Antecedents of online purchase intention: A Cross-national study between Iran and Malaysia.

Seyyed Mohammad Sadiq Es-haghi[1], Mona Afshardoost[2] and Mohammad Mehdi Ahmadi[3]

ABSTRACT

This study examines how cultural values influence consumer decision-making with respect to online purchase intention in Iran and Malaysia. The findings suggest that cultural values are antecedents to Website trust, perceived Website privacy and Website quality. As a result, comparing the Iranian and Malaysian models of online purchase intention, Website trust significantly affected the frequency of online shopping in the Malaysian model, but it did not in the Iranian model. The perceived Website privacy and Website quality significantly affected online shopping frequency in the Iranian model, but not in the Malaysian model. The implications of the study were discussed.

Keywords: Cross-Cultural Research, Structural Equation Modeling, Hofstede, Online Purchase Intention, Perceived Website Quality.

1. INTRODUCTION

Internet has developed a new economy. The revenue growth through online transaction has been noteworthy. In 2014, Internetretailer.com reported that global sales through e-commerce will increase 18.6% year over year in 2016 and worldwide e-commerce will be reach to $1.88 trillion. In the U.S., the investment bank predicts 12.4% growth during the next three years to $235.3 billion in online retail sales. Statistics from Forrester Research (in Statistics.com), revealed that online retail sales of European Union will hit $184.6 billion in 2015 and will increase with an annual growth rate of 12% over the next five years and will reach to €233.9 billion by 2018. Asia-Pacific is expected to become the leading region for online retail sales in 2015, with 33.4% of the total sales, compared with 24.6% in Western Europe and 31.7% in North America (e-marketers, 2014).

[1]SEYYED MOHAMMAD SADIQ ES-HAGHI, Faculty of Management and Accounting, AllamehTabataba'i University, Tehran, Iran, Azadist, Behbudist., Nokhost ally, No. 10, Tehran, Iran, Tel: +989127499599, E-mail: Sadiq.Isaac@gmail.com
[2]MONA AFSHARDOOST, Universiti Teknologi Malaysia, International Business School, Kuala Lumpur, Malaysia, Azadist., Behbudist., Nokhost ally, No. 10, Tehran, Iran, Tel: +989128804008, E-mail: mona_chorni@yahoo.com
[3]MOHAMMAD MEHDI AHMADI, Faculty of Management and Accounting, Allameh Tabataba'i University, Tehran, Iran, Azadist., Behbudist., Nokhost ally, No. 10, Tehran, Iran, Tel: +989374953032, E-mail: mmahmadi68@gmail.com

The increase in the number of Malaysian Internet users has been noteworthy over the years. As evident through the Internet World Stats.com the total number of Malaysian Internet users is expected to reach the 25 million by 2017. E-commerce in Malaysia is growing in tandem with the growth of Internet users. Statista.com reported that, the e-commerce penetration in Malaysia was 37% in 2014. According to internetworldstats.com Iran has the highest number of internet users (45%) in the middle-east countries. Researching information (67%) was the top activity performed by Iranian user followed by reading news websites (65%), online banking (64%), downloading music (49%), social networking (44%), and shopping online (43%). (TFOUR.ME)

Over the last decade, there has been a dramatic growth in e-commerce and online purchase. Likewise, this has sparked interest in academia as evident through the literature in this area. This is supported through using Scholar Google search and online purchase as article title that yields 1,740,000 hits (as at 22 March 2015). The notion of predicting online purchase behavior through intention has been well-recognized in research (Kim & Kim, 2004; Chen, Hsu & Lin, 2010; Delafrooz, Paim & Khatibi, 2011; Sin, Nor & Al-Agaga, 2012). Several concepts have been examined the factors that influence the online purchase intentions: cost (Kim & Kim, 2004; Delafrooz et al., 2011; Khare & Rakesh, 2011; Dabholkar & Sheng, 2012), gender differences (Gabriano & Strahilevitz, 2004; Jayawardhena, Wright & Dennis, 2007; Mee, Seng & Chai, 2010), trust and security (Chen et al., 2010; Ling, Chal & Piew, 2010; Delafrooz et al., 2011), ease of use and usefulness (Ramayah & Ignatius, 2009; Sin et al., 2012), saving time and money, the availability of information and wide range of alternatives (Harn, Khatibi & Ismail, 2006; Yi & Jiang, 2007; Hassan, Ghani & Said, 2009; Tudoran, Olsen & Dopico, 2009; Gao, Zhang, Wang & Ba, 2012; Belanche, Casaló & Guinalíu, 2012).

