

## A Model for Factors Affecting on Online Purchase Intention Raja Company Case Study

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**Abstract.** The rapid growth of Internet technology development has enabled consumers to search for product information and purchase products or services from Internet. As such, it is vital to examine the factors that effect on the customer online purchase intention. So, the main purpose of this study is to accomplish this duty. Data has been gathered from 309 Raja's travelers and analyzed by SPSS software in terms of Descriptive and Inference statistics. The results indicate that perceived quality of web site, by means of trust in web site, has effect on online purchase intention ( $p\text{-value} < 5\%$ ). In second hypothesis, online purchase intention has been affected by attitude toward online purchasing ( $p\text{-value} < 5\%$ ). But in the third hypothesis, results show that gender has no effect on online purchase intention ( $p\text{-value} < 5\%$ ). The implications of this investigation help to Raja managers to facilitate and improve the online purchase.

**Keywords:** Online purchase intention, perceived quality of web site, trust in web site, attitude toward online purchasing, gender

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## 1. Introduction

Internet and Web technologies have fundamentally changed the way businesses interacted, transacted and communicated with consumers (Ranganathan & Sanjeev, 2007).

In fact, The advancement of the World Wide Web has resulted in the creation of a new form of retail transactions electronic retailing (e-tailing) or web-shopping (Ling, chai & piew, 2010). The internet has become one of the major attributes of the information society, and is continuously improving its services all over the world ( Tariq & Eddaoudi, 2009). As a business medium, the Internet is unique in permitting firms to create interactive online environments that allow consumers to gather and evaluate information, assess purchase options, and directly buy products at their own convenience. Web-based retailing has become a global phenomenon with steady increase in online sales across the globe (Ranganathan & Sanjeev, 2007).

The rapid growth of the Internet technology has enabled Iranian consumers to purchase products or services from the web-retailers and search product information from the Internet (Ling, chai & piew, 2010). However, the internet has not yet been fully exploited in the Iranian market, as it has been in the European and American countries. Recently, the internet has seen a great improvement in the number of Iranian internet Users ( Tariq & Eddaoudi, 2009).

Web-shopping behavior does not necessarily follow traditional consumer behavior in the bricks-or-mortar retailing environment, thus Internet marketers are advised to explore the determinants of customer online purchasing intention among the web shoppers. With a good understanding of the web shopper's online purchase intention, web-retailers will be able to develop effective and efficient web-shopping strategies to attract new and potential web-shopping customers. Since consumer behavior is cultural-specific, it is unclear whether the reported findings of the consumer online purchase intention in the western countries (which exhibit low uncertainty avoidance in the Hofstede cultural typology) can be directly applied in a cross-cultural context such as in Iran (Ling, chai & piew, 2010).

So the main purpose of this study is to examining the factors that effect

on Iranian's online purchase intention especially when they are purchasing ticket for trip from website.

## **2. Online Shopping and Customer Online Purchase Intention**

Online shopping is becoming increasingly popular. Advancement in the Internet technology has facilitated the growth of in-home shopping (Lumpkin & Hawes, 1985). Online retail sales are estimated to grow from \$172 billion in 2005 to \$329 billion in 2010 (Johnson, 2005). There are 32 countries worldwide with the Internet penetration rate higher than 50% (<http://www.internetworldstats.com>).

Shim, Quereshi and Siegel (2000) define web shopping as the process consumers go through to purchase products or services over the Internet. The terms online-shop, Internet-shop, web-shop and online-store are used interchangeably in the extant literature. Web shopping is an e-commerce system used by shoppers in the context of business-to-consumer (B2C) or business-to-business (B2B).

Customer online purchase intention was one of the intensive research areas in the extant literature. Customer online purchase intention in the web-shopping environment will determine the strength of a consumer's intention to carry out a specified purchasing behavior via the Internet (Salisbury, Pearson, Pearson and Miller, 2001). Purchase intention can be classified as one of the components of consumer cognitive behavior on how an individual intends to buy a specific brand. Laroche, Kim and Zhou (1996) assert that variables such as consideration in buying a brand and expectation to buy a brand can be used to measure consumer purchase intention. Based on the argument of Pavlou (2003), online purchase intention is the situation when a customer is willing and intends to become involved in online transaction. Online transactions can be considered as an activity in which the process of information retrieval, information transfer, and product purchase are taken place (Pavlou, 2003).

