in the questionnaire and					

how they are encoded

Initially, the variation coefficient alpha for each subscale score of the questionnaire (or the test) and calculate the total variance. The alpha coefficient is obtained using the following formula.

$$r_a = \frac{j}{j+1} \left(1 - \frac{\sum S_j^2}{S^2} \right) \tag{1}$$

j is A subset of the questionnaire or exam questions S_i^2 is Variance on my test

 S^2 is of the total Variance

The coefficient of zero indicates a lack of trustworthiness and reliability of +1 indicates perfect. Typically values of 0.7 for this ratio can verify their reliability.

Construct validity and adequacy of the sample size in order to assess the adequacy of the sample size and validity (factor analysis possible), the test KMO (Kaiser-Meyer-Olkin) Bartlett used. The KMO test statistic is defined as follows:

$$KMO = \frac{\sum \sum r_{ij}^2}{\sum \sum r_{ij}^2 + \sum \sum n_{ij}^2}$$
(2)

The simple correlation coefficient between variables i and j in rij the partial correlation coefficient between them is aij .

Values greater than 0.7 for the test sample size is sufficient to express. Using the Bartlett test statistic is defined as follows:

$$\chi^2 = -(n-1 - \frac{2p+5}{6}) \ln |R|$$
(3)

Where **n** is the number of subjects, **p** the number of variables and $|\mathbf{R}|$ is the absolute value of the determinant of the correlation matrix.

In this test, the null hypothesis is that the variables are correlated only with themselves. Reject the null hypothesis that the correlation matrix contains information that is meaningful and there are minimum requirements for conducting factor analysis and then construct validity is confirmed.

So the question is quite convenient in terms of reliability, validity of the scale is confirmed.

Also in order to confirm the reliability of questionnaire, the method of Cronbach's alpha coefficients was used whose results are listed in Table 3 In the following table, the alpha coefficients of the questions and the number of questions in each part are indicated.

	N	%	
Cases Valid	3440	100.0	
Excluded	0	0	
Total	3440	100.0	

Table 2: Case Processing Summary

Reliability Statistics		
Cronbach's Alpha: 0.943	N of Items=62	
T-11-2. On the style Alasta Confficient		

Table 3: Cronbach's Alpha Coefficient

N	Research variable	# of	Cronba
о.		question	ch's
		s	alpha
1	The influence of E-Trust on	10	0.776
-	intention to participate in F-	10	01770
	Transactions		
2	The influence of perceived quality	12	0.892
	of the mixed EM variables		
3	Perceptions about benevolence,	8	0.792
	integrity and competence		
	characteristics of the seller,		
	Previous experiences of customers		
	about vendor reputation,		
	satisfaction and loyalty of the		
	previous customers		
4	The influence of perceived quality	10	0.816
	of information security and privacy		
	policies and Perceived quality of		
	legal, technical, financial, credit,		
	etc. infrastructures		
5	Perceptions about professional	12	0.845
	certifications, approvals, E-Trust		
	symbols, and through verification		
	and endorsement by a third party		
6	Perceptions about strategies,	10	0.884
	policies and methods for the		
	company's development in the		
	market competitions as well as		

development of products Table 3: Reliability Statistics of the questionnaire

Because the alpha coefficient of 0.943 is obtained. That is greater than 0.7. The reliability Statistics of the questionnaire is represented in Table 3.

Since in all cases the coefficient alpha is greater than 0.7, so the reliability of the questionnaire is quite appropriate, therefore, the reliability (Validity) of the scale is confirmed.