Past studies on Malaysian and Iranian consumer's online purchase intentions suggest that trust, Website quality and perceived Website privacy were conducted in isolation of each other. A gap exists for the integration of these factors and the effects on consumer online purchase intentions. Several studies had recognized culture as an important factor to influence online purchase intention across countries (Smith, Deitz, Royne, Hansen, Grünhagen & Witte, 2011; Park & Jun, 2003; Choi & Geistfeld, 2004; Linda, Ueltschy & Krampf, 2004; Jin, Park & Kim, 2008; San Martin, Camarero & San José, 2011; Garcia, Romeo & Subira, 2013; Jarvenpaa, Tractinsky & Saarinen, 1999). In this study we used Hofstede's (1997) work on national cultures as a theoretical basis to provide explanation of cultural differences in the hypothesis development. The focus of this study is to examine whether online consumers in Iran and Malaysia share similar intentions with regard to online purchasing. While there is a lot of research focusing on online purchase intentions in Western countries, little research has compared consumer intentions toward online purchasing across

nations. Therefore, this study examines the impact of Website trust, perceived Website privacy, and Website quality on online purchase intentions in Iran and Malaysia and to find out whether there are differences in the purchase intentions among these two countries.

2. THEORETICAL BACKGROUNDS

2.1 National Culture Differences

Culture is an essential element of the social environment and it has been received in the marketing literature as an influential factor shaping consumer behavior. On a macro level, many studies have indicated that different cultures response differently to adopt online purchasing (Choi & Geistfeld, 2004; Fan, Lee & Kim, 2013; Smith et al., 2011; Jin et al., 2008; Park & Jun, 2003; Linda C. et al., 2004; San Martin et al., 2011; Kim & Kim, 2010). While several cultural frameworks exist, we turn to Hofstede (1997), who have built the most widely accepted frameworks for understanding the existence of cultural differences among nations. This study uses Hofstede's theory concerning international cultures in identifying the expected behavior of two different countries with two different cultures namely Iran and Malaysia towards purchasing online.

In Hofstede's theory, national culture has been defined by five dimensions of power distance, individualist vs. collectivist, masculinity vs. femininity, Long term vs. short-term and uncertainty avoidance. Power distance describes as: "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 1997). In cultures with large power distance, accepting the authority is expected and in cultures with low power distance, people feel they should be treated equally. Collectivism explains cultures with strong connection among individuals. In collectivist cultures, confrontation is avoided and harmony should be supported. Individualism demonstrates cultures with loosing connections between individuals. In individualistic cultures, individuals feel free to express their opinions and are often believed honest for doing so (Hofstede, 1997). Lower scores are signs of a collective culture and high scores are signs of an individualistic culture.

Femininity implies to cultures that extended over the gender roles. In feminine cultures, men and women are equally treated in their life. However, in masculine cultures, the gender roles are clearly determined. Men are assumed to be tough, assertive, and concentrating on material success, whereas women are seen to be modest, tender, and focused on quality of life subjects. Higher scores are signs of a more masculine culture and lower scores are signs of a feminine culture (Hofstede, 1997).

The uncertainty avoidance is "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hofstede, 1997). Lower scores are sings of weak levels of uncertainty avoidance and higher scores are sings of strong levels of uncertainty avoidance. In cultures with weak uncertainty avoidance, innovative ideas, deviant and behaviour are tolerated. In contrast, in cultures with strong uncertainty avoidance, "emotional need for rules" is needed.