The potential benefits of online shopping for consumers include convenience, various selection, low price, original services, personal attention, and easy access to information, among others. The proliferation of

online shopping has stimulated widespread research aimed at attracting and retaining consumers from either a consumer-or a technology-oriented view (Jarvenpaa and Todd 1997). The consumer-oriented view focuses on consumers' salient beliefs about online shopping. Such beliefs may influence purchase channel selection. For example, online consumer behavior has been examined from the perspectives of consumer demographics (Brown et al. 2003; Chau et al. 2002; Korgaonkar et al. 2004; Li et al. 1999; O'Keefe et al. 2000; Park and Jun 2003; Park et al. 2004; Stafford et al. 2004), cognitive/psychological characteristics (Hoffman and Novak 1996; Huang 2003; Lynch and Beck 2001; Novak et al. 2000; Wolfinbarger and Gilly 2001; Xia 2002), perceptions of risks and benefits toward online shopping (Bhatnagar and Ghose 2004a; Bhatnagar and Ghose 2004b; Bhatnagar et al. 2000; Featherman and Pavlou 2003; Garbarino and Strabilevitz 2004; Huang et al. 2004; Jarvenpaa and Todd 1997; Jarvenpaa and Tractinsky 1999; Jarvenpaa et al. 1999; Joines et al. 2003; Kolsaker et al. 2004; Liang and Jin-Shiang 1998; Liao and Cheung 2001; Park et al. 2004; Pavlou 2003; Pires et al. 2004; Solomon 1999), shopping motivation (Childers et al. 2001; Johnson et al. 2004; Novak et al. 2000; Wolfinbarger and Gilly 2001), and shopping orientation (Donthu and Garcia 1999; Korgaonkar and Wolin 1999; Li et al. 1999; Swaminathan et al. 1999).

The technology-oriented view, on the other hand, explains and predicts consumer acceptance of online shopping by examining technical specifications of an online store. These specifications include user interface features, Web site content and design, and system usability. The above two views do not contradict but rather reinforce each other.

As the competition in e-commerce is intensified, it becomes more important for online retailers to understand the antecedents of consumer acceptance of online shopping or online purchasing. Such knowledge is essential to customer relationship management, which has been recognized as an effective business strategy to achieve success in the electronic market. In the below, the determinants of consumer acceptance of online purchasing are reviewed in detail in order to extracting our research model.

### 3. Determinants of Consumers of Online Purchasing

Previous research has identified four determinants of consumer acceptance of online shopping, namely consumer characteristics, personal perceived values, website design and the product itself.

The first factor is consumer characteristics (Swaminathan, Lepkowska-White, & Rao, 1999). Variables belonging to this factor include personality traits (O’Cass & Fenech, 2003), self-efficacy (Eastin, 2002), demographic profiles (Li, Kuo, & Russell, 1999; Sim & Koi, 2002; Vrechopoulos, Siomkos, & Doukidis, 2001) and acceptance of new IT applications (Childers, Carr, Peck, & Carson, 2001; Citrin, Sprott, Silverman, & Stem, 2000; O’Cass & Fenech, 2003). The second factor is personal perceived values (Li et al., 1999). Variables in this dimension include perceived risk (Bhatnager, Misra, & Rao, 2000; Eastin, 2002), perceived convenience (Eastin, 2002), perceived website quality (O’Cass & Fenech, 2003) and perceived benefits (Eastin, 2002).

The third factor is website design (Dahlen & Lange, 2002; Liang & Lai, 2002; Ranganathan & Grandon, 2002). Variables included in this factor are security (Belanger, Hiller, & Smith, 2002; Liao & Cheung, 2001; Ranganathan & Grandon, 2002; Swaminathan et al., 1999) and privacy (Belanger et al., 2002; Ranganathan & Grandon, 2002; Swaminathan et al., 1999). The fourth factor is the product itself. Successful Internet marketing depends on the product and service types being marketed (Peterson et al., 1997). Product type affects consumer attitude to shopping online (Bhatnager et al., 2000; Liao & Cheung, 2001; Peterson et al., 1997). Furthermore, Liao and Cheung (2001) described the effects of product life content (the degree to which the product is essential to the daily lives of its users) on consumers initially prone to shop online.

#### 3.1 Trust Toward Websites

One could say that trust itself is difficult to define, but one explanation prevailed: "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustier, irrespective of the agility to

monitor or control that other party” (Mayer et al., 1995). In other definition, Trust was defined as the beliefs one has regarding a seller’s behavior based on the consumer’s perceptions of the seller’s ability, benevolence, and integrity (Mayer et al., 1995; McKnight & Chervany, 2001; Palvou, 2003).