Row	Index		Amount
1	Kaiser-Meyer-Olkin Measure		0.930
	of Sampling		
2	Bartlett's Test of Sphericity	Approx. Chi- Square	183517.488
3	Degrees of freedom (df)		1891
4	Significance level		0.000

Table 4: Evaluate the validity and adequacy of sample questions (KMO and Bartlett's Test)

According to the statistics, KMO (which is more than 0.6) are adequate to verify sample size. The significance level for the Bartlett test, factor analysis was possible due to the variables (significance level less than 0.05) and construct validity is confirmed. (Table 3) Since in all cases the coefficient alpha (Table 3) is greater than 0.7, so the reliability of the questionnaire is quite appropriate, therefore, the reliability (reliability) of the scale is confirmed. It can be seen that the resulted coefficients are quite acceptable. After the confirmation of validity and reliability and applying the final changes and reforms, the questionnaire was attached as a business case to the main system of EC, such that it was contained in the website. The data collection mechanism was in a way that after each online purchase by customers, an invitation was sent to their registered email and they were invited to return to the website and fill the online survey. In order to encourage the customers to revisit the site next to the coupon incentive to complete the questionnaire only once every questionnaire that was completed by the customer will be considered. This was a factor to drive and accuracy to go in completing the forms. Based on the analysis of new customers to the membership status of this style of data collection increases the number of new members during the same period of previous coupons reserve in addition to advertisers' sites for electronic sales stimulator of people's willingness to participate in the survey, as well as it was regarded as a sole income.

VIII. EVALUATION OF MAIN AND SUB-HYPOTHESES AND THEIR RESULTS

In this research, we have 6 hypothesis the we should explain about analyzing in this study, we chose or defined six categories of ideas in order to address the issue of e-trust in etransaction and then, we implemented them and obtained new or better results that are discussed as follows.

This section of research includes presentation of primary and quantitative data analysis that is derived from technical surveys and polls in a number of Iran's EC websites which have collaborated in the fulfillment of this research project.

In order to analyze the collected data in this study, the LISREL or method of SEM was used. This method of analysis estimates the extent of the dependence of variables

mentioned in the questionnaire to the conceptual factors and also how the conceptual factors affect each other.

SEM is a comprehensive statistical approach for testing hypotheses about relations between observed and latent variables. It combines features of factor analysis and multiple regressions for studying both the measurement and the structural properties of theoretical models. The proper selection of Structural Equation Modeling is a crucial part of the research study (Davis, 1996; Stevens, 2002[24]). According to Stevens [24], (2002) SEM allows for the testing of models with varying degrees of dependent variables, while measuring model error to bridge the gap between the latent variable. SEM is formally defined by two sets of linear equations called the inner model and the outer model. The inner model specifies the relationships between unobserved or latent variables, and the outer model specifies the relationships between latent variables and their associated observed or manifest variables (Gefen et al., 2000) [25].

The latent variables and their related observable variables. together with respective inner and outer equations used in the structural model of trust, are given in Figure 1. The detailed hypothesized model is presented in Figure 2 too. The unidimensionality of each construct in the proposed model (rule of law, communication, competence and reputation, personality traits, social interaction, trust, and relationship quality) was checked. Unidimensionality check is necessary when the manifest variable s are connected to their latent variables in a reflective way [26]. A construct is essentially unidimensional if the first eigenvalue of the correlation matrix of the block manifest variables is larger than 1 and the second one smaller than 1, or at least very far from the first one. After conducting the principal component analysis, the first eigenvalue resulted greater than 1 and second eigenvalue less than 1, for each block. The results lead to confirming the unidimensio nality for all the blocks } [27].

LISREL or SEM is a very general and powerful multivariate analysis technique in the family of and multiple regression methods and in a more precise expression; it is an extension of "general linear model". SEM is used as a method for the analysis of large sample and the sample size can be changed the assessment of parameter significance. It enables the researcher to simultaneously test and study a series of regression equations that allows testing campaigns. The structural equation modeling is a general approach to testing hypotheses about the relationship between the observed and latent variables, which is sometimes called the covariance structure analysis, casual modeling and sometimes it is called LISREL. But the dominant expression in these days is the structural equation modeling or in abbreviation form, SEM.

Through this method one can examine the acceptability of theoretical models in specific societies using data correlations in non-pilot and pilot tests. According to Byrne[32]:

- SEM: Studies the relationship between the two factors while the effects of other factors are also taken into account.
- SEM: Is also suitable in the credit approval of a model that includes low importance factors or relations
- SEM: Indicates the reliability of the results through the evaluation of measurement errors.