Long vs. short-term explains the degree a society accepts long-term faithfulness to traditional, forward thinking values. Societies with long-term values take a more pragmatic approach: they encourage thrift and efforts in modern education as a way to prepare for the future. While, short-term-oriented societies prefer to maintain time-honored traditions and norms while viewing societal change with suspicion. In this research, we seek to determine whether there are any differences in the intentions of two groups of respondents (one from Iran, the other from Malaysia) purchase online. On the basis of Hofstede's cultural dimensions: Iranians score higher on individualism (41 vs. 26) and uncertainty avoidance (59 vs. 36) while Malaysians score higher on power distance (104 vs. 58) and masculinity (50 vs. 43) (Hofstede, 1983).Therefore, based on the cultural differences summarized earlier, we would expect Malaysian and Iranian respondents to have different attitudes towards purchasing online.

2.2 Perceived Website Trust and Cross-Cultural Online Purchase Intention

In general, trust is clarified as the tendency of a party to be defenseless to the another party's action on the basis of expectation that the other party will do an special action which is important to trustor, without regard to the ability to control or monitor the other party (Mayer, Davis &Schoorman 1995). For that reason the person who trusts might engage in actions which might involve risks (Gefen, 2000). Hence, approving trust includes taking a particular extent of risk. The definition of trust in marketing is perceived reliability of a consumer on the brand, services, or products of a retailer (Flavian, Guinalíu & Gurrea, 2006).

Many researchers found the relationship between Website trust and purchase intentions. Gefen (2000) have examined the customer's behavior in an online bookstore and discovered that trust have influenced the customer's intention to purchase from this online bookstore. Following research showed the same conclusions, revealing that the trust of customers in web vendor influenced their intention to buy from the Website and consequently their loyalty to that site (Wu & Chang, 2006; Salo & Karjaluoto, 2007; Chang & Chen, 2008). According to Yoon (2002) Website trust have significant impact on customers satisfaction and their purchase intentions. Similar findings have also been reported by the search of Wu and Chang (2006), they suggest that most of customers do not buy products from a web vendor regarding to the lack of trust in that site. (McKnight & Chervany, 2002) categorized the factors which are influencing the customer's

trust in a site as structural guarantee of the Web, Website quality and the Website reputation, the same categorization also was found by (Salo & Karjaluoto, 2007; Chang & Chen, 2008).

Chen et al. (2010) had completed research about attributes of Website that contribute consumer purchase intention. In their foundation, security, usability, convenience, trust and delivery factors were the most valued between the groups. Hong and Cho (2011) have studied about the influence of consumer trust in loyalty and buying intention in B2C e-retailer in Korea. Their findings indicate that the three intermediary factors of benevolence, trustworthiness and integrity have a significant impact on customer trust. They also found that trust have impact on both purchase intention and attitudinal loyalty in a B2C e-retailing in an intermediary way. According to Dabholkar and Sheng (2012) greater consumer participation in using recommendation agents for online product, leads to greater trust, more satisfaction and thus greater purchase intention. Mohammadian and Ghanbar (2014) examined factors affecting Iranian Web brand trust and have found that security, privacy, brand name, quality of information, word of mouth, Website design, navigation and past experiences positively influence online brand trust and purchase intention. According to Hanafizade, Behboudi, Ilani & Kalhor (2011) lack of information, lack of electronic guarantee/security, lack of reputation, and lack of trust have significant impact on avoidance of online shopping.

Andalib and Danaee (2013) also claimed that three components of trust, efficiency and achievement play an important role on customer loyalty to purchase online. Delafrooz et al. (2011) had investigated the consumer's online purchase intention between students of university in Malaysia. The results showed that only security, trust and self-efficacy were positively related to the online buying intention.