A great deal of the literature shows that trust plays an important role in the relationship with uncertainty, interdependence, and concerns of opportunism (Gefen, 2000; Gefen et al., 2003; Li et al., 2006; Pavlou & Gefen, 2004). Indeed, trust may play a decisive role in the transactional relationship with environmental uncertainties between sellers and buyers. Hence, if companies know how to create online trust, they can enhance their web sites, which will have an impact on sales revenues and profitability.

In the context of online shopping, a great number of studies have insisted that a customer’s purchase intentions, satisfaction, and loyalty are related closely to the building of consumer trust (Ba & Pavlou, 2002; Gefen et al., 2003; Li et al., 2006; Lim, Sia, Lee, & Benbasat, 2006). In fact, although, online shopping has become almost a must in some developed countries, several studies demonstrated that trust is a noteworthy factor which influences customers to use internet as a mean of commerce. Trust is considered to be a precious asset in online transactions (Ponnurangam et al., 2006). Koufaris and William (2002) found the notion of trust on the internet is the basis for customer involvement in online shopping. Further, their research indicated that an enjoyable experience with the use of any website might lead to a significant level of trust in the company itself, thus motivating customers to buy again and again online. Reicheld and Schefer (2000) also explained the acquisition of trust in the core of loyalty circulation. Namely, once consumers have developed trust toward a specific firm, they will tend to be willing to provide the firm with their personal information, and then that firm can earn the chance to create a more favorable relationship among customers. These situations may make it possible to provide more customized products and services.

McKnight and Chervany (2002) have specified that trust in e-commerce context is related to the trust relationship between the online seller and

buyer. This is based on the willingness of the seller to provide a safe environment for every online transaction made by the customers, both at the banking transaction and the product delivery moment.

As a result, the circulation of consumer trust is the result of a high level of loyalty, and trust continually increases during the development of the circulation. Brynjolfsson and Smith (2000) suggested that there exist implicit uncertainties and inherent risks around online surroundings, which are the spatial and temporal separations between online consumers and web retailers. These separations exist for the following reasons: first, there are monetary-loss relevant risks because online consumers must depend on electronic information, and thus consumers face exposure to incomplete or distorted product information; second, there are risks associated with the release of personal information to online shopping malls and third parties. Therefore, consumers who have a high level of trust toward online shopping malls tend to be more inclined to pay price-premiums for the purchase of specific products.

Koufaris and William (2002) examined the relative significance of using the internet to buy and sell products and services based on the following trust indices: third party privacy seals, privacy statements, third party security seals, and security features. The result of this study showed that the most important index perceived by customers is security. The output also proved that the valuation of trustworthiness by customers is a lot different from the one done by experts in the field. Another important issue discussed by the research was the degree to which customers are willing to divulge their personal information, including credit card numbers and other information, to companies online.

In addition, during the recent years, customers have had more information and options on the web, and companies struggle to maintain and earn the trust of their customers and potential customers.

Customers' trust is difficult to build, especially when there is a lack of face-to-face communication or contact. In other words, there is this need for people to see the tangibility of their transactions and avoidance to anything virtual and does not physically exist. Trust was one of the factors that proved to have the same effect everywhere, as the higher the trust, the more people will be willing to buy online (Koufaris

and William, 2002). Other studies showed that security is critical in the decision to buy online. The ability to provide secure website was significant in both implementation and success of online shopping (Ruppel, Underwood-Queen and Harrington, 2006).

### 3.2 Web Site Quality

An analysis of extant literature on online shopping reveals three distinct orientations underlying these studies; viz, Human-Computer Interaction (HCI), behavioral, and consumerist orientations. These three streams have also been identified by Chang, Cheung, and Lai (2005). In this section we imply only to the first category because is related to our research. HCI research is primarily concerned with design and implementation of user interfaces that are easy to learn, efficient, and pleasant to use. Scholars embracing a HCI orientation have investigated Web-site related characteristics that potentially influence online consumer behavior. These researchers emphasize factors such as information content (Ranganathan & Ganapathy, 2002); visual attractiveness of the Web site (Heijden, 2003); quality of information provided (Salaun & Flores, 2001); ease of navigation, time taken for information search (Evarard & Galletta, 2005; Spiller & Lohse, 1997; Tarafdar & Zhang, 2005); and the overall design of the Web site (Flavin, Guinaliu, & Gurrea, 2006; Huizingh, 2000; G. Lee & Lin, 2005; Zviran, Glezer, & Avni, 2006). This stream of research places technological factors to be at the forefront of factors influencing online consumer shopping behavior.