Due to the fact that the goal of multivariate analysis methods such as SEM is to eliminate the factors and relations that are not so important from the structural model in order to maximize the summarization to obtain accurate results, the expected outcomes from analyzing the collected data and information in this research can be listed as follows: Approval of the proposed model / Approval or rejection of the research hypotheses / Making the new finding available for future use. The structural model is causal relationships between the latent variables.

This model aims to discover both direct and indirect effects of the exogenous latent variables on endogenous latent variables, or in other words, it is the presentation of the research model path analysis. At this stage, we have tried to offer the causal research model. The Figure 1 shows the research conceptual framework models.

A conception definition is a section of the scientific research process that describes the meaning of a word with respect to a specific discipline. It may be difficult to understand due to its strict and conceptual uses. Conceptual model definition is very vital especially during content analysis. Conceptual frameworks are products of qualitative processes of theorization. To explore the process of building conceptual frameworks, we make a conceptual framework and then outline the processes and procedures of its.



Figure 1: Research Conceptual Models (Conceptual framework)

Then it should determine unstandardized path coefficients in models. After examining the model adjustment with suitability indexes, the results are presented. The structural model is presented as follows: (Figure 2)





Figure 2: The model coefficients are significant indicators

After analyzing all data with LISREL we obtain the fitness statistics indicators value include :

```
Goodness of Fit Statistics
               Degrees of Freedom = 1704
   Normal Theory Weighted Least Squares Chi-Square =
                    3468.24 (P = 0.0)
   Estimated Non-centrality Parameter (NCP) = 3764.24
          Minimum Fit Function Value = 21.19
   Population Discrepancy Function Value (F0) = 24.36
  90 Percent Confidence Interval for F0 = (24.08; 24.64)
Root Mean Square Error of Approximation (RMSEA) = 0.02
 90 Percent Confidence Interval for RMSEA = (0.02; 0.02)
     Expected Cross-Validation Index (ECVI) = 24.93
 90 Percent Confidence Interval for ECVI = (24.65; 25.21)
            ECVI for Saturated Model = 1.06
          ECVI for Independence Model = 51.83
 Chi-Square for Independence Model with 1770 Degrees of
                  Freedom = 178107.64
             Independence AIC = 178227.64
                 Model AIC = 85720.24
                Saturated AIC = 3660.00
            Independence CAIC = 178656.24
                Model CAIC = 86620.29
               Saturated CAIC = 16732.10
             Normed Fit Index (NFI) = 0.99
           Comparative Fit Index (CFI) = 0.92
            Incremental Fit Index (IFI) = 0.91
       Root Mean Square Residual (RMR) = 0.014
               Standardized RMR = 0.011
           Goodness of Fit Index (GFI) = 0.95
```

The analysis of the SEM model The results of the overall model's goodness-of-fit analysis showed that the absolute fit indicators reached a significant level, implying that a discrepancy existed between the covariance matrices of this model and of the empirical data. In general, good indicators are fitted in two categories: comparative or comparative fit variances.

As such, the model should be rejected since it was easily affected by large samples. However, other achieved values presented converse results. Specifically, regarding goodnessof-fit measures, the RMSEA value (.02) was less than the acceptance value (<.08), indicating that the model was acceptable. Regarding comparative fit measures, CFI value (.92) was greater than the standard value (>.90), indicating the model was acceptable. Regarding parsimonious fit measures, for other indicators on figure 2 the model was acceptable. Therefore, on the basis that all model fit indicators passed the fitness test, the proposed model was proven to be acceptable (Table 4).

