

THE EFFECT OF VIRTUAL SELLING AND BUYING OF VEHICLE ON THE ADOPTION OF E-COMMERCE SYSTEM BY CUSTOMERS

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Abstract. The purpose of this study is to examine the impact of product perception, shopping experience, information provided or the level of perceived risk on the adoption of B2C e-commerce. To collect the data, a researcher-made questionnaire with a five-point Likert scale was used. To measure questionnaire's reliability, Cronbach's alpha was used which the value obtained was %925. Cochran method was used to obtain the sample size. The results show that attitudes toward e-commerce, subjective norms and perceived risk are the main factors that affect the decision to purchase from electronic retailers.

Keywords: online shopping, intention, perception, attitude

1 Introduction

The growth of the World Wide Web (www) and its acceptance among consumers has paved a way to the rise of B-to-C electronic commerce (EC) (Lei-Da Chen et al, 2004). According to Sawhney and Kaplan (2000) electronic commerce (e-commerce) is a means of business activities conducted using electronic data transmission over the internet and the world wide web. Hutt and Speh (2004) illustrated how transaction management aspect of electronic-commerce can also enable firms to reduce operating cost by enabling better coordination in the sales, production, and distribution process or better supply management and to consolidate operations and reduce overhead. Huang et al. (2001) considered firms are interested in e-commerce because, quite simply, it can help business and improve profits.

The Internet's capacity to access, organize and communicate information in a more efficient way has brought about new formulas for the relationship between consumers and firms. New economic agents and new business models have emerged too. In this way, the development of e-commerce offers great opportunities for both manufacturers and retailers, but it also presents important challenges for organizations, demanding an in-depth review of marketing strategies and consumer knowledge (Goldsmith and Bridges 2000, Jones and Vijayarathy 1998). Therefore, enterprises view e-commerce as the best way to form a bridge between suppliers, business partners, and customers (Timmers, 1999; Fellenstein and Wood, 2000). Internet gathers all competitors and consumers in one place. It brings new lane to promote, advertise products and services in market (Barry Silverstein, 2002). Online shoppers always want to seek information within few clicks and reach to the most relevant information according to their requirements such as competitive brands, best price offers, product specification and consumer word-of-mouth (Yuan Gao, 2005).

Online shopping basically based on individual thinking point of view and his personal perceptions. Online shopping makes its own character for its development (Na Wang 1, 2008, p. 4). While the traditional "brick-and-mortar" shopping venues are restrained by time and space, the Internet has decreased the effort and time consumers spend on shopping (Bhatnagar et al., 2000). Furthermore, the Internet makes an unlimited range of products and services accessible for consumers all around the world (Quelch and Klein, 1996). People can buy or sell virtually anything, at anytime, from anywhere, through online shopping (Ko et al., 2004).

Retailers all over the world are establishing virtual stores, which exist in the cyberspace and offer merchandise and services

through an electronic channel to their customers with a fraction of the overhead required in a bricks-and-mortar store (Hoffman et al., 1996; Yesil, 1997).

Beside our study that have focused on the commercial characteristics of the Internet as a sale system have adopted diverse theoretical approaches and have obtained contradictory results. Even though there are research endeavors to explain e-commerce system adoption and online consumer behavior (e.g., Gefen et al., 2003; Grazioli and Jarvenpaa, 2000; Pennington et al, 2004).

A business can reduce the cost of handling sales inquiries, providing price quotes, and determining product availability by using electronic commerce in its sales support and order taking processes.

Just as e-commerce increases sales opportunities for the seller, it increases purchasing opportunities for the buyer. Elberse (1996) outlined that, e-commerce provides buyers with a wider range of choices than traditional commerce, because buyers can consider many different products and services from a wider variety of sellers. This wide variety is available for consumers to evaluate 24 hours a day. Some buyers prefer a great deal of information in deciding on a purchase; others prefer less. Bloch and Catfolis (2001) explored the believe that the internet and the digital revolution more generally, will have wide-ranging impacts on marketing as well as on many other aspects of society and business.