Given that a Web site is the dominant medium of interaction between merchants and consumers in online shopping, it is imperative that the quality of the Web site is given adequate importance. Past research on Web quality can be classified into four complementary approaches (Ethier, Hadaya, Talbot, & Cadieux, in press). The first approach focused on the functional features of the site. Under this approach, scholars examined the content, style, presentation, navigation and other features of the Web site (Tarafdar & Zhang, 2005). The second approach drew upon the technology acceptance model to view Web quality as an overarching construct that included elements such as information quality, systems quality, and service quality. The third approach emphasized



the fundamental service that the business-to-consumer (B2C) Web site provided. Here, Web quality was assessed with subdimensions like reliability, responsiveness, assurance, empathy, and tangibility. The fourth approach viewed Web quality through the lens of the consumer attitudes and perceptions (Aladwani & Palvia, 2002). Extending these approaches, scholars have also proposed multiple instruments for assessing Web quality (e.g., WEBQUAL [Loiacono, Watson, & Goodhue, 2002]; SiteQual [Webb & Webb, 2004];SERVQUAL [Iwaarden & Wiele, 2003], etc.) that try and incorporate dimensions from one or more of these approaches.

A review of past research on Web site quality reveals little consensus on what constitutes this construct. Multiple terms such as Web quality, Web site quality, service quality, site usability, and so forth, have been used to denote different dimensions of Web site quality. Earlier studies adopted a dominant HCI perspective focusing on the quality of the medium through which online commerce was conducted between businesses and consumers. As more behavioral and consumerist studies emerged, multiple lenses were used to assess Web site quality, thus leading to varied terminology and mixed empirical findings. However, there is a broad agreement that quality of a B2C Web site is a multidimensional and a more complex construct (Ethier et al. in press).

Zviran, Glezer,& Avni (2006) further confirmed the linkage between Web site design and customer satisfaction. Lepkowska-White (2004) found that online buyers and online browsers differed significantly in their evaluation of B2C sites. Online browsers viewed sites more negatively than buyers on various parameters such as site enjoyment, speed of downloads, personalization of information, relevance of information, ease of navigation, and so forth. Flavin et al. (2006) found Web usability (assessed in terms of Web site structure, simplicity, ease of navigation, speed, etc.) to influence buyer satisfaction and loyalty. All these studies point to the importance of content and design elements in Web sites. Since a Web site forms the primary medium of communication and interaction between merchants and consumers, the quality of the Web site, in terms of the way its contents are structured and the way the Web channel is designed, has the potential to influence the purchase behavior of online consumers.

### 3.3 Online Purchasing and Gender

In the before section was mentioned that consumer characteristics influence on online shopping behavior. The basic notion underlying this stream is that individual characteristics such as the demographics, personality, and profiles play a larger role in determining the online shopping behavior (De Wulf, Schillewaert, Muylle, & Rangrajan, 2006; Liao & Cheung, 2001; Zhang, Prybutok, & Koh, 2006).

In fact, Consumer demographics is among the most frequently studied factors in on online shopping research. The effects of gender, age, income, education, and culture of consumers on online shopping behavior have been examined since late 1990s (Bellman et al. 1999; Jarvenpaa and Tractinsky 1999; Li et al. 1999; Swaminathan et al. 1999).

While some websites are gender-specific, the majority of commercial websites usually target both males and females. In addition, gender is said to impact the way males and females participate in online activities, which is why it is important to understand their differences regarding online perception (Hoffman, Kalsbeek, and Novak, 1996; Tracy, 1998; Wells and Chen, 1999).

Traditionally, shopping is an activity more favored by women. It is women who are usually in charge of household shopping and hold more positive attitudes towards the traditional store and catalogue shopping than their male counterparts (Alreck and Settle 2002). However, the new shopping channel provided by the Internet seems to result in a different, if not opposite, gender pattern. Although there was no significant difference between online shoppers and non-shoppers in terms of gender (Donthu and Garcia 1999), men were found to make more purchases (Li et al. 1999; Stafford et al. 2004) and spend more money online (Susskind 2004) than women. Men's perceptions of online shopping were approximately the same as (Alreck and Settle 2002) or even more favorable than (Slyke et al. 2002) those of female consumers.

