

An Analysis of Factors Affecting the Consumer's Attitude of Trust and their Impact on Internet Purchasing Behavior

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Abstract

Consumer trust in online transactions significantly is more important than in traditional markets, and Lack of trust in e-commerce component is considered as one of the main reasons for crashing some dot-com companies. The aim of present study is to examine factors that affecting the formation trust and their impact on purchase behavior in decision making process. This research is based on data that obtained through a survey study. In this study, the hypotheses were presented considering the variables were associated with trust and technology acceptance and diffusion model that in 2009 by Yu and Tao was presented. In this regard, factors were considered in the overall format of the trustee, trustor and environmental factors in the three-step approach to building trust, purchase and purchase repeat. Hypotheses were tested by Spss software and finally became clear that some of the factors have the strong impact on which level of customer behavior.

Keywords: Internet shopping, purchase repeat, trust attitude, perceived usefulness, perceived ease of use

1. Introduction

Internet as a commercial medium, make it easy to companies to establish mutual online environments and Allows consumers to collect data and measure them, Evaluate the intentions to purchase and purchase products directly and easily.(Ranganathan & Sanjeev 2007) With the advent of electronic trading in early 1990, Web-based retail has led to a global phenomenon that increased worldwide sales.(Ranganathan & Sanjeev 2007) . Because of convenience, ease of data collection, the ability to compare prices, wider choice of products and services and saving time, online shopping is increased. Compared with traditional procurement, risk in online shopping is much higher. Due to the uncertainty, the unknown, lack of control and potential opportunism, the exchange in an online environment requires trust as an important element (shankar et al 2002). One of the challenges that online merchants are facing, is consumer trust, when consumers spread throughout the world, controllable trusted sources are not readily available to merchants (Jarvenpaa, & Tractinsky 1999).

Especially when a business is run in an uncertain environment, the business transactions require trust factors. It is notable that one of the main concerns is that online merchants may sell consumer personal information without their approvals (Lee 2007). Without any trust, interactions between customers and vendors will be limited (March 2006). A client should believe that online transactions are consistent with his/her beliefs and expectations. (Liu et al 2005). Trust in electronic commerce is a confidence level that shows how a trustor's intentions and actions are perfect during an interaction. Normally it is difficult to define trust especially because of its various meanings. Researchers have shown that trust is a key element in e-commerce success. However, this question that how trust is achieved and maintained has not been answered correctly.Note that also there is no single and clear definition of trust but it is usually considered as confidence, belief and reliance (Roger & james 1995).

Webster define trust as relying on certain people or objects and depending on the characteristics, abilities, strength and integrity of individuals (webster 2004) .Trust is a kind of Confidence that people are deserved and their performance are predictable and rely on ethics. (Joseph & Winston 2005) .Slyke defined trust as “trustor expectation of trustee motivation and behavior”, in this definition trustor is online merchant and trustee is online consumer (Schneiderman 2000). Trust can be categorized into some type, while interpersonal trust is established between merchants and online consumers, institutional trust is established between the consumer and computer. Both of them take into consideration in online shopping. Trust in trading helps reducing the complexity of social relations and consumers can reduce mental concerns of improper behavior of e-retailers through trust. Consumers’ trust in online transactions is more important than the traditional markets. Because of the uncertainty, the unknown, lack of control and potential opportunism, the transactions in online environments are associated with greater concerns (Shanka &Urban 2002). Lee showed trust has a direct influence on the attitude (lee 2009). Trust also plays a key role in customer buying decisions (Benamati & Serva 2007; Riegelsberger et al 2005). Other researchers have shown that trust increases ensuring to business relationship and determines the quality of transactions between buyers and sellers. (Lewis 1995)

2.Research background and hypothesis development

Despite the tendency for observing trust as a one-dimensional phenomenon, the trust has more than one dimension. Since the concept of trust is taken from different areas, it is a multidimensional phenomenon that is related to the specific understanding of risks individual fields. Although, trust building in a dynamic process involves several steps, some scholars believe that this trust is a concept of multi-level variables in which some of the internal relationship is static and some of external relationships will change over time. Therefore trust is considered a complex phenomenon and considering all aspects of it, is a complex problem. Due to the complexity of this realm and the fact that research on trust in electronic commerce is relatively a new topic, trust can be evaluated from different viewpoints. These dimensions are summarized in three specifications: trustee, trustor and factors associated with infrastructure and environment.

2-1 Trustor factors.

Trustor characteristics are those factors that influence tendency to trust and can be associated with the psychological, interpersonal, experiential and cultural features that influence the process of trusting to others. Propensity to trust is one of the factors of trustors (shanker et la 2002; Jones & leonard 2008; Li et al 2008). Providing information such as address, telephone number and financial information, particularly in the area of financial fraud is very worryisome (March 2006). Perception of risk varies from a trustor, product and or service to other trustors, products or services that it means everyone may not consider the risk the same. Individual general tendency to trust people is a criterion to trust or distrust people. If you believe that people are generally good in nature, and trust to others cause good result, you will more likely want to trust others (Teo& Liu 2007). Researchers have shown willingness and disposition to trust will have a positive impact on trust when consumer trust develops in the business environment (Lu et al 2010). Finally, tend to trust has the biggest impact on people's trus (Beldad et al 2010). Another characteristic of trustor is his/her skills and experience in computers and internet (Lai et al 2010). Scholars believe that it is clear that past experience can impact plans to deal with the websites.(Chiu et al 2010) Studies have shown customer satisfaction positively affected trust in electronic commerce. If customers have the more satisfying experience, they will perceive higher trust level based on their past experiences. In addition, satisfied customers will more desire to establish long-term relationship with the vendors (Yeh & Li 2009).