Model fitting indices					
Index	GFI	CFI	NFI	IFI	RMSEA
Value	0.95	0.92	0.99	0.9 1	0.020
Standar d value	It is desired to be as close as possible to 1	X> 0.9	X>0. 9		X<0.05 good 0.05 <x<0.08 Medium X>0.08 Weak</x<0.08

Table 4: Model fitting, a series of indices were taken into account whose values are presented [28],[29].

$$GFI = 1 - \frac{\operatorname{tr}\left\{\left[\Sigma'^{-1}\left(S - \Sigma'\right)\right]^{2}\right\}}{\operatorname{tr}\left[\left(\Sigma'^{-1}S\right)^{2}\right]} = 1 - \frac{F_{t}}{F_{n}} = 1 - \frac{F\left[S, \Sigma\left(\theta\right)\right]}{F\left[S, \Sigma\left(0\right)\right]} = 1 - \frac{\chi_{t}^{2}}{\chi_{n}^{2}}$$

$$R^{2} = 1 - \frac{\Sigma e'^{2}}{\Sigma\left(y - \overline{y}\right)^{2}}$$

$$(5)$$

After extracting the structural equation model and determining its standardized coefficients., considering all the above criteria are desirable, this means that the model fit the data, or in other words, the model can be generalized to the entire population. RMSEA (mean square error of approximation) index is an important index of less than 0.08, in which case the condition is satisfied.

$$RMSEA = \sqrt{max\left\{\left(\frac{F(S,\Sigma(\theta))}{df} - \frac{1}{N-1}\right), 0\right\}}$$
(6)

The index difference between the models fit per degree of freedom where K is the assessing fit of the model F and N is the total number of observations.

T desired value in the table is critical. Methods of obtaining these statistics are as follows: We are a small sample size and the number of degrees of freedom or in other words, when we get to the test, 95 percent. According to the table to get the desired number. The sample size for this study is 3440 to 3439 by subtracting the number of degrees of freedom reaches the desired value T for the 3439 and 95% of the 1.96 is the confidence interval, ie, T is the minimum amount of significant correlation 1.96 can be.

The values of the above indices show that the model of this method has a good condition with respect to the listed factors and this indicates that it would be well fitted to data. Table 5 has determined the standardized coefficients and significant numbers of the used model as follows.

This table clearly shows that all the hypotheses of this research in the studied statistical society are comprehensively correct and acceptable.

Analysis 1st Hypothesis - The E-Trust has a significant

influence on the decision making to conduct an E-

Transaction on the EC context.

In Businesses understanding Trust and distrust on transactions, such as how the become visible or enhance and diminish and how they are related with between, is considered a great priority by practices and researchers because of their crucial affect. [30], [31].

In order to evaluate the first hypothesis which is considered as the main hypothesis of this research, the data from the principal model of this study that was derived from the LISREL software is used. According to the model data as well as the information in Table 5, the correlation coefficient between the two variables of E-Trust and decision to carry out an E-Transaction is 0.86 and the t-value is 17.72. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the tvalue for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, the E-Trust has a positive and significant influence on decision to conduct an E-Transaction, implying that as the trust enhances, the decision to conduct a transaction is more likely to be made and by diminishing the trust, the decision to conduct a transaction would be less likely to be made.

N o.	Research variable	Path coeff icien t	T Value	Co nfi rm
1	The influence of E-Trust on intention to participate in E- Transactions	0.96	17.72	ok
2	The influence of perceived quality of the mixed EM variables and Customers' perceptions of traditional selling based services of the vendor as a supplement to the online trading system	0.93	26.08	ok
3	Perceptions about benevolence, integrity and competence characteristics of the seller and Previous experiences of customers about vendor reputation, satisfaction and loyalty of the previous customers	0.96	48.80	ok
4	The influence of perceived quality of information security and privacy policies, Perceived quality of legal, technical, financial, credit, etc. infrastructures	0.85	36.72	ok
5	Perceptions about professional certifications, approvals, E-Trust symbols, Perception of trust through verification and endorsement by a third party	0.59	31.79	ok
6	Perceptions about strategies, policies and methods for the company's development in the market competetions as well as development of products and the	0.79	44.73	ok

n in	Science and Technology.		
	Government policies on EC laws		
	and development master		
	programs		

Table 5: Standardized coefficients and significant numbers of the model

Analysis 2^{nd} Hypothesis - In the aspect of trust, the perceived quality of mixed electronic marketing variables and the customers' perceptions about multichannel coordination has an effect on the enhancement of trust to make decision to conduct electronic transactions on the EC context.