Such a change of gender pattern in the online shopping environment has been explained using different models or factors, including shopping orientation (Rodgers and Harris 2003; Swaminathan et al. 1999), information technology acceptance and resistance (Rodgers and Harris 2003; Susskind 2004), product involvement (Slyke et al. 2002), product proper-

ties (Citrin et al. 2003), and perceived risks (Garbarino and Strabilevitz 2004). First, shopping orientation was found to influence consumers' shopping activities, interests, and opinions. Men and women were found to have different shopping orientations—men were more convenience-oriented and less motivated by social interaction, while women were just the opposite (Swaminathan et al. 1999]. The function of shopping online as a social activity is weak compared with shopping in traditional stores. This is due to the lack of face-to-face interaction with sales associates online. Women did not find online shopping "as practical and convenient as their male counterparts" (Rodgers and Harris 2003), page 540). Another reason lies in the technology associated with online shopping. Information systems studies have shown that there are gender differences in the context of individual adoption and sustained usage of technology (Venkatesh and Morris 2000). Women were reported to have a higher level of web apprehensiveness (i.e., individual's resistance to or fear of the WWW as a channel for context-free online information seeking and communication) (Susskind 2004). Being more skeptical about e-business than their male counterparts; women were emotionally less satisfied with online shopping and made fewer online purchases than men (Rodgers and Harris 2003).

Second, the products that male and female consumers are interested in buying are different. For example, male consumers are more interested in hardware, software, and electronics, while females are more interested in food, beverages, and clothing. In the early stage of e-commerce, the types of products available online used to be male-oriented (Slyke et al. 2002). Women did not shop online because they could not find products that interested them.

Third, women demonstrate a stronger need for tactile input in product evaluation than men (Citrin et al. 2003). The inability to touch or try on products, a shortcoming of online purchasing, might also result in fewer female online shoppers. This characteristic affects online purchase negatively, particularly for those products that require more tactile cues for their evaluation (e.g., shoes).

Hoffman et al. (1996) documented that males carry out more online product research than females, which is known to be the major activity

that precedes the act of purchase. Also, it was stated by Tracy (1998) that men focus more on the transactional aspect of online shopping. Moreover, the researcher found that males are 2.4 times more likely to buy online than females. Christopher (2004) indicated that the number of females using the internet to shop has tremendously increased in the recent years. Further, he found that females have become a significant force in cyberspace as customers of goods and services. Again, another study undertaken by Commerce-Net and Media research reported that, the growth rate of females making purchases online has surpassed the growth rate for males (Dillon, 1999). In addition, a study made by Active-Media proved a progressive growth of females buying on the internet as was reported by Mintel (2000). This confirmation has allowed the prediction that the great online presence of females will emerge and dominate the one previously shown by males. As a conclusion from both reports (Dillon, 1999 and Mintel, 2000), females have become a good source of profits for the most well-known companies. Jaques (2004) has similar findings in the case of European consumers and their reactions to shopping online. Moreover, numerous marketing research studies also confirmed the role that females are playing in online shopping and that there will be no difference between them and males in terms of future e-commerce impact.

Studies of gender differences in online shopping attitude are scarce and reported findings are inconsistent (Cyr & Bonanni, 2005; Dittmar, Long, & Meek, 2004). An extensive review of online shopping literature by Chang, Cheung, and Lai (2005) shows that more men than women buying online in some studies and no significant gender differences in online shopping behavior between the genders in other studies. Likewise, a more recent review by Zhou, Dai, and Zhang (2007) demonstrates conflicting findings pertaining to the impact of gender on online shopping activities. Thus, gender differences in online shopping attitude deserve more attention and better understanding.

With a few exceptions, explicit research studies to address gender differences in online shopping are scarce (Dittmar et al., 2004). As a result, little is known about males' and females' perceptions of online shopping and what impacts men's and women's decision to engage in or abstain

from online shopping (Cyr & Bonanni, 2005). Furthermore, literature reviews of online shopping indicate that results concerning gender differences in online shopping environments are mixed and inconsistent (Chang et al., 2005; Zhou et al., 2007). In spite of the effect of demographic variables especially gender on online purchase intention as a control variable, it seems that, gender has direct effect on online shopping as an independent variable. Sorce, Perotti & Widrick(2005) like Zhou, Dai & Zhang(2007) indicated that gender as an independent variable, has positive effect on online shopping. This inconsistency about of gender role has caused to attending to this issue in this study.