2-2 Trustee factors.

People may make a decision to whether trust other or not based on the trustees’ characteristics and this decision is based on an assessment of individual factors. Trustee characteristics can divided to two parts: first, some properties such as size and reputation which are related to merchants or companies, second features such as security-related, design and appearance of the web sites. Furthermore, based on these two parts, trustee factors are divided to five elements. First is perceived quality of data and lack of error (Kim et al 2005; Hoffman et al 1999; Chiu et al 2010), When customers trust a website which contains guaranteed information such as the quality, they are concerned about the honesty of the dealer, his claims about the products and the influx of unwanted messages (Kim et al 2005). Providing useful information can lead to improved awareness and perceptions of the brand. The researchers have shown that non-relevant information may reduce consumers' trust about the products' ability in value creation (Ha 2004).

As customers expect every website to be free of errors, they likely trust to websites which contain good information timely and fully. Several studies have shown that providing clear and complete information in health website have increase trust to web (Beldad et al 2010). Second element is graphic and design features (Jones & Leonard 2008; Beldad et al 2010). Since an effective plan attracts customers and catches their attention to the web sites, an aesthetic design is an important tool in developing trust. The design aesthetic is defined as beauty that through factors such as colors, shapes, language, songs and animations can be expressed (Li & Yeh 2010). Kim and Moran evaluated the impact of graphical features such as color and the artistic images in designing the database of a bank website. The study showed that as the dynamic three-dimensional images increased, the users feeling about the reliability of the banking system get better (Beldad 2010). One important feature of a website, is the ability of the website in increasing the consumers tendency to have relationship with the website.

This can be done through providing entertainment for customers, allowing them to have feedback and having contact with the consumer through email that allow customer to return to the site and use it for a long-term. Entertainment can include photos, display products, animations and online games (Samaniego et al 2006). so when new areas to be like a known environment, people feel that things done as they should be, So easily understand what should happen (Lu et al 2010) Help is an important measure for the effectiveness of the website performance and includes web designer's technical skills, operations efficiency , and providing speedy useful guidance . So having the help and guidance tools shows that enough information should be considered in the design. (Kim et al 2011). Third element that affects trusting else is reputation and past performance (Eastlick et al 2006). Researchers have shown that vendor reputation and word of mouth in social networks influence the trust process in internet organization. Customers who don't have previous experience, may rely on online retailer reputation (Beldad et al 2010). There is no surprise that the famous brand have more success on the Internet.

If customer trust in product or the organization, his perceived risk will be reduce so will be more likely inclined to trust (March 2006). Reputation is a valuable and tangible asset that requires long-term investments in resources, more efforts and focusing on customer relations. Furthermore Perceived reputation is especially associated with customers' trust In online stores (Liu & teo 2007). Consequently sellers who have good reputations, should maintain their reputations In each trade two things is very important, one is the methods of payment for goods and services and other is relating to the exchange of goods or service. Payment systems can effect trust to others (Kim et al 2010) and delivery systems that include the guarantee of delivery in specified time and quality, return the goods Systems can influence building trust process (Kolsaker & Payene 2002). When electronic commerce developed, the need for electronic payment service was peered and money and traditional means were used as a model for e-payment service. E-payment was defined as the electronic value that convey from payer to the recipient through payment mechanisms.

The electronic payment services are the interface between the users which allow customers to access their bank account to deal and manage them .Generally, electronic payment systems can be categorized as following: Digital cash, Debit card, Credit card, Pre-paid cards, Payment on delivery. As an electronic payment system has many advantages over traditional payment system, it should also be freed from any security abuse and therefore is the security of electronic payment systems is the success factor. Although many security tools and mechanisms created for electronic payments, there are still security problems. Hence the need to reduce risks which are related to process of electronic payment transactions is growing (Kim et al 2010). Studies have shown that the written payment as a sign of confidence, increase trust in merchant (Gregory et al 2003).

Another important aspect of transaction is how to exchange the product or service and how to offer after sales service (Kim et al 2005). Delivery can create customers' experience about the brand that draw through marketing channels (Yeh & Li 2009). Because of the nature of e-commerce and the failures in touching and delivering the specified goods, the perceived risk will be increased by customers after finishing of the shopping. The risk is a barrier to Internet shopping; especially for goods which purchased non-online normally. When customers receive a receipt for goods purchased, and they are able to track their order via internet, they likely tend to buy online. If there might be the possibility of returning the goods, consumers will be ensured that they can return the goods or solve the problems. The tracking order system allow customers to monitor the purchase process so the fear of possible abuse is Reduced. (Gregory et al 2003)

2-3 Environmental factors.

Environmental characteristics are associated, with the level of risk and observed vulnerability and may depend on Elements such as the balance of power in relationships, government regulation, trustee alternatives.

One of these factors is assurance and guarantees (Lee & turban 2001; Kim et al 2005; Beldad et al 2010). System assurance is defined as reliability and security of trading system that leads to the safe and successful Internet transactions. Ambrose and Johnson have concluded that trust in the reliability of transactions on the Internet is important for customers. Hence the system assurance features that customers are interacting with them, are critical in creation and maintaining customers' trust. When a Web site contains guarantees criteria, it increases the company's overall reliability (Kaplan & Nieschwietz 2003). To increase trust, websites must convince their potential customers that their information will be protected. Web sites should apply the methods and mechanisms that increase the perceived reliability. These methods may include the privacy policy statements, third party guarantees, recommendation and customers' satisfaction letters, incentives and other guarantees such as money back guarantee. (Peterson et al 2007). Government regulation is another element of environmental factors (Kim et al 2005; Shanker 2002; Li et al 2008).