As can be seen in Table 5, the correlation coefficient between the two sub-indices, namely the index of the second hypothesis of this study and the index of E-Trust is 0.93 and the t-value of 26.08. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the t-value for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, the index of the second hypothesis has a positive and significant influence on the E-Trust index to make decision to carry out an E-Transaction, implying that as this factor grows, the E-Trust for making decision to conduct a transaction enhances and by declining this factor, E-Trust for decision making to conduct an E-Transaction will decrease.

Analysis 3rd Hypothesis - In the aspect of trust, perceptions about the trust capabilities of the vendor such as benevolence, honesty, competence, etc. as well as the previous experiences of the customers about good reputation, satisfaction and loyalty has an effect on the E-Trust to make decision to conduct E-Transactions on the EC context.

As can be seen in Table 5, the correlation coefficient between the two sub-indices, namely the index of the third hypothesis and the index of E-Trust for intention to conduct E-Transactions is 0.96 and the t-value of 48.80. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the t-value for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, the perceptions about the trust capabilities of the vendor such as benevolence, honesty, competence, etc. as well as the previous experiences of the customers about good reputation, satisfaction and loyalty has a positive and significant influence on the E-Trust to make decision to carry out E-Transactions, implying that as this factor grows, the E-Trust for making decision to conduct a transaction enhances and by declining this factor, the E-Trust for decision making to conduct a transaction will decrease.

Analysis 4th Hypothesis - In the aspect of trust, the perceived quality of information security and privacy policies has an effect on the E-Trust of truster and perceptions about the quality of EC infrastructure used by the EC company influences the intention to conduct E-Transactions on the EC platform.

As can be seen in Table 5, the correlation coefficient between the two sub-indices, namely the index of the fourth hypothesis and the index of E-Trust for intention to conduct E-Transactions is 0.85 and the t-value of 36.37. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the t-value for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, the perceived quality of information security and privacy policies as well as perceptions about the quality of EC infrastructure used by the EC company has a positive and significant influence on the E-Trust of truster to make decision to carry out E-Transactions, implying that as this factor grows, the E-Trust for making decision to conduct a transaction enhances and by declining this factor, the E-Trust for decision making to conduct an E-Transaction will decrease.

Analysis 5th Hypothesis - In the aspect of trust, certifying or introducing either of the two parties of transaction by a third party, valid policies of the vendor about the insurance and warranty of the products and services as well as perceptions about professional certificates (E-Trust signatures, system assurance and insurance of the exchanges, certification of trustworthiness, acknowledgements, commendation and appreciation notices in social networks, online forums, online chat rooms, number of likes and +1s in social networks assigned to the company's website link or its product), has an effect on the E-Trust to make decision to conduct an E-Transaction on the EC platform.

According to definition of T.S.H. Teo, J. Liu (2007) system assurance means as the reliability and security of a vendor's e-transaction system, which buyer enables doing secure and successful transactions through the Internet[33].

As can be seen in Table 5, the correlation coefficient between the two sub-indices, namely the index of the fifth hypothesis and the index of E-Trust for intention to conduct E-Transactions is 0.59 and the t-value of 31.79. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the t-value for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, the index of the fifth hypothesis has a positive and significant influence on the E-Trust to intent to carry out an E-Transaction, implying that as this factor grows, the E-Trust for making decision to conduct a transaction enhances and by declining this factor, the E-Trust for decision making to conduct a transaction will decrease.

Analysis 6th Hypothesis- In the aspect of trust, perceptions of supportive macro policies and legislations of the government and associated organizations, perceptions about the company's development strategies, policies and plans regarding the issues of market competitions as well as product development has an effect on the E-Trust to make decision to conduct online transactions with the company. As can be seen in Table 5, the correlation coefficient between the two sub-indices, namely the index of the sixth hypothesis and the index of E-Trust for intention to conduct an electronic transaction is 0.79 and the t-value of 44.73. The critical value of the t-test or its minimum value for signification of the correlation coefficient is 1.96, but the t-value for this relation is greater than 1.96. Therefore this factor is statistically significant. In other words, perceptions of supportive macro policies and legislations of the government and associated organizations, perceptions about the company's development strategies, policies and plans regarding the issues of market competitions as well as product development has a positive and significant influence on the E-Trust to make decision to carry out online transactions, implying that as this factor grows, the E-Trust for making decision to conduct a transaction enhances and by declining this factor, the E-Trust for decision making to conduct an E-Transaction will decrease.