2 Theoretical Background

The theory of planned behavior (TPB) (Ajzen, 1991) is an extension of the theory of reasoned action (TRA) (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980). Both theories hypothesize that an individual's intention to perform the behavior in question is a determinant of that behavior. Intentions are "indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991) and perceived behavioral control (PBC) influences behavior indirectly through intentions, as well as directly when the person does not have complete control over that behavior and when the individual's perceptions of control are accurate (Madden et al., 1992). TPB includes perceived behavioral control over engaging in the behavior as a factor influencing intention. TPB has been used in many different studies in the information systems literature (cf. Mathieson, 1991; Taylor and Todd, 1995a, b; Harrison et al., 1997). TRA and TPB have also been the basis for several studies of Internet purchasing behavior (George, 2002; Jarvenpaa and Todd, 1997; Khalifa and Limayem, 2003; Limayem et al., 2000; Tan and Teo, 2000; Pavlou et al., 2002; Grandon et al., 2011, Su and Huang, 2011; Sun et al., 2014). In order to communicate with customers and facilitate commercial transactions, used websites, hence companies needs to know more about customers and their intentions and also orientation with internet especially e-commerce. Thereby evaluate and improve the effectiveness and usability of it. On the other hand changes and developments of purchase methods from traditional ways and physical presence to new electrical purchase methods causes companies more pay attention to online shopping and demands of customers, in order to attract more customers. The theory of planned behavior (TPB) (Ajzen, 1991) has been adopted as the framework for our study. So that we can apply a solid theoretical basis. According to available literature we intended to offer at first, study of a theoretical model for a bunch of effective variables in e-commerce strategies in Iran. Second, understanding of behavioral variables of customers. Third, check out the acceptance from technical prospective of virtual selling. Fourth, evaluation of car companies and agencies in online shopping and how they meet the intention of customers, and at the end study for technology oriented approach base on the development of innovative technologies by focus on e-commerce features.

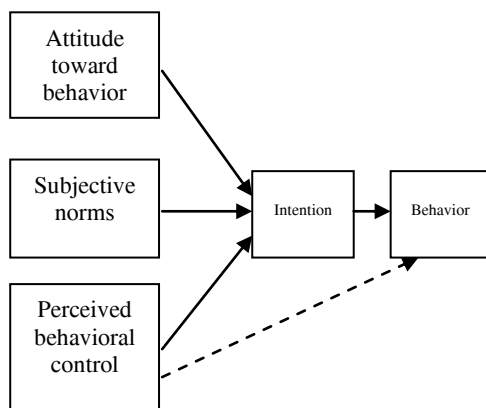


Fig1. Model 1 represent the TRA (full lines) Model 2 represent the standard TPB (full lines plus dotted line)

3 Literature review

3.1 Consumer Attitude

Kardes (2002) said that attitude is a concept that has been explored by a lot of attitude research. Attitudes toward a behavior have been found to influence the behavior, including online information search and purchase behavior (Shim et al., 2001). According to (Ajzen and Fishbein, 1975; 216) an attitude represents a person's general feeling of favorableness or unfavorableness toward some stimulus object". The next statement "as a person forms beliefs about an object, he automatically and simultaneously acquires an attitude toward that object" (Ajzen and Fishbein, 1975) Heijden et al., 2003, stated that attitude has strong, positive and significant impact toward intention, this finding also support (Yulihastri et al., 2011) research stated that attitude has significant influence on intention. Although some recent studies have suggested that attitude may not be as important in predicting behavioural intentions (for example, Venkatesh et al., 2003) In the context of consumer website use and online shopping adoption, several researchers have indeed found positive and significant impacts of attitude on intention (Jeong and Lambert, 2001; Korzaan, 2003; van der Heijden, 2003; Shih, 2004; Lee et al., 2005; Pavlou and Fygenson, 2006). Further, favourable attitude is expected to ease online transactions and reduce barriers to the adoption of e-Commerce (Jarvenpaa et al., 1999; Pavlou and Chai, 2002). Lastly, attitude has been shown to correlate well with behavioral intention when adoption is voluntary (Davis et al., 1989) and among experienced users (Karahanna and Straub, 1999; Yu et al., 2005).

The most influential predictor of intention to search for information via the Internet was previous Internet purchase experience, a factor related to consumers' perceived risk. This finding supports other previous attitude-behavior researchers (e.g., Bentler and Speckart, 1979, 1981; Sutton and Hallett, 1989) who asserted that past behavior is a predictor of future behavior. Attitude towards online shopping has huge impact on intention to web purchasing (Limayem et al. 2000). There are some other definitions according to one of the other definition attitude towards online shopping is defined as customers positive or negative sensation connected to complete the buying behavior on internet (schlosser, 2003).