Legal safeguards like regulations, laws, guarantees, and contracts will facilitate trustors' beliefs that the trustee will make every effort to fulfill the promises. Laws and regulations are in the area of structural guarantees that used by different researchers. Lee and colleagues associated structural guarantees with information systems, government agencies and public services and expressed that this factor facilitate the initial trust (Li et al 2008). The last factor of environmental factors is promotion and advertising .Keller states that the brand is one of the facilitator to increase brand awareness. Word of mouth influence people knowledge and expectations, attitudes, behavioral intentions and ultimately behavior. Many researchers have shown that word of mouth advertising affects trust. As communities and online communication can affect the electronic trust, word of mouth advertising among communities' members can increase trust in the Web (Ha 2004).

2-4 Perceived ease of use and usefulness.

Perceived ease of use and usefulness are the main structural variables of technology acceptance model. Perceived ease of use refers to users' belief that using a particular system is without difficulty and effort. (Davis 1989). In various studies shows that ease of use affect attitude through usefulness. But some studies insist that ease of used impacts on attitude directly (Chiu et al 2010; Yu & Tao 2009). In other hand Perceived usefulness refers to trustors' belief that using a particular system may improve their performances. Studies by Amoako and colleagues in 2004 showed that ease of use can influence on consumers' attitudes (Amoako et al 2004). During the 2005, Zain found the similar results (Zain et al 2005). Other researchers evaluating perceived usefulness impact on Internet purchases. (Chiu et al 2010)

2-5 Purchase and Purchase Repeat.

Various studies have shown that consumers are not enough confident of websites to deal with (Kaplan & Nieschwietz 2003). According to studies, customers decide to buy online only because of trust (Fui-Hoon et al 2002). Others find trust as the main factor in purchasing from the websites. (Cazier et al 2006). In terms of transaction cost theory, trust reduces transaction costs since it plays the role of catalyst of knowledge sharing between buyers and sellers (Lu et al 2010). Long-term relationships, collaboration and cooperation are some of the consequences of trust. Researchers have shown that trust can be an interfering factor in the relationship between action and satisfaction and or loyalty and satisfaction (Shankar et al 2002). Researchers have defined Loyalty in Internet as the perceived intentions to visit and use the Internet to purchase at present and future (Kim et al 2011). Trust can lead to brand loyalty and commitment. Similar trust, brand commitment may be influential in the long-term relationships. Trust in brands plays a key role in building commitment (Ha 2004). Loyalty has a four-step framework which includes trust, satisfaction, perceived value and service quality directly and indirectly. So loyalty is a main factor to form intention to repeat purchase (Kim et al 2011).

- H 1: Environmental characteristics have been affect consumer trust attitudes in online shopping
 - H 1-1: Promotion has been affects consumers' trust attitudes in online shopping.
 - H 1-2: Governmental rules have been affect consumers' trust attitudes in online shopping
 - H 1-3: Third party assurance has been affect consumers' trust attitudes in online shopping
- H 2: Trustee features have been affect consumers' trust attitudes in online shopping
 - H 2-1 Information quality has been affect consumers' trust attitudes in online shopping.
 - H 2-2 Graphic design has been affect consumers' trust attitudes in online shopping.
 - H 2-3 Reputation has been affect consumers' trust attitudes in online shopping
 - H 2-4 Payment method has been affect consumers' trust attitudes in online shopping.
 - H 2-5 Delivery has been affect consumers' trust attitudes in online shopping.

- H 3: Trustor features have been affect consumers' trust attitudes in online shopping.
H 3-1 Trust propensity has been affect consumers' trust attitudes in online shopping.
H 3-2 Skill and experience has been affect consumers' trust attitudes in online shopping.
- H 4: Perceived ease of use has been affect consumers' trust attitudes in online shopping.
- H 5: Perceived usefulness has been affect consumers' trust attitudes in online shopping.
- H 6: Perceived ease of use has been affect Perceived usefulness in online shopping.
- H 7: Environmental features have been affect customers buying behavior in online shopping.
H 7-1 Promotion has been affect consumer purchasing behavior in online shopping.
H 7-2 Governmental rules have been affect consumer purchasing behavior in online shopping.
H 7-3 Third party assurance has been affect consumer purchasing behavior in online shopping.
- H 8: Trustee features have been affect customers purchasing behavior in online shopping.
H 8-1 Information quality has been affect customers purchasing behavior in online shopping.
H 8-2 Graphic design has been affect customers purchasing behavior in online shopping.
H 8-3 Reputation has been affect customers purchasing behavior in online shopping.
H 8-4 Payment method has been affect customers purchasing behavior in online shopping.
H 8-5 Delivery has been affect customers purchasing behavior in online shopping.
- H 9: Trustor features have been affect customers' buying purchasing in online shopping.
H 9-1 Trust propensity has been affect customers' purchasing behavior in online shopping.
H 9-2 Skill and experience has been affect customers' purchasing behavior in online shopping.
- H 10: Perceived ease of use has been affect customers' purchasing behavior in online shopping.
- H 11: Perceived usefulness has been affect customers' purchasing behavior in online shopping.
- H 12: Consumer trust attitude has been affect customers' purchasing behavior in online shopping.
- H 13: Environmental features have been affect customers' repeat purchasing behavior.
H 13-1 Promotion has been affect consumers' repeat purchasing behavior.
H 13-2 Governmental rules have been affect consumers' repeat purchasing behavior.
H 13-3 Third party assurance has been affect consumers' repeat purchasing behavior.
- H 14: Trustee features have been affect customers' repeat purchasing behavior.
H 14-1 Information quality has been affect customers' repeat purchasing behavior.
H 14-2 Graphic design has been affect customers' repeat purchasing behavior.
H 14-3 Reputation has been affect customers' repeat purchasing behavior.
H 14-4 Payment method has been affect customers' repeat purchasing behavior.
H 14-5 Delivery has been affect customers' repeat purchasing behavior.
- H 15: Trustor features have been affect customers' repeat purchasing behavior.
H 15-1 Trust propensity has been affect customers' repeat purchasing behavior.
H 15-2 Skill and experience has been affect customers' repeat purchasing behavior
- H 16: Perceived ease of use has been affect customers' repeat purchasing behavior
- H 17: Perceived usefulness has been affect customers repeat purchasing behavior
- H 18: Consumers' trust attitude has been affect customers' repeat purchasing behavior