Culture has also been found to influence how an individual responds to a potential risk (Yamagishi & Yamagishi, 1994, Weber & Hsee, 1998, Taylor, Franke & Maynard, 2000). Some researchers found the cultural differences in the impact of Website trust and purchase intention. Choi and Geistfeld (2004) studied how cultural values have impact on consumer decision-making with respect to e-commerce in Korea and the US. The findings suggest that perceived risk (security of credit card information, confidentiality of personal information, trust of online retailers, etc.) has a direct and negative effect on consumer's intention to adopt online purchasing. Also the results showed the higher levels of uncertainty avoidance result in higher levels of perceived risk, which reduced the consumer's intention to purchase online in Korea**.** San Martin et al. (2011) in a cross-national study from Spain and Japan found that online perceived risk (risk in the transaction, risk in the channel, social risk) has a positive effect on purchase intention.

However, there are some researches which didn't find any cultural differences in the influence of Website trust on purchase intention. For examples, Jin et al. (2008) have found the cultural differences in the impact of firm reputation on online purchasing and have found cultural similarities in trust-loyalty and reputation-trust links between Korea and the USA. Also, Jarvenpaa, S.L. et al. (1999) in a cross-cultural study between Australia and Israel found no strong cultural impact regarding the antecedents of trust. Therefore our research for distinct dimensions of Website trust begins with a framework of three categories: Website trust, trust of internet service provider, and trust of internet retailer. Table 1 shows the definition of constructs. Thus, it can be hypothesized that:

H1a: Website trust will be positively associated with purchase intention for Iran, and Malaysian consumers.
H1b: The strength of the relationship between Website trust dimensions to use online shopping will be different between Iran and Malaysian consumers.

Table 1: The definition of Website trust dimensions

Trust of internet retailer	The overall consumer trust in the community of sellers in the e-marketplace	Mayer et al. (1995) and Gefen (2000)
Website Trust	The overall consumer trust in the Website	Ling et al. (2010
Trust in e-service provider	The overall consumer trust in the Internet seller	Featherman, Miyazaki et al. (2010)

2.3 Perceived Website Privacy and Cross-Cultural Online Purchase Intention

The privacy concept is in its own body not new and in a general manner has been clarified as an individual's power to control the conditions by which his/her personal data is obtained and used (Galanxhi and Nah, 2004). In social practice theory, privacy is defined as "the right to be left alone" (Warren and Brandeis, 1890). Pound (1915) defined privacy in terms of an extension of personhood or personality .The growth of new technologies capacity for data processing and its complexity has led privacy to be an increasingly essential issue (Kelly and Erickson, 2004).Therefore, individual distrust is growing due to how their personal information is being collected and processed. We frame online privacy concern as users' perception of protection against security threats and control of their personal data information in an online environment (Lallmahamood, 2007).

Prior research established that majority of Internet users are not aware of the possible risks of their usual Web activities like their online purchasing, booking flights/hotels, visiting Websites of social networking and even file transferring. In these activities the user's privacy is at risk. Personal information of users can be continuously changing hands or even in some situations in the servers, without the user's permission or notice. This information may even be given to the other parties for market research or profit (Nguyen and Vu, 2011). Udo (2001) investigated the online IT user's concerns so as to disconfirm or confirm the worries of data privacy. The findings shows that most of the online It users have worries about the security and their privacy while purchasing online. They had also concerns about the safety of their e-mails. Lallmahamood (2007) explored the influence of perceived privacy and security on the individual's intention to use Internet banking in Malaysia. It was concluded that security and privacy have significant relationship with the individual's intention in using Internet Banking. Brown et al., (2005) have studied concerns for privacy and online travel product purchase in the Australia. The study revealed that the confidential guarantees from online travel websites may not have any impact on consumer's buying intentions.