3.2 Subjective norms

According to Fishbein and Ajzen (1975), Subjective norms refer to "perceived pressures on a person to perform a given behavior and the person's motivation to comply with those pressures." Thus, subjective norms reflect how the customer is affected by the perception of some significant referents (e.g., family, friends, and colleagues, among others) of his/her behavior (Schofield, 1975). Subjective norms or the approval of others, called refer-

ents, have been found to affect behavior. For example, referents have been found to influence shopping center patronage intentions (Evans et al., 1996), online apparel purchases (Shim and Drake, 1991). Numerous studies in psychology have theorized that subjective norms are an important determinant behavioral intention (e.g., Herrero Crespo and Del Bosque Rodríguez, 2010; Lin, 2007; Taylor and Todd, 1995; Yi et al., 2006). Subjective norms tend to be more influential during early stages of innovation implementation when users have limited direct experience from which to develop attitudes (Taylor and Todd, 1995).

As stated previously, the TRA identified subjective norms and attitude as determinants of behavioral intention (Davis et al., 1989), whereas the original TAM did not include subjective norms in its model. Subjective norm can be thought of as composed of two components: societal norm and social influence (Pavlou and Chai 2002). Societal norm refers to the process of adherence to the larger societal fashion, i.e., a large circle of influence. Collectivism, however, refers to the extent to which individuals are integrated into groups, forming their judgments based on group norms (Hofstede and Bond 1988). Social influence refers to the extent to which people accept a hierarchical system with an unequal power distribution (Pavlou and Chai 2002).

3.3 Perceived behavioral control

Ajzen and Madden (1986) extended the TRA into the Theory of Planned Behavior (TPB) by adding a new construct "perceived behavioral control" as a determinant of both intention and behavior. Perceived behavioral control refers to consumers' perceptions of their ability to perform a given behavior. TPB allows the prediction of behaviors over which people do not have complete volitional control. Perceived behavioral control, or the ease of accessing the Internet, has been found to influence intentions to search and to purchase online (Shim et al., 2001). When customers repeat their behavior several times, they feel more and more in control and form favorable intentions about purchasing (Liao et al., 2007). Perceived behavioral control reflects perceptions of internal constraints (self-efficacy) as well as external constraints on behavior, like availability of resources. It has been found that the Planned Behavioral Control (PBC) directly affects online shopping behavior (George et al, 2004) and has a strong relationship with actual Internet purchasing (Khalifa and Limayem, 2003). When consumers perceive that control over navigation at a website is low, they limit time spent searching at a site (Richard, 2005), express less shopping enjoyment (Childers et al., 2001), and report more negative evaluations of the products (Richard and Chandra, 2005). Given these reactions, we would not expect that even a lenient return policy could overcome consumers' negative evaluations of a website with low perceived control. In contrast, when consumers experience high levels of control over their shopping experience, they express more positive attitudes toward the e-tailer. But high levels of control do not reduce consumer uncertainty about e-tailer quality. As a result, we posit that consumers will be receptive to the signal information contained in the return policy when perceived control over navigation is high (Padmanabhan and Rao, 1993).

3.4 Perceived Product

Product knowledge is a perception towards definite products, together with previous experience of using the product Eze, Tan and Yeo (n.d); According to them it is the list of the information that is related to the product and helps the customers to check whether it fits to their needs or not. Prieto et al (2009) explain product knowledge as something which we collect with the passage of time by experiencing the product and to know their necessary features. It is the information which is filtered by the buyers mind, after making certain cost and benefit analysis this knowledge compels the consumer to interpret the conclusion which may or may not be purchasing behavior. Product perception, sometimes called product understanding (Dillon and Reif, 2004) or product value (Crisp et al, 1997), consists of price, product quality, and variety. Since the perceived product quality

is a pivotal reason to buy (Aaker, 1991), price is the cost paid by the customers, and variety gives the customers more alternatives to choose the products and hence motivate the customers.

The experience of searching and purchasing in particular web-sites can help consumers assess product quality based on fewer product cues. From the learning and habitual use perspectives (Murray and Haubl, 2007), by assessing particular cognitive cues using more experience-based information (rather than assessing all product attributes), consumers are more likely to reduce their cognitive loads and, thus, reduce the cognitive costs invested in online searches and purchases. Product quality has long been discussed in the literature from different points of view (Garvin, 1984; Harari, 1993). Thus, perceived product quality can be defined as the customer's perception or the judgment about the overall excellence or superiority of the products or service with respect to its intended purpose relative to alternatives (Aaker, 1991; PZB, 1988).