3. Methodology

This research can be categorized as descriptive survey research. The study population consisted of members of <expert.ir> web site that have been purchase form commercial websites at least one time. The study is used of available random sampling. So that during the time of completing this research the questionnaire was distributed to online Members. Sample size based on Cochran formula and standard deviation of 0.84389 that achieved from sample, and the error of $\alpha = 0.05$ was 275.

The data gathering instrument was a self administered questionnaire. All the items were measured using five-point Likert scale items with anchor points 1 = strongly disagree and 5 = strongly agree. To analyze the hypotheses of the study, one-sample τ -test has been used. To test the reliability of data gathering instrument, a preliminary study has been conducted with a sample of 30. The results of the primary sample show that Cronbach alpha (α) index is 0.8448 that indicate a good reliability. Also for testing the existence of linear relations between variables, Pearson correlation was used. At first regression analysis was conducted on the main hypotheses. Finally, to determine the extent of the effects of variables in each part (i.e. trust propensity, skill & experience, information quality) on trust attitude, purchase behavior and repeat purchase behavior, regression analysis has been used to examine the sub hypotheses.

4. Data Analysis and Findings

Table 1 shows demographic data. As it is shown, most of the respondents were female with 20 to 30 years of age. Their level of education falls mostly on categories of bachelor degree and amount of income falls mostly on category of more than 900\$ a month. Table 2 represents descriptive statistics of variables. As it can be seen, some of variables have a mean value of less than 3 and others have a mean value more than 3 which among them the environmental factors has the minimum mean of 2.5076 while perceived ease of use has the greatest mean of 3.5162. Standard deviations range from 0.58017 to 0.84389. Table 3 represents the Pearson correlation among factors influencing on trust attitude, purchase and purchase repeat. Also represent the Pearson correlation among independent variables. As it is shown, the correlation of most variables are significant at 95% confidence level ($\text{Sig} < 0.05$). The correlation coefficients of all of the variables with trust attitude are positive, so these variables have positive and significant linear relations with trust attitude. The correlation coefficient of 0.659 that is related to relationship between information quality and trust attitude is the greatest and in other hand the relationship between governmental rules and trust attitude has the lowest correlation coefficient of 0.331. Considering the model 2 have shown that The correlation coefficients of all of the variables with purchase are positive, so these variables have positive and significant linear relations with purchase.

The relationship between purchase and information quality has the greatest correlation coefficient of 0.765 that shows the strong relationship and the relationship between purchase and promotion with correlation coefficient of 0.253 is the relatively weak relationship. Finally in model 3 The greatest and the lowest correlation coefficient of 0.797 and 0.235 belong to the relationship between purchase and purchase repeat and the relationship between promotion and purchase repeat. As past models it is clear that the coefficients of all of the variables with purchase repeat are positive, so these variables have positive and significant linear relations with purchase repeat. Table 4 represents the result of testing the assumption of linear regression. It is shown the Durbin-Watson index in all of the three models is in the accepted range of 1.5 to 2.5. Also achieved means and Standard-Deviations al mostly are equal to zero and one. These elements show that we can use regression analysis to test hypotheses. Table 5 shows the result of testing the main hypotheses by multiple regression analysis. As it is clear in model one only ease of use is the main predictor of trust attitude, actually other hypotheses were rejected. And 66.5 % changes in trust attitude are explained by ease of use. In model two usefulness, trustor and trustee factors are the main predictors of purchase behavior that these factors are explained 65.8% changes in purchase behavior.

Finally in model three, 57% changes in purchase repeat behavior are explained only trustee and environment factors. Table 6 shows the multiple regression analysis of sub hypotheses of factors influencing on trust attitude. Regression analysis showed that among the independent variables, only ease of use, information quality, assurance, payment methods and skill & experience are considered as the main predictors of trust attitude. In total, these factors are explained 59.9% changes in trust attitude. According to table 5, as it is shown that 34.7% of dependent variable changes can be explained by ease of use, 16.6 % of its changes can be explained by information quality, 5.1% of its changes can be explained by assurance, and 1.7% of its changes can be explained by payment methods, finally 1.8% of dependent variable changes can be explained by skill & experience. Beta coefficients for regression equations expressing the values predicted for the independent variables. In other words beta coefficients show impact of these variables on trust attitude. All of these factors but skill & experience have a positive linear relation with trust attitude. ($P < 0.05$)