Park and Jun (2003) observed cross-cultural differences in consumers behavior among Korea and the U.S. The effects of perceived risks of Internet shopping and Internet usage were higher or even opposite in the American sample compared to the Korean sample. However, no significant differences found in online buying experience or Internet buying intentions among Korean and American consumers. Linda C. et al. (2004) explored perceived consumer risk (privacy, financial, etc.) with regard to online purchasing using a cross-national sample from U.K., the U.S. and Canada. The findings shows that the influence of online purchase experience in reducing perceived consumer risk is different significantly by product/service and across cultures. For instance, in the case of clothing, purchase experience had impact on perceived risk significantly only in Canada, not in the U.K. and U.S. In the case of computer purchase, experience reduced perceived risk in Canada and the U.K., but had no significant influence in the U.S.   In Japan the influence of risk on purchase intention is clearly higher than in the case of Spain. Kim and Kim (2010) focused on a cross-cultural study between Korea and the USA. They found that the significant impact of privacy on e-satisfaction and e-service quality was equal in both countries. Therefore it is hypothesized that:

H2a: Perceived Website privacy will be positively associated with purchase intention for Iran, and Malaysian consumers.

H2b:The strength of the relationship between Perceived Website privacy and intention to use online shopping will be different between Iran and Malaysian consumers.

2.4 Website Quality and Cross-Cultural online purchase intention

Aladwani and Palvia (2002) have described perception of customers of Website quality as evaluation of users about features in a website meeting their needs and impressing the total excellence of that Website. Website quality is the overall perceived quality of a Website according to the viewpoint of customer (Yoo and Donthu, 2001). In prior researches there are many Website quality dimensions that clarified and can be sorted into some categories like ease of use, enjoyment, security, information quality, and service quality (Yoo and Donthu, 2001; Aladiwani and Palvia, 2002; Wolfinbarger and Gilly, 2003; Hoffman and Novak, 2009).

Sin et al. (2012) reported that 3 factors of ease of use, subjective norm and perceived usefulness have positive impact on buying intention in online social media in Malaysia.

In another study Bavarsad, Rahimi & Mennatyan (2013) found that the quality of web site content, perceived security and customer's trust influence the e-shopping positively and significantly. Webb and Webb (2004) argued that the union of quality factors obtained from data quality and service quality are required to assess both minimum and desired quality factors which are expected in a Website. Also, both data and service quality have positive relation to customer satisfaction in a B2C Website. Hsu, Chang & Chen (2011) investigated the influence of Website quality on satisfaction and buying intention of travel products in Taiwan. They have researched three dimensions of Website quality which are information availability, service quality and system quality of Website. The results indicate that service quality has more important impact on decision making of customers than system quality and information. Similarly, Afshardost, Farahmandian & Es-haghi. (2013) studied the factors influencing online purchase intention among students in Malaysia. The results revealed that Website content quality has significant impact on student's intention to purchase online. Hence, considering the multidimensional of Website quality we define Website quality dimensions as Website ease of use, Website entertainment and Website content quality.

Smith et al. (2011) conducted a cross-cultural study of online shopping behavior in three countries: Norway, Germany and the US. The results indicated the differences in shopper's behavior. The findings show that the full TAM model does not hold for the European samples. In addition, cognitive involvement has impact on perceived usefulness and perceived ease of use in all countries, but the relationship between behavioral intention and affective involvement does not hold in Germany. Fanet al. (2013) observed a cross-cultural differences in the relationships among perceived risk, website quality (online retailer's reputation)

and emotion from the samples of the US and Korea. The findings show that the links for reputation-perceived risk and reputation-emotion are stronger in Korea than in the US. The results also suggest that Korean consumers are more affected by the online retailer's reputation than are US consumers. Fan et al. (2013) attempted to explore the relationships between web site quality, customer satisfaction, flow, and relationship intention in Korean and Chinese e-marketplaces. The findings revealed that Web site quality had some impact on satisfaction and flow in both countries, but for the dimensions of web site quality different results were found between the countries. Flow positively influencing satisfaction, but the impact in China was greater than that in Korea.