3.5 Online shopping experience

The shopping experience in the cyber world is quite different from conventional stores. Effort, life style compatibility, playfulness have been mentioned (Baty and Lee, 1995; Goldsmith, 2000; Hoffman and Novak, 1996); social interaction was added by Jarvenpaa and Todd (1996-97). Shopping experience, according to most studies, concerns the user-friendliness and aesthetics of online shopping websites. The experiences include the effort required to use a website, its interactivity, and the fun of shopping online. In line with the work by Klein (1998), Shim and Drake (1990), Liang and Huang (1998), Eastlick (1996), and Weber and Roehl (1999), Shim et al. (2001) found that previous experience with Internet shopping is a good predictor of online search behavior.

Some of the studies believe that web-shopping consumer's behavior will depend on experience quality in which the experience quality can be obtained only through prior purchase experience, and prior experiences will strongly affect future behavior. There are some studies that have mentioned to past online experience as one of the antecedents of online purchase intention (Laroche et al., 2005; Ranganathan and Sanjeev, 2007; Kwon and Noh, 2010; Shim et al., 2001; Weber and Roehl, 1999; Eastlick 1996; Li et al., 1999). Although a positive relationship between Internet usage and online shopping intention was detected in some studies (Bhatnagar et al., 2000; Citrin et al., 2000; Liao and Cheung 2001; Park 2002), the relationship was not found to be significant in some of the later studies (Cho 2004; Nysveen and Pedersen 2004).

Experience with online shopping is found to correlate positively with consumers' likelihood to shop online. The more experienced consumers are with online shopping and the more satisfied they are with past online transaction experiences, the higher their purchases amounts and the more likely they are to be repeated purchasers (Brown et al. 2003; Devaraj et al. 2002; Foucault and Scheufele 2002; Koivumi 2001; Moe and Pader 2004; Park and Jun 2003; Pires et al. 2004; Yang and Lester 2004) and the lower likelihood of them aborting an intended online transaction (Cho 2004). This is supported by the extended Technology Acceptance Model, which suggests that increased user experience has positive effect on users' attitudes toward technology and the mastering of that technology (Venkatesh and Morris 2000).

3.6 Access to information

Internet its helps to store data in an inexpensive way, collect information rapidly and cheaply, provide information interactively in accordance with consumer needs, and, in comparison with printed marketing materials, it offers a greater sensory experience and can serve as a medium for trade (Peterson et al., 1997). Leong et al., (1998) claimed that the most important advantage of the Internet was its ability to provide detailed information and to reach target consumers. Seo and Kim (1999)

state that consumers with online shopping experience highly value the inexpensiveness of Internet search costs of traditional shopping channels. Consumers are not only free to search for product information, but also free to compare information between competing manufacturers (Alba et al. 1997). Klein (1998) argues that information search facilities on the Internet are particularly useful for search goods due to the low perceived costs of providing and assessing objective data. Confirming this point, Liang and Huang (1998) indicate that consumers are likely to conduct transactions in a manner that minimizes transaction costs such as those related to searching for product information, receiving post-sales services, and so forth.

The view that the shopping process is composed of consumers' shopping strategies and goals could explain why information search intentions via the Internet might be an antecedent of intention to use the Internet for purchase. It is believed that consumers develop shopping strategies, that is, action plans, for performing complex shopping behaviors (Darden and Dorsch, 1990). In addition to product type, Klein's (1998) model predicts that two other broad variable categories will influence information-seeking behavior. Specifically, certain consumer characteristics (i.e., product knowledge, prior experience, attitude toward shopping, and social influence) may affect the degree of Internet search.

Today, virtual community have profoundly changed consumers' purchase decision-making process. For example, many people nowadays examine other consumers' reviews and experiences posted in VCs before purchasing new products. In this case, members engage in knowledge sharing to reduce their uncertainty prior to the consumption experience. (Lu et al., 2010). Empirical studies have shown that the intention to get information positively influences the purchasing behavior (Gefen 2002, Pavlou and Fyngenson 2006). According to the Theory of Planned Behavior, behavioral intention is the most influential predictor of behavior (Ajzen 1991). In much research on consumer behavior, researchers often use intention to represent the actual behavior (Lin 2006, Lu and Zhou 2007). Thus, we use the intention to get information and the purchase intention to represent get information and purchase behaviors, respectively.

Consumers are likely to get information from a vendor or website if they trust it and believe that it will provide credible information. Pavlou and Fyngenson (2006) found that the trust belief positively affects consumers' attitude toward getting information from a Web vendor.

Despite the steady growth in online commerce, however, there are few insights regarding how different sources of information affect consumers' purchase decisions. This lack of research is surprising considering similar decisions have been studied extensively in a brick and mortar context (Brucks 1985; Punj and Staelin 1983; Ratchford 2001). Marketing researchers, however, are now calling for more research on the role of different information sources for Internet purchases (e.g., Bucklin et al., 2002; Ratchford et al., 2003).