Table 7 shows the multiple regression analysis of sub hypotheses of factors influencing on purchase. Regression analysis showed that among the independent variables, only promotion, information quality, graphic design, reputation, skill & experience, payment methods and governmental rules are considered as the main predictors of purchase. In total, these factors are explained 85% changes in purchase. According to table 6, as it is shown that 6.2% of dependent variable changes can be explained by promotion, 47.1 % of its changes can be explained by information quality, 12.6% of its changes can be explained by graphic design, 9.3% of its changes can be explained by reputation, 6.9% of its changes can be explained by skill & experience, 1.7% of its changes can be explained by payment methods, and finally 1.9% of dependent variable changes can be explained by governmental rules. All of these factors have a positive linear relation with trust attitude. ($p < 0.05$) Table 8 shows the multiple regression analysis of factors influencing on purchase repeat. Regression analysis showed that among the independent variables, only ease of use, information quality, skill & experience, trust propensity and promotion are considered as the main predictors of purchase repeat. In total, these factors are explained 75% changes in purchase repeat.

According to table 7, as it is shown that 55% of dependent variable changes can be explained by reputation, 7.9 % of its changes can be explained by information quality, 5.4% of its changes can be explained by ease of use, 2.8% of its changes can be explained by trust propensity, and 2.8% of its changes can be explained by promotion, finally 1.1% of dependent variable changes can be explained by skill & experience. All of these factors but trust propensity have a positive linear relation with trust attitude. ($p < 0.05$)

5. Conclusion

In this study the factors that influencing the formation of trust attitude, purchase and purchase repeat are examined. Theoretical framework was suggested that twelve factors are associated with consumer purchase behavior in three stage of decision making process. The results provide valuable insights into understanding the factors that affect the trust attitude after than affect the purchase and purchase repeat behavior. The Pearson correlation test showed that all of the variables affecting trust attitude, purchase and purchase repeat positively. Furthermore, to understand which variable can predict better the trust attitude, purchase and repeat purchase behavior, we used regression analysis. As the result we can state that hypotheses 1-1, 2-1, 2-4, 3-2 , and 4 in model one and the hypotheses 7-1, 7-2, 8-1, 8-2, 8-3, 8-4, and 9-2 in model two and the hypotheses 13-1, 14-1, 14-3, 15-1, 15-2 and 16 in model three have been confirmed but other hypothesis were rejected. The regression analysis was revealed that information quality is the best predicting factor for trust attitude, same as graphic design and reputation that are the best predictor factor for purchase and purchase repeat. In fact, by increasing these factors, the probability of related dependence variable will be increase. Finally this research clear that in each stage some of that factors significantly is important that must be attended. In model one to forming trust attitude, ease of use, skill & experience, information quality, payment methods and assurance must be considered. For increasing purchase behavior skill & experience, information quality, graphic design, reputation, payment methods, governmental rules and promotion are the main influencing factors and finally in purchase repeat behavior, ease of use, skill & experience, information quality, payment methods and assurance must be highlighted.

References

- Amoako, G.K. Salam, A.F. (2004). An extension of the technology acceptance model in an ERP implementation environment. *Information and Management*, 41/2 pp, 731–745
- Beldad , A. Jong , M.d. Steehouder, M. (2010), How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust . *Computers in Human Behavior*, 26 pp, 857–869
- Benamati, J. Serva, M. (2007). Trust and distrust in online banking. *Information Technology for Development*, 13/ 2 pp, 161- 175
- Cazier, J.A. Shao, B.M. Louis, D. St. (2006). E-business differentiation through value-based trust. *Information & Management*, 43 pp, 718–727
- Chiu, C. M. Huang, H. Y. Yen, C. H. (2010). Antecedents of trust in online auctions. *Electronic Commerce Research and Applications*, 9 pp, 148–159
- Davis, F. D. (1989).” Perceived Usefulness, Perceive Ease of Use, and User Acceptance Information Technology”. *MIS Quarterly*. 13pp, 319-339
- Fui-Hoon, N. Fiona, Davis, Sid, (2002), HCI Research Issues in Electronic Commerce, *Journal of Electronic Commerce Research*
- Eastlick, M. A., Lotz, S.L., Warrington, p. (2006). Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment. *Journal of Business Research*, 59 pp, 877–886
- Gregory, B. M. Blessinger, A.A. (2003), Perceptions of no-name recognition business to consumer e-commerce trustworthiness: the effectiveness of potential influence tactics, *Journal of High Technology Management Research* , 14 pp, 71–92
- Ha, H.Y. (2004), Factors influencing consumer perceptions of brand trust online. *Journal of Product & Brand Management*, 13/5 pp, 329–342
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. *Communications of the ACM*, 42 pp, 80–85
- Jarvenpaa, S. Tractinsky, N. (1999). Consumer trust in an Internet store: A cross cultural validation. *Journal of Computer-Mediated Communication*, 5. Retrieved on February 18, 2008 from <http://jcmc.indiana.edu/vol5/issue2/jarvenpaa.html>.
- Jones, Kiku. Leonard, N.K. (2008). Trust in consumer-to-consumer electronic commerce. *Information & Management*, 45 pp, 88–95
- Joseph, E. Winston, B.E. (2005). "A Correlation of Servant Leadership, Leader Trust and organizational Trust", *Leadership & organizational Development journal*, 26/ 1 pp, 6- 22
- Kaplan, S.E. Nieschwietz, R.J. (2003), A Web assurance services model of trust for B2C e-commerce. *Information Systems*, 4 pp, 95–114