### 3.4 Attitude Toward the Online Shop

Wu (2003) described attitude as "a person's relatively consistent evaluations, feelings and tendencies toward an object or idea". Attitudes toward buying on the internet are defined as a consumer's positive or negative feelings about performing the purchasing behaviors on the internet (Schlosser, 2003). Attitude theory (Fishbein and Ajzen, 1975) suggests that intentions toward the idea of online purchasing are mainly explained by attitudes toward the idea. Attitudes develop over time as people gain experience with the object or receive knowledge about the object from other sources. Then, the formed attitude stimulates actions or behaviors toward the object and, based on their attitude, people perform positive or negative actions. Yang and Lester (2004) and Lepkowska-White (2004) have empirically demonstrated that online buyers have a more positive attitude toward online shopping than nonbuyers. According to the Theory of Reasoned Action (Ajzen & Fishbein, 1980) and Ajzen's (1991) Theory of Planned Behavior, attitudes have a considerable impact on behavior (Churchill & Iacobucci, 2002). Therefore, we hypothesize that consumers' attitudes toward the online shop positively influence shopping behavior.

Furthermore, according to Martinez-Lopez, Luna and Martinez (2005), the classical attitude model is also perfectly valid when the object concerned is the internet. This classical attitude model (belief or cognition-affect-behavior) that is called CAB Paradigm, is based on the assumption that consumers tend to form their beliefs based on the accumulated

knowledge of some key attributes of the object. Affect should be formed after the forming of firmly held beliefs about the object, and would be followed by behavior. In our paper, we can suppose that this CAB paradigm can be presumed to be true.

In most studies, attitude shows a positive relationship with online shopping (Chang et al., 2005). However, the extent of the relationship between attitude and online shopping is not collectively consistent across studies (Glassberg et al., 2006). For example, Zhou et al. (2007) indicate that the path coefficient between attitude and online shopping intention varies in strength from 0.77 in some studies to 0.35 in others. This issue is examined in this research.

Based on the literature review, the conceptual model that has been exhibited in Figure.1. is used for this study.

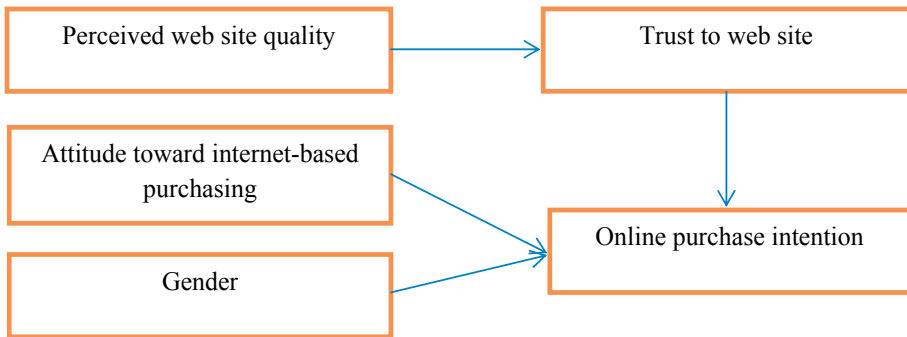


Figure 1. Conceptual model

### **Hypothesis:**

1. Perceived web site quality through trust to website, has effects on online purchase intention.
2. Consumer's attitude toward internet-based purchasing has effects on online purchase intention.
3. Consumer's gender has effects on online purchase intention.

## 4. Research Methodology

### 4.1 Instrument and Data collection

A questionnaire instrument has been used in this study. This questionnaire comprises 25 items. The respondents indicated their agreement or disagreement with the items using a five-point Likert scale with 1 representing strongly disagree and five representing strongly agree. Finally, the demographic information was collected by asking questions regarding the participant's gender, marital status and years of experience with internet. Data has been gathered from 309 consumers in Iran that involved in online purchase programs and have had past experience about internet-based shopping. Respondent to this study consisted of 156(50.5%) males and 153(49.5%) females. With respect to marital status, the results indicated that of the total of 309 participants, 109 people (35.3)% were single, 177 people (57.3%) were coupled and 23 people (7.4%) are in other category. Table 1, summarizes the demographic profile of the survey participants who returned the valid responses. Furthermore in according with the descriptive statistics of variables that have been displayed in Table 2, we can observe that all of the variables have meaning above the average.