The online sources that we study include seeing the product online, online recommendations by a friend, recommendations by an online vendor, recommendations in an online editorial, and online ads. For several decades now, researchers have studied how consumers use multiple information sources to arrive at a purchase decision (e.g., Newman and Staelin, 1973). We focus on how consumers search in the online environment and how consumers process and evaluate the credibility of such information. So we look the use of information sources that offered by website. More recently, the growth of the Internet has increased interest in how consumers choose online and offline sources (Klein and Ford, 2003; Ratchford et al., 2003; Rohm and Swaminathan, 2004). Prior research has also investigated whether the use of different offline sources varies across product categories (e.g., Westbrook and Fornell, 1979; Beatty and Smith, 1987). We know of only a handful of studies that investigate the use of online and offline information sources and these are typi-

cally within one product category. For instance, Klein and Ford (2003) and Ratchford et al., (2003) focus only on automobile purchases.

3.7 Theory of Perceived risks

Shopping has long been regarded as a risky activity as shoppers may be uncertain of a purchase decision and the consequences of a poor decision (Bauer 1960). Perceived risk can be defined as consumer prediction about uncertainty potential negative result from online transaction (Kim et al., 2008). Forsythe and Shi, 2003 defined risk on online shopping as certain wish subjectively from purchase disadvantages that is considered in some online purchasing. In trying to understand the way consumer involved in consumer attitude through internet, it seems that risk is one of primary concern considered by consumer. The study of perceived risk has a long history in the marketing literature. Researchers generally agree that perceived risk is a combination of the perception of the likelihood that something will go wrong and the perception of the seriousness of the consequences if it does (Kaplan et al., 1974; Taylor, 1974; Bettman, 1973; Lopes, 1995). Perceived risk has been shown to negatively influence consumers' intention to shop online, both for products (Bhatnagar et al. 2000; Featherman and Pavlou 2003; Jarvenpaa et al. 1999; Joines et al. 2003; Kolsaker et al. 2004; Liang and Huang, 1998; Liao and Cheung 2001; Park et al., 2004; Pavlou 2003) and e-services (Ruyter et al. 2001). Such a negative correlation was found to influence both experienced and novice consumers (Liang and Huang, 1998), while others find no such linkage (e.g., Liao and Cheung, 2001; Miyazaki and Fernandez, 2001).

The effect of perceived risk may be subject to product characteristics. The risk is generally higher for high-involvement products that require the initiation of problem-solving behavior and have some degree of personal importance than for low-involvement products (Pires et al. 2004). Consumers may worry about the security of transmitting credit card information via the internet (Bhatnagar et al. 2000). It is an obstacle that people perceive lack of security and privacy on the internet in the adoption of electronic commerce (Leibermann and Stashevsky 2002). Furthermore, consumers perceive higher levels of risk when shopping online than when shopping in traditional channels (Bhatnagar and Ghose, 2004).

The Internet, just like any type of non-store shopping, makes it difficult to examine physical goods; consumers must rely upon somewhat limited information and pictures shown on the computer screen (Jarvenpaa and Tractinsky, 1999). Consumers generally associate a higher level of risk with non-store purchase rather than store purchase. Unlike offline consumers, online consumers are concerned with risks involved in buying on the Web such as credit card, fraud and not receiving the right products after ordering (Heijden et al., 2003). Moreover, there is bound to be much uncertainty regarding system security, reliability, standards, and some communication protocols (Turban et al., 1999). All these factors increase the perceived risk of online shopping so that more than half of Internet users still have not made an online purchase (Teichgraber, 2001).

Jarvenpaa and Todd (1996-97) classified the risk types as follows. (1) Economic or financial risk: This is the monetary losses due to poor purchase choice, inability to return goods, etc. In this study, economic risk refers to credit card embezzlement. (2) Social risk: This originally refers to the fact that shopping on the web will be considered as imprudent or socially unacceptable, but as online activity becomes popular, we refer it as the embarrassment of confronting people in purchasing private-oriented books. (3) Performance risk: This refers to situation where product/service fails to meet ones expectation in online book shopping, in this study since the book quality is rather fixed, thus we refer to safety of payment methods. (4) Personal risk: This refers to the harmful personal consequences to the consumer resulting from online shopping. However, any losses can be attributed to this type according to the definition; thus, we regard this type of

risk as transaction data leakage. (5) Privacy risk: This refers to the personal private information leakage when offered to the online vendors.