- Kim, D.J. Song, Y.I. Braynov, S.B. Raod, H.R. (2005). A multidimensional trust formation model in B-to-C e-commerce: a conceptual framework and content analyses of academia/practitioner perspectives, *Decision Support Systems*, 40 pp, 143–16
- Kim, M.J. Chung, N. Lee, C. K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, 32 pp, 256–265
- Kim, C. Tao, W. Shin, N. Kim, N.S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*, 9 pp, 84–95
- Kolsaker, A. Payne, C. (2002). Engendering trust in e-commerce: a study of gender-based concerns. *Marketing intelligence & planning*, 20/4 pp, 206-214
- Lai K.W., Tong W.L., Lai C.F.(2010). Trust factors influencing the adoption of internet-based interorganizational systems. *Electronic Commerce Research and Applications*
- Lee, M. Turban, E. (2001). A trust model for consumer Internet shopping. *International Journal of Electronic Commerce*, 6/ 1 pp, 75-91
- Lee, L.T. (2007). Digital media technology and individual privacy. In C.A. Lin and D.J. Atkin (Eds.), *Communication technology and social change: Theory and implications* (pp. 25 7- 279). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc
- Lee, M. (2009). Predicting and explaining the adoption of online trading: An empirical study in Taiwan, *Journal of Decision Support Systems*, 47/ 2 pp, 13 3- 142
- Lewis, J (1995). Trust as a social reality. *Social Forces*, 63/ 4 pp, 96 7- 985
- Li, X. Hess, T.J. Valacich, J.S. (2008). Why do we trust new technology? A study of initial trust formation with organizational information systems. *Journal of Strategic Information Systems*, 17 pp, 39–71
- Li, Y.M. Yeh, Y. S. (2010). Increasing trust in mobile commerce through design aesthetics . *Computers in Human Behavior*, 26 pp, 673–684
- Li, X. Hess, T.J. Valacich, J.S. (2008). Why do we trust new technology? A study of initial trust formation with organizational information systems. *Journal of Strategic Information Systems*, 17 pp, 39–71
- Liu, C. Marchewka, J.T. Lu, J. Yu, C. S. (2005). Beyond concern—a privacy-trust-behavioral intention model of electronic commerce. *Information & Management*, 42 pp, 289–304
- Lu , Y. Zhao, L. Wang, Bin,(2010), From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*, 9 pp, 346–360
- March, S.H. (2006). Can the building of trust overcome consumer perceived risk online?. *Marketing Intelligence & Planning*, 24/7 pp, 746-761
- Mayer, R.C. Davis, J.H. (1995). " An Integrative Model Of Organizational Trust", *Academy of Management Review* , 20/3 pp, 709- 734
- Peterson, D. Meinert, D. Criswell, J. Crossland, M. (2007), Consumer trust: privacy policies and third-party seals. *Journal of Small Business and Enterprise Development*, 14/4 pp, 654-669
- Ranganathan, C. Sanjeev, S. (2007). Examining online purchase intentions in B2C ecommerce: Testing an integrated model, *Information Resources Management Journal*, 20/ 4 pp, 48-64
- Riegelsberger, J. Sasse, M.A. McCarthy, J. (2005). The mechanics of trust: A framework for research and design. *International Journal of Human-Computer Studies*, 62/ 3 pp 381- 422
- Samaniego, G. Arranz, A. Cabezudo, R. (2006). "Determinants of internet use in the purchasing process". *Journal of Business & Industrial Marketing*, 21/ 3 pp, 16 4- 174
- Schneiderman, B. (2000). Designing trust into online experiences. *Comm of the ACM*, 43/16 pp, 57-59
- Shankar, V. Urban, G.L. Sultan , F. (2002), Online trust: a stakeholder perspective, concepts, implications, and future directions. *Journal of Strategic Information Systems*, 11 pp,325–344
- Shankar, V. Urban, G. L. (2002). Online trust and e-business strategy: concepts, implication, and future directions. *Journal of Strategic Information System*, 11/3-4 pp, 325- 344
- Teo, S.H. Liu, Jing. (2007). Consumer trust in e-commerce in the United States, Singapore and China. *The international journal of management science*
- Webster. (2004). *new twentieth century dictionary of the English: language, unabridged based upon the board foundation laid down*, pp, 24-56
- Yeh , Y.S. Li, Y.M.(2009). Building trust in m-commerce: contributions from quality and satisfaction. *Online Information Review*, 33/6 pp, 1066-1086
- Yu, C.S. Tao, Y.H. (2009). Understanding business-level innovation technology adoption. *Technovation*. 29 pp , 92–109
- Yeh, Y.S. Li, Y.M. (2009), Building trust in m-commerce: contributions from quality and satisfaction. *Online Information Review*, 33/ 6 pp, 1066-1086
- Zain, M. Rose, R.C. Abdullah, I. Masrom, M. (2005). The relationship between information technology acceptance and organizational agility in Malaysia. *Information and Management*, 42 pp, 829–839