In this research, for the purpose of studying the secondary version of models (from second **hypothesis** to sixth **hypothesis**), each version model was figured in LISREL V8.5 software, where, for example, for the second hypothesis models we have two figures, the first models shows the standardized parameters and the other testifies about the reliability of the coefficients, which was used in the T-student survey to clarify the relation of perceived quality of mix marketing volume with e-transaction. As observed in figure 2, the influence of correlation coefficient between the perceived quality of mix marketing volume and the sub-index perception of multichannel coordination by the customer, is 0.60 and according to figure 2 data T is equal to 15.38.

The threshold of T-student survey or the minimum limit for the reliability of the correlation coefficient is 1.96. In this case, the number obtained is greater than 1.96, therefore this coefficient is reliable.



Figure 3. Figure of sub-index model influence of mix marketing volume and perceived quality of multichannel coordination over making e-transaction, as to standardized coefficients

In other words, the perceived quality has positive and reliable influence over decision-making for an e-transaction. That is, by increasing mix marketing volumes and perceived quality of multichannel coordination, the fulfillment of transaction is also increased, while in case of decrease, the execution of transaction also decreases. The LISREL software, confirming the main model, for the approval or disapproval of each mediated or non-mediated (direct or indirect) version of connection form, creates similar models and directly or indirectly clarifies the influence of one factor, over which the hypothesis is based on.



Figure 4. Figure of sub-index model influence of mix marketing volume and perceived quality of multichannel coordination over making e-transaction, as to reliability of the coefficients

For the third hypothesis models we have two another figures include 3,4, the first models shows the standardized parameters and the other testifies about the reliability of the coefficients, which was used in the T-student survey to clarify the relation of perceived quality of the capabilities of the vendor's trust (benevolence, reliability, competence), Reputation, satisfaction and loyalty of the previous customer with decision to e-transaction. As observed in figure 2, the influence of correlation coefficient between the perceived quality of the capabilities of the vendor's trust (benevolence, reliability, competence), Reputation, satisfaction and loyalty of the previous customer by the customer, is 0.85 and according to figure 2 data T is equal to 12.66. The threshold of T-student survey or the minimum limit for the reliability of the correlation coefficient is 1.96. In this case, the number obtained is greater than 1.96, therefore this coefficient is reliable.



Figure 5 : Figure of sub-index model influence of vendor's capabilities trust (benevolence, reliability, competence), Reputation, satisfaction and loyalty over making e-transaction, as to standardized coefficients.

In other words, the perceived quality of vendor's capabilities trust (benevolence, reliability, competence), Reputation, satisfaction and loyalty of the previous customer has positive and reliable influence over decision-making for an e-transaction. That is, by increasing capabilities and perceived quality of , reputation , loyalty , satisfaction , the fulfillment of transaction is also increased, while in case of decrease, the execution of transaction also decreases.

The Lisrel software, confirming the main model, for the approval or disapproval of each mediated or non-mediated (direct or indirect) version of connection form, creates similar models and directly or indirectly clarifies the influence of one factor, over which the hypothesis is based on. And as it was noted, only two of the five secondary models is represented (that is, the model which shows the relation between the variables and decision making for an e-transaction of the second hypothesis), to which figures 3,4 refer 5.