Research Model and Hypotheses (Expressing the relationship between studies variable):

First set of hypotheses:

Hypothesis 1a: Individual attitudes towards online shopping positively affects car purchasing intention.

Hypothesis 1b: Subjective norms towards online shopping positively affects car purchasing intention.

Hypothesis 1c: Perceived behavioral control towards online shopping positively affects car purchasing intention.

Following set of hypotheses:

Hypothesis 2a: Perceptions of products supplied by Automakers positively affects Attitude towards buying a car.

Hypothesis 2b: Shopping Experience achieved by online shopping positively affects Attitude towards buying a car.

Hypothesis 2c: Access to information supplied by the virtual store during the research and comparison processes positively affects Attitude towards buying a car.

Hypothesis 2d: Risk perception of online shopping negatively affects car purchasing intention.

Hypothesis 2e: Risk perception of online shopping negatively affects Attitude towards buying a car.

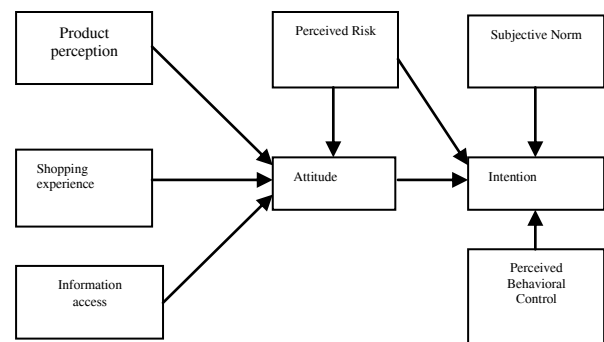


Fig 2. The research model.

4 Research Methodology

The present study is applied in term of objective, and also an analytical-survey in terms of methodology. The survey is based on polls who are involved in subject. Data collection has been achieved through the statistical sample and generalization of the results to the statistical population. The answers obtained from a sample that was selected carefully can be generalized to the population. Therefore, it doesn't require to be scrolled from the entire population. Statistical population consisted of internet customers at the present who intended to do online shopping to buy vehicle. To respond the questions or test the hypotheses in this survey, it's important to identify variables. Here, we considered three kinds of variables including independent variables, dependent variables and mediator variable. In this study, statistical population includes entire buyers who do online shopping from automaker companies and selling vehicle in Iran such as the following companies:

Iran Khodro, Saipa, Saipa Dizel, Pars Khodro, Pars Khodro, Kerman Motor, Bahman Khodro, Amico, Aria Dizel, Asan Motor, Mamout, Atlas Khodro, Maz Iran, Rhine, Avrin Khodro, Modiran Khodro, Modiran Pars.

To calculate statistical sample size according to big and mixed population, we can't make a comprehensive list of population from all members of population. Therefore, we use Cochran's formula whenever the statistical population size is unknown. According to the Cochran Z formula, the amount of standard probability is 96% and then P and Q are the ratio of success and ratio of failure at level of 0.5. Also, the accepted error by researcher d is equal to 0.010. According to this method, number of sample in this study is 155 objects.

In this study, according to this method, 155 subjects were selected as the sample. Study domain includes the entire buyers of online shopping from automaker companies and vehicle sellers in Iran.

5 Data collection

The viewpoint of the present research is in the scopes of e-commerce, e-marketing, decision making and vehicle and especially in the scope of the role of online shopping in customers' acceptance and buying vehicle. The data collection method was questionnaire which is one of the common study tools and a direct method to collect the data. Through the questionnaire, we intended to seek knowledge, attitude and customers beliefs. In addition to the questionnaire, in order to achieve precise information, we used other methods such as library method to obtain information.

A questionnaire consisting of 42 questions was used to collect the data and information. The questionnaire was prepared based on theoretical principles of the study and the hypotheses. The status of hypotheses has been realized by the questionnaire. The questionnaire was provided in the form of informative items and according to the spectrum of Likert quintet. It was tried to design the questionnaire as understandable as possible and asked from respondents in each of these factors in questionnaire to declare their option from very low until very much. The numerical values in order were considered 1 to 5. General scale and ratings of this spectrum are as follows:

General scale: very low, low, somewhat, much, very much

Ratings: 1, 2, 3, 4, 5.

5.1 The data analysis methods

In the present paper, the descriptive statistical techniques were used for data analysis such as creating frequency tables and designing charts for analyzing the statistical distribution in terms of age, sex and etc. the inferential statistics were also used for analyzing the research data through different analyses. First of all, in order to identify the exploratory factors, to confirm the factor analysis and studying the variable conditions such as reliability and validity, the one-sample test was used. In fact, the difference between the studied sample averages is tested by a given value. In the present research, the factor analysis is used in terms of the validity (divergent).