However, some researchers didn't find the cultural differences in their studies. Garcia et al. (2013) compared the ways in which a web site's content quality and content presentation can have impact on the purchase intentions in Spania and the U.S. The findings revealed no cultural differences in buyer's preferences. Kassim and Abdullah (2010) studied the impact of perceived service quality dimensions on loyalty, satisfaction and trust in e-commerce settings in Qatar and Malaysia. They found no significant difference among the effects of satisfaction on loyalty, trust on loyalty, and perceived service quality on satisfaction among the Malaysian and Qatari customers showing that the relationships in the model did not hold between the two cultural groups because the respondents have similar cultural background. Hence, considering the multidimensional of Website quality we define Website quality dimensions as Website ease of use, Website entertainment and Website content quality. The definitions of constructs are explained in Table 2. Based on the discussed theory we can hypothesis that:

H3a: Website quality will be positively associated with purchase intention for Iran, and Malaysian consumers.

H3b: The strength of the relationship between Website quality dimensions to use online shopping will be different between Iran and Malaysian consumers.

Table 2: The definition of Website Quality Dimensions

Content quality	Website attributes such as information usefulness, completeness, accuracy and so on	Aladwani and Palvia (2002)
Ease of use	The ease of understanding of the Web pages and intuitive operations	Loaicono et al. (2002)
Entertainment	Visual appeal, innovativeness, and emotional appeal of the Website	Loaicono et al. (2002)

3. METHODS

3.1 Sample and data collection procedures

The survey data were conducted in Iran and Malaysia. The online survey was accomplished to people during a two-month period. A total of 1,100 e-mail accounts in Iran and 1,200 e-mail accounts in Malaysia were contacted for survey participation by using a convenience sampling method. A total of five online retailer companies in Iran and four online retailer companies in Malaysia were chosen.

To ensure that the respondents had purchased any product online (or intended to buy), the following question was used: "I had an online purchasing (or wanted to purchase) from this store". Only those respondents who said "yes" were included as acceptable data. Therefore, from 400 responses which returned from Iranian consumer, only 315 of them were usable, indicating a response rate of 28.6 percent. Also, from 330 Malaysian respondents, only 276 of them were usable which represent a response rate of 27.5 percent.

After deleting incomplete questionnaires, a total of 591 responses (315 from Iran and 276 from Malaysia) were gathered for further analyses. A low response rate in the research was not unexpected, due to the fact that the e-mails sent to people, did not grant any monetary incentives to encourage participation. However, the response rate of more than 10 percent is an accepted level for further analyses (Manfreda, Bosnjak, Berzelak, Haas & Vehovar, 2006).

Regarding the gender ratio, the number of males were more in both Iranian and Malaysian sample (58.4 percent for Iran and 54.7 percent for Malaysia). In Iran, most respondents were between the ages of 20 and 29 (49.2 percent) and in Malaysia, most respondents were between the ages of 30 and 39 (43.8 percent). In total 62.7 percent of Iranian respondents had online shopping experience and 67.4 percent of Malaysian respondents purchased a product online. Table 3 shows the frequency distribution for the demographic variables.

Table 3: Frequency distributions for the demographic variables for Iraninan and Malaysian

Variable	Category	Iran (n=315)		Malaysia (n=276)	
		n	%	n	%
gender	Male	184	58.4	151	54.7
	female	131	41.6	125	45.3
age	<20	28	8.8	15	5.4
	20-29	155	49.2	99	35.8
	30-39	103	32.6	121	43.8
	40-49	22	6.9	36	13
	>50	7	2.2	5	1.8
Online purchase experience	Yes	229	62.7	186	67.4
	No	86	27.3	90	32.6

3.2 Survey instruments

A questionnaire was developed to measure the four constructs of the study as well as demographic information. The measures are mainly adopted from the previous researches (Mayer et al., 1995; Yoo and Donthu, 2001; Salisbury, Pearson, Pearson & Miller, 2001; Aladwani and Palvia, 2002; Loaicono, Watson & Goodhue, 2002; Mukherjee and Nath, 2007; Ling et al., 2010; Featherman, Miyazaki & Sprott, 2010). There are overall nine measures connected with the research model. The questionnaire consisted of two sections. The first section contains questions on the profile of respondents including age, gender and online purchase experience. The other sections contain Likert-scale questions with 1 representing "strongly disagree" and 5 representing "strongly agree". A Pilot study was conducted to check for the reliability of survey items. A total number of 40 survey questionnaires were distributed both in Iran and Malaysia. In fact, reliability analysis will help to determine how the questionnaire items must be designed (Malhotra and Groover, 1998). Scales reliability was estimated by using Coefficient Cronbach's alpha (Cronbach, 1951). The reliability of all measures were greater than 0.70. Thus, the pilot test shows that all measures are reliable. This suggests that all items can be used in the final distribution of questionnaires.