X. CONCLUTIONS

This study has been established with the goal of examination of the impact of factors of trust on E-Transactions on the EC Context. The studies in the field of trust in commerce or EG expressed in the online environment show that the key note in EC models in connection with the parties to interaction purchasing's being the buyer (customer), being the seller (corporate or individual) being a service provider (government), being a recipient of the service (citizen) and being the third agent (third party) may play a role in creating a sense of trust in electronic interactions. In other words, depending on the roles of each of the individual or company they can play a role in every electronic interaction as the truster or trustee to engage in the exchange. Now the factors of the concept of trust operate under the influence of the factors that the both parties have. In other words the customer is usually in the role of truster and from his point of view, the vendor (trustee) should be able to gain his/her trust to the goods or to products supplied by showing the amount of benevolence, competence, integrity and predictability of the future behavior through the internet to be attracted or a salesperson have the necessary qualifications and licenses for sale and exchange. Also from the point of view of the seller (trustee), a buyer must be willing to pay the determined price of purchased product to the salesperson, and in the interaction has no intention rather than the interaction leading to the E-Transaction. Thus, in this research it was attempted to design and provide a conceptual model to evaluate and rank the importance of factors of trust in EC and E-Transactions on the EC and EG Context. In this conceptual model, five classes of important factors of trust in the EC according to resources in this field with official investigations were regarded as trust factors in E-Transactions that have been considered. In order to rank and prioritize the importance or priority of each factor in an appropriate statistical society they were studied and discussed. The results of the analysis of survey outcomes lead to confirmation the 6 hypotheses of the research. The ten results and findings of research are listed as follows that in conceptual framework of online business can play a vital role in making decision and trust based behaviors to the customers or vice versa.

REFERENCES

- Najafi, I, (2013), "Evaluation of trust factors in management and commerce fields during electronically carried out transactions", National Agrarian University of Armenia, Yerevan, 2013. 140p.: Date:2013 Availability: Available: ANAU library [35 N-14] (1).
- [2] Gefen D, Straub DW., (2004), Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. Omega 004;32(6):407–24
- [3] Olmedilla, D., Rana, O., Matthews, B. & Nejdl, W. (2005). Security and trust issues in semantic grids. In Proceedings of the Dagsthul Seminar, Semantic Grid: The Convergence of Technologies, volume 05271
- [4] Lee, Sang M.; Sang Jun Lee, (2006), CONSUMERS' INITIAL TRUST TOWARD SECOND-HAND PRODUCTS IN THE ELECTRONIC MARKET, Journal of Computer Information Systems. Winter2005/2006, Vol. 46 Issue 2, p85-98.
- [5] Wang, F. (2009) : Trust management towards service-oriented applications. Service Oriented Computing and Applications journal 3(1)
- [6] McKnight, D. H., Chervany, N. L. (2001) Conceptualizing Trust: A Typology and E-Commerce Customer Relationships Model. Proc. of the 34th Hawaii Int. Conf. on System Sciences
- [7] Corritore, C. L. et al (2005) Measuring Online Trust of Websites: Credibility, Perceived Ease of Use, and Risk. In: Proc. of Eleventh Americas Conf. on Information Systems, Omaha, NE, USA pp.
- [8] Turban, E., Lee, J., King, D., and Chung, H.M. (2005) Electronic Commerce: A managerial perspective, Pretence Hall International Inc.