Figure 1 : conceptual model of consumer trust and purchase behavior

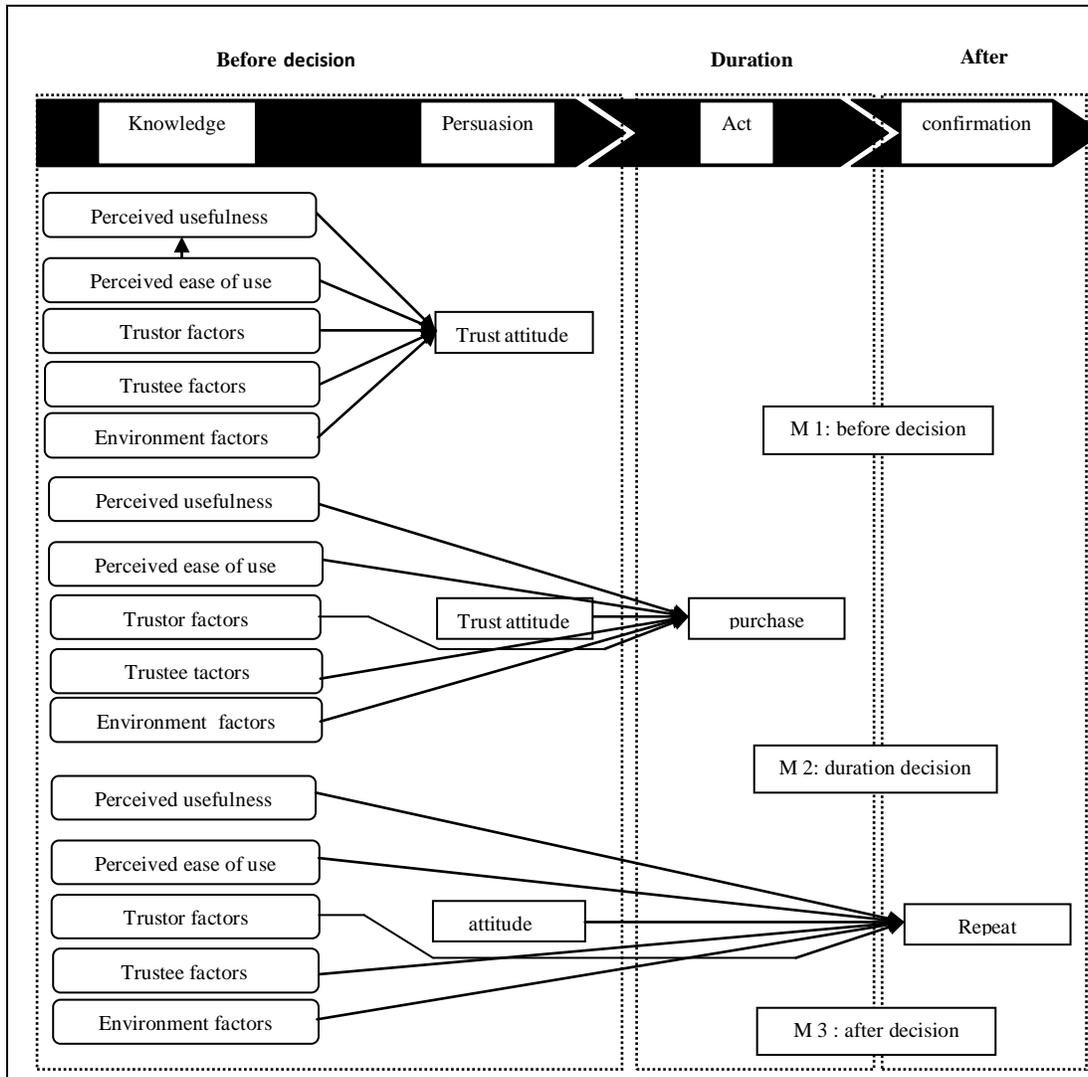


Table 1. Descriptive Statistics Results

Characteristics Description	Frequency	Percent %	
Gender	Female	157	57.1
	Male	118	42.9
Age	Less than 20 years	0	0
	20 to 30 years	233	84.6
	31 to 40 years	37	13.5
	more than 40 years	5	0
Education	Advanced diploma and less	5	1.8
	Bachelor	106	38.5
	Master Degree	148	53.8
	PhD and above	16	5.8
Income	Below 300 dollars	11	4
	301 to 600 dollars	55	20
	601 to 900 dollars	57	20.7
	More than 900 dollars	152	55.3
Usage time in week	Less than 2 hours	5	1.8
	2 to 4 hours	11	4
	4 to 6 hours	35	12.7
	More than 6 hours	224	81.5

Table 2. Descriptive Statistics for main factors

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Perceived usefulness	275	3.2770	.84389	.05209
Perceived ease of use.	275	3.5165	.64449	.03886
Trust attitude	275	2.6897	.78627	.04741
Purchase behavior	275	3.3266	.70131	.04229
Purchase repeat	275	3.4645	.67234	.04054
Trustors factors	275	3.1741	.77751	.04689
Trustee factors	275	3.1782	.58017	.03499
Environment factors	275	2.5076	.66257	.03995

Table 3. Pearson Correlation of factors influencing on trust attitude, purchase and repeat purchase