3.3. Data analyses

Descriptive statistics were calculated in SPSS 22 and proposed hypotheses were examined through a structural equation modeling (SEM) in Amos 22.
Eventually, a multi-group analysis was conducted to check if the proposed hypotheses are different based on nationality (Iranian vs. Malaysian samples). A comparison of χ^2 value was employed among constrained and unconstrained

models to estimate whether the two groups are statistically different. In addition, multi-group analyses were conducted to find out if there is any difference in the proposed relationships by comparing the coefficient of each path (Byrne, 2009).

4. RESULTS

4.1 Descriptive statistics

Table 4 presents descriptive statistics for the all measurement items. Using the total data (N=591), mean score for Website quality was determined to be the highest. Malaysian sample showed higher mean scores in all constructs than Iranian sample. Furthermore, the normality of data was examined by Kolmogorov-Smirnov test statistic. Since the test statistic level is higher than 0.05, the data was normal. Table 4 presents the descriptive statistics for measurement items.

Table 4: Descriptive statistics for measurement items

Construct	Mean (SD)			One-Sample Kolmogorov-Smirnov Test statistics		
	Combined (n=591)	Iran (n=315)	Malaysia (n=276)	Combined (n=591)	Iran (n=315)	Malaysia (n=276)
Purchase intention	3.34 (0.97)	3.03 (0.93)	3.70 (0.89)	0.080	0.077	0.122
Website trust	3.25 (0.88)	3.20 (1.00)	3.30 (0.71)	0.064	0.075	0.065
Perceived website privacy	3.18 (0.87)	3.03 (0.92)	3.34 (0.79)	0.084	0.077	0.122
Website quality	3.36 (0.81)	3.07 (0.85)	3.69 (0.62)	0.060	0.056	0.061

4.2 Structural model

Structural Equation Modeling (SEM) was used to evaluate the structural model. The results revealed that the structural model fit the data well ($\chi^2_{(1977)}$=4659.228, p<0.000; CFI=0.93; RMSEA=0.065). The research model is shown in Figure 1.
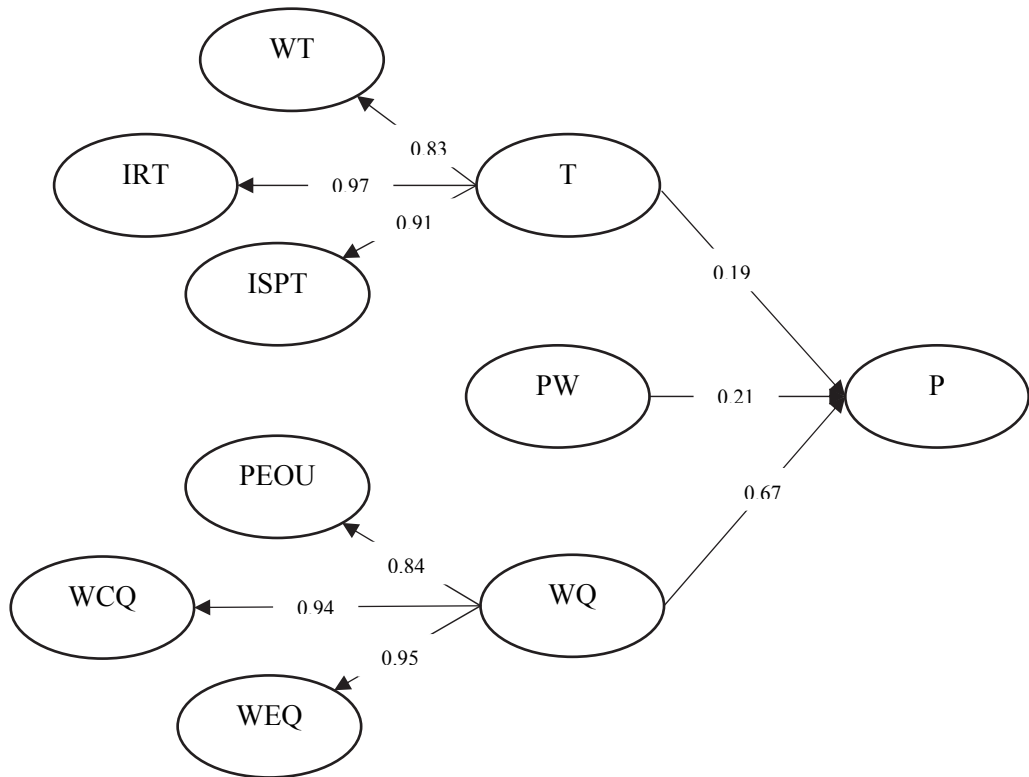
Figure 1: Antecedents of online purchase intention