Moreover, in order to test the measuring model and to trust its correctness, the confirmatory factor analysis (divergent validity 5) was used. The questions of the present research are suggested that confirmed the latent variables by exploratory factor analysis then the correctness and fitting of the model are discussed by the confirmatory factor analysis (table 1).

The results of exploratory factor analysis obtained from SPSS and LISREL software.

In the present research, for the properness of the data for factor analysis KMO (Kaiser-Meyer-Olkin) was used. Furthermore, for assuring the data to be accurate (I.e. to be assured that the correlation matrix is not equal to 0), the Bartlett test was used. All derived factors in the present research were not favored of the researcher. Therefore, the goal of factor analysis is to explain the phenomena with less prior variables. To do this, mathematic criterion such as Kaiser or Scary Kettle are used for maintaining the factor.

5.2 The results of the findings

The electric commerce development in different areas especially in industry is the result of electric commerce capabilities which is greatly accepted in today's business. Human being tries to accelerate the development process of the electric commerce in different aspects of the social system. It kept away from traditional pattern and tries to create new pattern with the requirements of today's technology. In this regard, most of service providers paid attention to new technology of providing service to customers as a way for controlling costs, absorbing new customers and realizing the customer's expectations. They also added the use of technology in their program as a guidance (Joseph and Stone, 2003, p. 190).

Understanding the factors lead to accepting information and create the situation under which the e-commerce is accepted is one of the most important studies in domain of e-commerce. In other words, why people turn to e-commerce and how it's accepted are of the most important researches in e-commerce. In other words, why people turn to e-commerce specially purchasing from the internet or do not accept it are of the most issues in e-commerce discussions. Therefore, the researcher studied the importance of this subject.

Based on the findings of the research, the first hypothesis was accepted with 0.05 difference values. It means that the individual perspective to internet purchase positively affect the car purchase tendency.

The second hypothesis was confirmed because of the less difference level which is discussed. It means that the mental norms regarding online purchase positively affect the tendency of buying car.

The third hypothesis (with 0.02 difference level) revealed that controlling the perceived behavior in terms of online purchase positively affect the tendencies of buying car. The fourth hypothesis was accepted with the difference level of 0.08. This shows that the understanding of the delivered products by car producers positively affect the attitude toward buying car.

The fifth hypothesis indicates that the experience gained by purchase in online condition positively affects the attitude toward buying car. It was confirmed based on the difference value of 0.08 (table 2).

The sixth hypothesis was confirmed based on the difference level of 0.05. It means that accessing the delivered information by online store positively affect the attitude toward buying car.

According to different level and result, the 7th hypothesis was confirmed. The understanding of online purchase risk negatively affects the tendency of purchasing car. Based on the 0.08 difference level, the result of eighth hypothesis was confirmed. Understanding online sale negatively affects the attitude toward purchasing car.

In order to confirm or reject the hypotheses, the structural equation model was used especially path analysis. The following structural model shows the relationship between tendencies of purchasing car and online sale. The structural model in standard estimation status showed that there's a positive (0.66) and significant (8.50) effect in online purchasing and selling (Figures 1 and 2).

Table 1

sex	quantity	percentage	age	quantity	percentage	education	quantity	Percentage
male	23	15%	20-28	29	18%	Under diploma	28	18%
female	124	80%	29-30	46	30%	Diploma	49	31%
uncertain	8	5%	36-45	49	31%	BS	42	27%
			46 to up	32	21%	MA	20	13%
			Without answer	-----	-----	Phd	11	7%
						Without answer	5	4%
Total	155	100%	Total	155	100%	Total	155	100%