		Usefulness	Ease of use	Propensity	Skill & experience	Information quality	Graphic design	Reputation	Payment method
usefulness	P.correlation	1							
	Sig. (2- T)								
Ease of use	P.correlation	.575**	1						
	Sig. (2- T)	.000							
Trust propensity	P.correlation	.283**	.448**	1					
	Sig. (2-t)	.001	.000						
Skill & experience	P.correlation	.706**	.584**	.402**	1				
	Sig. (2- T)	.000	.000	.000					
Information quality	P.correlation	.801**	.532**	.386**	.685**	1			
	Sig. (2- T)	.000	.000	.000	.000				
Graphic design	P.correlation	.578**	.598**	.370**	.501**	.640**	1		
	Sig. (2- T)	.000	.000	.000	.000	.000			
Reputation	P.correlation	.559**	.439**	.405**	.547**	.526**	.568**	1	
	Sig. (2- T)	.000	.000	.000	.000	.000	.000		
Payment method	P.correlation	.461**	.572**	.378**	.424**	.493**	.612**	.528**	1
	Sig. (2- T)	.000	.000	.000	.000	.000	.000	.000	
delivery	P.correlation	.235**	.622**	.384**	.436**	.327**	.304**	.239**	.493**
	Sig. (2- T)	.008	.000	.000	.000	.000	.001	.007	.000
Assurance	P.correlation	.342**	.410**	.465**	.374**	.449**	.621**	.486**	.587**
	Sig. (2- T)	.000	.000	.000	.000	.000	.000	.000	.000
Rule	P.correlation	.368**	.382**	.413**	.412**	.295**	.474**	.565**	.465**
	Sig. (2- T)	.000	.000	.000	.000	.001	.000	.000	.000
Promotion	P.correlation	.456**	.210*	.165	.360**	.548**	.583**	.388**	.373**
	Sig. (2- T)	.000	.018	.064	.000	.000	.000	.000	.000
Attitude	P.correlation	.550**	.589**	.427**	.441**	.659**	.545**	.454**	.410**
	Sig. (2- T)	.000	.000	.000	.000	.000	.000	.000	.000
Purchase	P.correlation	.683**	.637**	.408**	.765**	.713**	.665**	.684**	.424**
	Sig. (2- T)	.000	.000	.000	.000	.000	.000	.000	.000
purchase Repeat	P.correlation	.603**	.616**	.277**	.650**	.630**	.546**	.742**	.502**
	Sig. (2- T)	.000	.000	.002	.000	.000	.000	.000	.000

		Delivery	Assurance	Governmental Rule	Promotion	Attitude	Purchase	purchase Repeat
delivery	P.correlation	1						
	Sig. (2- T)							
Assurance	P.correlation	.408**	1					
	Sig. (2- T)	.000						
Rule	P.correlation	.420**	.699**	1				
	Sig. (2- T)	.000	.000					
Promotion	P.correlation	.191*	.441**	.282**	1			
	Sig. (2- T)	.031	.000	.001				
Attitude	P.correlation	.379**	.550**	.331**	.360**	1		
	Sig. (2- T)	.000	.000	.000	.000			
Purchase	P.correlation	.383**	.471**	.545**	.253**	.546**	1	
	Sig. (2- T)	.000	.000	.000	.004	.000		
purchase Repeat	P.correlation	.371**	.349**	.417**	.235**	.504**	.797**	1
	Sig. (2- T)	.000	.000	.000	.008	.000	.000	

Table 4: Assumption of linear regression

model	Durbin-Watson	Regression Standardized Residual		predictors	Dependent variable
		mean	Std .Dev		
Before decision	2.415	7.11 E -17	0.957	Governmental rule, promotion, delivery, propensity, skill & experience , payment method , reputation, Graphic design, usefulness, assurance, ease of use, information quality	attitude
During decision	1.647	2.03 E -15	0.947	Governmental rule, promotion, delivery, propensity, skill & experience , payment method , reputation, Graphic design, usefulness, assurance, ease of use, information quality, attitude	purchase
After decision	1.960	3.49 E -15	0.947	Governmental rule, promotion, delivery, propensity, skill & experience , payment method , reputation, Graphic design, usefulness, assurance, ease of use, information quality, attitude	purchase Repeat

Table 5. Multiple Regression Analysis of the main hypotheses

Independent variable	Cumulative R ²	R ² changes	Beta	p-value
Model 1				
Ease of use	0.589	0.589	0.665	0.000
Model 2				
usefulness	0.467	0.467	0.371	0.001
trustor	0.600	0.133	0.443	0.001
trustee	0.658	0.058	0.847	0.000
Model 3				
trustee	0.537	0.537	1.713	0.000
environment	0.570	0.033	0.427	0.003

Table 6. Multiple Regression Analysis of the sub hypotheses of model 1 (factors influencing on trust attitude)

Independent variable	Cumulative R ²	R ² changes	Beta	t	p-value
Information quality	0.513	0.166	0.462	6.205	0.000
assurance	0.564	0.051	0.289	4.589	0.000
payment	0.581	0.017	0.212	2.333	0.021
Skill & experience	0.599	0.018	-0.163	-2.286	0.024

Table 7. Multiple Regression Analysis of the sub hypotheses of model 2 (factors influencing on purchase)

Independent variable	Cumulative R ²	R ² changes	Beta	t	p-value
promotion	0.064	0.064	0.622	7.669	0.000
Information quality	0.535	0.471	0.517	5.885	0.000
Graphic design	0.661	0.126	0.609	6.627	0.000
reputation	0.745	0.093	0.419	4.734	0.000
Skill & experience	0.814	0.069	0.491	6.649	0.000
Payment methods	0.831	0.017	0.389	4.294	0.000
Governmental rules	0.850	0.019	0.247	3.898	0.000

Table 8. Multiple Regression Analysis of the sub hypotheses of model 3 (factors influencing on purchase repeat)

Independent variable	Cumulative R ²	R ² changes	Beta	t	p-value
reputation	0.550	0.550	0.828	9.469	0.000
Information quality	0.629	0.079	0.364	3.933	0.000
promotion	0.711	0.028	0.328	-3.862	0.000
Trust propensity	0.739	0.028	-0.236	-3.831	0.000
Skill & experience	.750	0.011	.187	2.230	.028