- [9] Choi, S., Stahl, D. and Whinston, A., 1997. The economics of electronic commerce, Indianapolis, Macmillan Technical Publishing
- [10] Kahani , M., Behkamal, B., Mohammad K. Akbari, (2007),"Evaluating the quality of B2B applications using B2BAQM model- case study", ISACOportal (in Persian) Third Information and Knowledge Technology conference (IKT2007), Mashad, Iran, October 2007
- [11] June Jamrich Parsons, Dan Oja 2010 584 pages NEW PERSPECTIVES ON COMPUTER CONCEPTS 2011 makes it possible. Creating a fully integrated and interactive teaching and learning environment, NEW PERSPECTIVES ON COMPUTER CONCEPTS 2011 consists of a printed book
- [12] Bouckaert, G. & Van de Walle S. (2001). Government Performance and Trust in Government. Paper for the Permanent Study Group of Productivity and Quality in the Public Sector. EGPA Annual Conference, Vaasa, Finland, 5–8 September.
- [13] Davis J. H., Schoorman F. D., Mayer R. C., & Tan H. H., (2000), The trusted General manager & business unit performance : Empirical evidence of competitive. Strategic Management Journal, 21(5), 563-576.
- [14] Adams, C., and Lloyd, S. (2002) Understanding PKI: Concepts, Standards, and Deployment Considerations. Sams.
- [15] Zimmermann, P. (ed.) (1994) PGP (Pretty Good Privacy) User's Guide. MIT Press, Cambridge.
- [16] Tyrone Grandison, T. (2003) Trust Management for Internet Applications. PhD thesis, University of London, UK.
- [17] Mui, L., Mohtashemi, M., and Halberstadt, A. (2002). A computational model of trust and reputation. In Proceedings of the 35th International Conference on System Science, pages 280–287.
- [18] Whitener, E. M., Bordet, S. E., Korsgaard, M. A., & Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review*, vol. 23, No. 3, pp. 513-530.
- [19] Marsh, S. P. (1994) Formalising Trust as a Computational Concept. University of Stirling PhD thesis
- [20] Gujral, N., DeAngelis, D., Fullam, K. K., and Barber, K. S. (2006) Modelling Multi-Dimensional Trust. In: Proc. of Fifth Int. Conf. on Autonomous Agents and Multiagent Systems AAMAS-06. Hakodate, Japan.
- [21] Nielsen, M. and Krukow, K. (2004) On the Formal Modelling of Trust in Reputation-Based Systems. In: Karhumaki, J. et al. (Eds.): Theory Is Forever, Essays Dedicated to Arto Salomaa on the Occasion of His 70th Birthday. Lecture Notes in Computer Science 3113 Springer.
- [22] Abdul-Rahman, A. (2005) A Framework for Decentralised trust Reasoning. PhD Thesis.
- [23] Cofta, P. (2006) Distrust. In: Proc. of Eight Int. Conf. on Ecommerce ICEC'06, Fredericton, Canada. pp. 250–258.
- [24] Stevens J. (2002). Applied Multivariate Statistics for the Social Sciences, 4th Edn. Mahwah, NJ: Erlbaum.
- [25] Gefen D., (2000), E-commerce: the role of familiarity and trust. Omega 2000;28(6):725–37.
- [26] Tenenhaus, M., and Esposito Vinzi, V. (2005). PLS regression, PLS path modeling and generalized procrustean analysis: a combined approach for PLS regression, PLS path modeling and generalized multi block analysis. Journal of Chemometrics, 19, 145–153.
- [27] Shpëtim ÇERRI, University "Aleksander Xhuvani", Elbasan, Albania, 2012, "EXPLORING FACTOR AFFECTING TRUST AND RELATIONSHIP QUALITY IN A SUPPLY CHAIN CONTEXT", Journal of Business Studies Quarterly, Vol. 4, No. 1, pp.74-90, http://jbsq.org/wp content/uploads/2012/09/JBSQ_Sept2012-6.pdf
- [28] Hooman, Dr Heidar Ali, (2008), Structural equation modeling with LISREL, (Persian Reference)
- [29] Ghasemi,Dr Vahid, (2008), Introduction to Structural Equation Modeling translated, (Persian Reference)
- ISSN:2278-5299

- [30] Pavlou PA, Gefen D., (2004), Building effective online marketplaces with institution-based trust. Information Systems Research ;15(1):37–59
- [31] Lee, J.-N., & Choi, B. (2011). Effects of initial and ongoing trust in IT outsourcing: a bilateral perspective. Information & Management, 48(2), 96–105.
- [32] Byrne, Barbara, M, (2009), Structural equation modeling with AMOS : basic concepts, applications, and programming ; Second Edition, Taylor & Francis, Jul 31, 2009 - Education – 416
- [33] Thompson S.H. Teo, Jing Liu, (2007), "Consumer trust in ecommerce in the United States, Singapore and China ", Omega 35 (2007) 22 – 38, http://www.elsevier.com/locate/omega