**Table 1:** Demographic profile of surveyed students

Item	Frequency	%
<b>Gender</b>		
Male	156	50.5
Female	153	49.5
<b>Marital Status</b>		
Single	109	35.3
couple	177	57.3
etc	23	7.4
<b>Years of experience with internet</b>		
<1	48	15.6
2-5	170	55
>5	91	29.4

**Table 2:** Descriptive statistics of items

		Perceived web site quality	Attitude toward internet-based purchasing	Trust to web site	Online purchase intention
N	Valid	309	309	309	309
	Missing	0	0	0	0
Mean		3.5502	3.6731	3.6550	3.5624
Median		3.5000	3.8333	3.7000	3.5556
Mode		3.60	4.00	3.80	3.89
Std.Deviation		0.28668	0.41499	0.33990	0.34070
Variance		0.08218	0.17222	0.11553	0.11607
Minimum		2.60	2.50	2.40	2.78
Maximum		4.10	4.50	4.30	4.22

## 5. Data Analysis

### 5.1 Model Validation

SPSS version 16.0 was used to analyze the collected data. Given the theory-driven approach to scale development, scale validation was done using confirmatory factor analysis. The factor analysis utilized the principal component extraction method and varimax rotation. It required that factor loadings exceed 0.40. Table 3, summarizes factor loadings, Cronbach's alpha, Eigen values, and variances explained of all indicator variables.

The results indicated the presence of four factors with Eigen values greater than one. This questionnaire used the Cronbach's a coefficient to test the internal consistency among items of the same construct. According to Cuieford (1965), a Cronbach's a value that is greater than 0.7 indicates high reliability and a Cronbach's a value that is less than 0.35 represents unacceptable reliability (Lee et al., 2009).

A Cronbach's a value between 0.35 and 0.7 has fair but acceptable reliability. Thus, all constructs can be considered reliable. The reliability values of the constructs are in the range of 0.67-0.78 suggesting acceptable reliability. Cumulative variance explained for all the variables are measured to be acceptable: for the independent variables, 72.958% and for the dependent variable, 61.325%. The factor loading values of all indicator variables are over 0.479, far exceeding 0.30, which, as a rule of thumb, is considered the minimum loading for interpretability (Lee et al., 2009).



**Table 3:** Reliability and validity

Category	Constructs/factors	Indicators	Factor loading	Eigen value	Total variance explained (%)	Cumm. variance explained (%)	Cronbach's alpha
Independent Variable	Perceived web site quality	PWSQ1	0.563	7.434	27.534	27.534	0.78
		PWSQ2	0.871				
		PWSQ3	0.869				
		PWSQ4	0.718				
		PWSQ5	0.744				
		PWSQ6	0.641				
		PWSQ7	0.665				
		PWSQ8	0.765				
		PWSQ9	0.598				
		PWSQ10	0.601				
	Attitude toward internet-based shopping	ATIS1	0.581	3.539	23.612	51.146	0.67
		ATIS2	0.711				
		ATIS3	0.529				
		ATIS4	0.612				
		ATIS5	0.707				
		ATIS6	0.667				
	Trust to web site	TWS1	0.681	1.142	21.812	72.958	0.73
		TWS2	0.805				
		TWS3	0.878				
		TWS4	0.724				
TWS4		0.553					
TWS5		0.616					
TWS6		0.798					
TWS7		0.823					
TWS8		0.651					
TWS9		0.558					
TWS10	0.501						
Dependent Variable	Online purchase intention	OPI1	0.479	3.749	61.325	61.325	0.71
		OPI2	0.710				
		OPI3	0.803				
		OPI4	0.593				
		OPI5	0.523				
		OPI6	0.628				
		OPI7	0.498				
		OPI8	0.782				
		OPI9	0.702				

## 5.2 Hypotheses Testing

In this study, correlation coefficient, regression model and independent samples t-test have been used for testing the hypotheses.

Table 4, summarizes the results of first hypothesis. The results of partial correlation coefficient indicates that the effect of Perceived web site quality through trust to website, on online purchase intention is significant at 0.05 level ( $p\text{-value} < \%5$ ).

**Table 4**

p-value	Partial correlation coefficient	Sample size
0.001	0.184	309

In second hypothesis, the effect of Consumer's attitude toward internet-based purchasing on online purchase intention has been examined. The findings (table 5) shows that this effects is significant at 0.05 level ( $p\text{-value} < \%5$ ).

**Table 5**

p-value	correlation coefficient	Sample size
<0.001	0.247	309

The aim of the third hypothesis was to investigation the effect of consumer's gender on online purchase intention. For this purpose, the independent two sample t-test was used. However before this test, the variance equivalence should be examined. The result of this test (table 6) indicates that the variances of two groups of consumer are equal. So after that, the p-value and t-value indicate that, gender of consumers hasn't effect on online purchase intention (table 7).