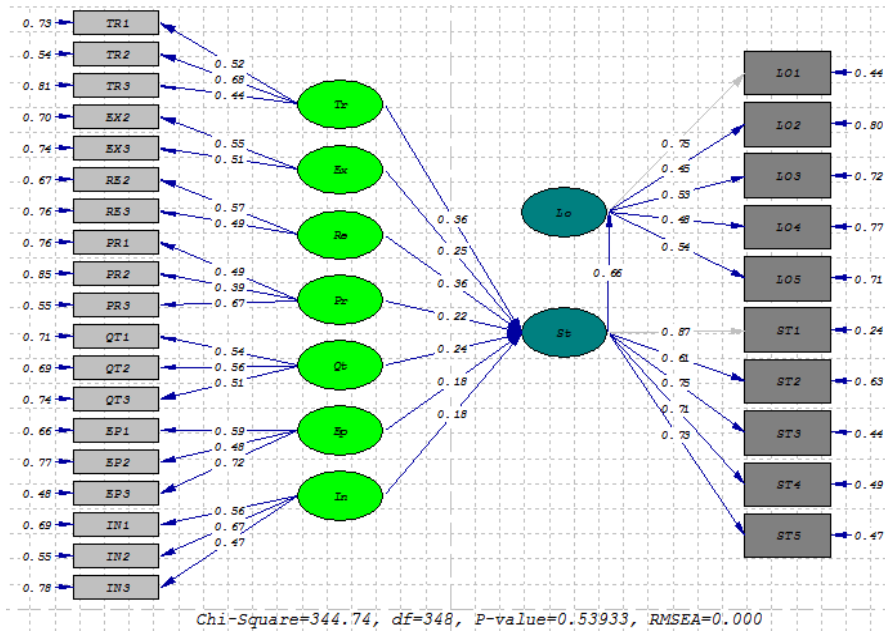


Figure 1: the structural model in standard estimation status

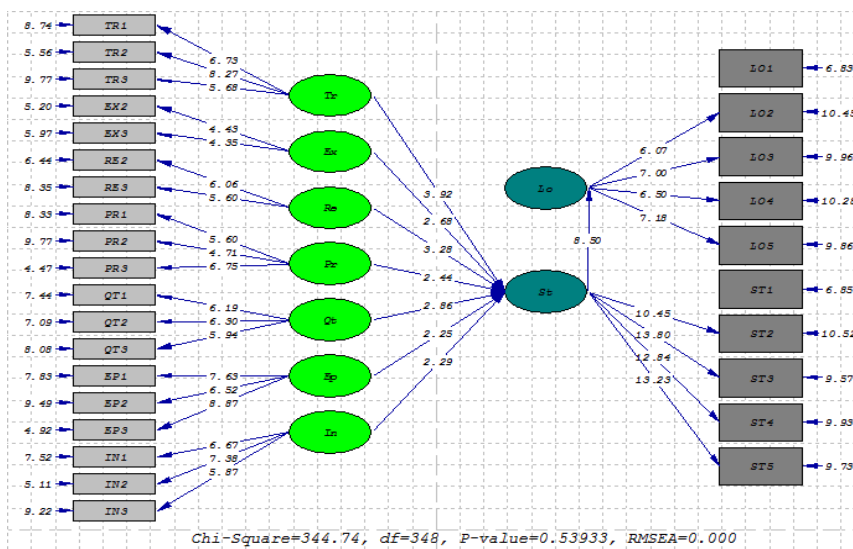


Figure 2 : structural model in significant coefficient status

Table 2: the results of fitting model

Results	Obtained numbers	Standard value	Indicators
Suitable fitting	0.897	$df < 3 \chi^2$	The ratio of K2 to degree of freedom Chi-square / df
Suitable fitting	0.000	$0.08 < < 0.05$	RMSEA
Suitable fitting	0.95	Higher than 0.9	GFI
Suitable fitting	0.92	Higher than 0.9	AGFI
Suitable fitting	0.97	Higher than 0.9	CFI
Suitable fitting	0.95	Higher than 0.9	NFI
Suitable fitting	0.96	Higher than 0.9	NNFI

6 Conclusion

This paper studied the relationship between online sale and acceptance and purchase of car by customers. The behavior of customers in relation to online sale was studied. Based on the studies all hypotheses were confirmed. The following suggestions are introduced to the same society:

The website design should pay attention to the ease of practicality and it should also use facilities such as flash technology for the first page by focusing on products and services the company provides. Moreover, a powerful web search should be used for the user. The secure and easy pay should be provided for customers to assure the customers. It should introduce various payments such as bank account, credit card and etc. Facilities such as the designed product orders through internet should be introduced to users. Before purchasing product or service, the order process should display the good purchase to user with high resolution in a way that customers be confident in delivering method. Facilities should receive the customer addresses through websites and they should send them an email informing about the product. Since after sale services have an important role in assuring the customer, it's suggested that the company agents and centers be introduced clearly and the contact info be contained in the website. For future studies, the researchers can analyze the factors, absorb the customer's satisfaction and prioritize them. They also study and compare online sale in big and small companies, the indirect barriers of ecommerce in supply chain and the effect of ecommerce in developing the supply chain and increasing the customer's satisfaction. Studying the relationship between internet marketing and social welfare and internet democracy increase are suggested for further researches.

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