**Table 6**

p-value	F-Value
0.707	0.142

**Table 7**

Significant level		p-value	t-value	Std.Deviation	Mean	Sample size	group
Downer	Upper						
-0.136	0.016	0.123	-1.547	0.339	3.53	156	Male
				0.340	3.59	153	Female

## 6. Regression Model

Now in this stage, with consideration of a regression model, the simultaneous effects of perceived web site quality, trust to web site, attitude toward internet-based purchasing and gender on online purchase intention were examined. The initial regression model has been exhibited in below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

In this model: Y: online purchase intention X1: perceived web site quality X2: trust to web site X3: attitude toward internet-based purchasing X4: gender The result of the table 8 shows that this model is significant at 0.05 level (p-value < %5). Furthermore, the amount of justified  $R^2$  and  $R^2$  Indicates that, amount of explained variance by independents variables is low.

**Table 8**

p-value	F-Value	$R^2$ Justified	$R^2$
<0.001	10.665	0.112	0.123

In the next step, the significance of the regression coefficients is examined by t-test. As has been shown at the table 9, only the amount of  $\beta_i$  perceived web site quality and attitude toward internet-based purchasing are significant. So the existence of these variables is necessary for the regression model.

**Table 9**

p-value	t-value	$\beta_i$	Regression coefficient
0.002	3.060	1.250	$\beta_0$
<0.001	4.288	0.299	$\beta_1$
0.054	1.937	0.117	$\beta_2$
<0.001	4.707	0.231	$\beta_3$
0.161	-1.404	-0.051	$\beta_4$

So the finally egression model is to:

$$Y = 1.25 + 0.299 * X_1 + 0.231 * X_3$$

## 7. Conclusion

In the future, most of the shopping activity will be conducted through information technologies like internet; mobile ant etc and consumers haven't attending at stores physically. In fact, recently the online purchasing behavior is a main stream in marketing field. However, this new phenomenon has own special problems. In fact, "A major stumbling block for internet retail growth relates to consumer distrust of shopping online-over concerns that are both real and imagined" (Arnold, Landry, & Reynolds, 2007, p. 300). For example, the results of study in this area indicate that online shoppers are abandoning their shopping carts nearly 60% of the time. Considering that an estimated \$102 billion was spent online during 2006, shopping cart abandonment cost online vendors \$61 billion in lost sales revenues (Holland, 2006). Zhou, Dai, and Zhand (2007) noted that the number of aborted online transactions outnumbered completed transactions by four to one. Valentine(2003) further elaborated, "according to Celent Communications, online payment fraud is 30 times higher than payment fraud in the physical world" (p. 39).

Consideration of this problem, the purpose of this quantitative research study was to assess the factors that may cause consumers to accept or reject online shopping. A better understanding of the factors that may affect online shopping acceptance or rejection will provide online vendors with insights into what causes consumers to abandon or complete transactions.

In the first hypothesis, the effect of perceived web site quality on online purchasing behavior through trust to web site was examined. The results confirm this hypothesis. This findings are similar with the results of Koufaris and William (2002); McCloskey (2006); Wakefield, Stocks & Wilder (2004); Koufaris & Hampton-Sosa (2002a) and Slyke, Belanger & Comunale (2002).

The effect of attitude toward internet-based shopping on online purchasing was investigated in second hypothesis. The results of correlation coefficient and p-value indicate that this relation is approved. Yang & Lester (2007); Shergill & Chen (2005); Heijden, Verhagen & Creemers (2003) and Wang, Chen, Chang & Yang (2007) in contrast with Dijst, Farag & Schwanen (2005) have reached to the same results with our survey.

In the last hypothesis, the effect of gender as an independent variable on online purchase intention was analyzed. Wakefield & Whitten (2006); Sorce, Perotti & Widrick (2005); Zhou, Dai & Zhang (2007); Tracy (1998); Mintel (2000); Hoffman, Kalsbeek and Novak (1996); Dillon (1999); Christopher (2004) and Wells and Giihn (1999) in their studies indicated that gender as an independent variable has positive effect on online purchase intention. The findings of our research aren't similar with them. In fact, gender as an independent variable hasn't effect on online purchase intention.

Finally, with the consideration of regression model, the simultaneous effect of all independent variables include of perceived web site quality, trust to web site, attitude toward internet-based shopping and gender on online purchase intention was examined. Although the significance of this model was proved, but the amount of explained variance was low ( $R^2 = 0.123$ ). This means that, other variables with the exception of these variables have strong effect on online purchase intention. So future

study need to address this issue. The results of testing the significance of correlation coefficient of regression model show that only perceived web site quality and attitude toward internet-based shopping are necessary for the regression model.

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