Hypothesis 1 was accepted, indicating a significant relationship between trust and online purchase intention (H1, $\gamma=0.19$, p<0. 01). Hypothesis 2 was supported with a significant path from perceived Website privacy to online purchase intention (H2, $\gamma=0.21$, p<0. 01). Hypothesis 3 was supported, indicating a significant relationship between Website quality and online purchase intention (H3, $\gamma=0.67$, p<0. 01).

4.3 Multiple group analysis comparison between Iranian and Malaysian samples regarding intentions to purchase online

A multiple group analysis was conducted to examine whether Iranians and Malaysians are different with respect to online purchase intention. The total data were divided into two groups: Iranian group and Malaysian group. The differential impact for the two groups was found by comparison of the chi-square

difference among unconstrained and constrained models (Hair, Black, Babin& Anderson, 2010).

Afterwards, we checked whether the proposed model fit for both sample groups. The acceptable fit indices were obtained (Iranian: $\chi^2_{(656)}$=3205.009, p<0.000; CFI=0.96; RMSEA=0.089; Malaysian: $\chi^2_{(656)}$=3182.779, p<0.000; CFI=0.91; RMSEA=0.079). Each path coefficient was compared among the two groups to discover if the statistical differences among the two groups exist. At the same time, we constrained each path to be equal between Iranian and Malaysian and checked the differences in chi-square values among the constrained model and the freely estimated model. The results of the separate structural model estimations regarding path coefficients and chi-square values are presented in Table 5.

Table 5: Comparison of Iranian and Malaysian differences in the relationships between trust, perceived website privacy, Website quality and online purchase intention.

Path	Standard Estimates		Subgroup Comparison ($\chi^2_{(1977)}$ Unconstrained =11916.766)		Result
	Iran (n=315)	Malaysia (n=276)	Constrained $\chi^2_{(1978)}$	$\Delta\chi^2_{(1)}$	
T $\rightarrow$ PI	0.00^{ns}	0.47^{**}	11931.881	15.115^{**}	Malaysia>Iran
PWP $\rightarrow$ PI	0.38^{**}	0.14^{*}	11922.295	5.529^{*}	Malaysia<Iran
WQ $\rightarrow$ PI	0.85^{**}	0.38^{**}	11923.382	6.616^{*}	Malaysia<Iran

Notes: T= Trust, PWP= Perceived Website Privacy, WQ= Website Quality, PI= Purchase Intention
*p< 0.05
**p< 0.01

In H1a, we suppose that the relationship between trust and online purchase intention is different among Iranians and Malaysians. A chi-square difference test for the path coefficient between trust and online purchase intention resulted in statistical significance ($\Delta\chi^2_{(1)}$=15.115, p<0.01), indicating that this path among the two groups was significantly different. The coefficient path was larger in Malaysian group. Thus, the relationship between trust and online purchase intention in Malaysia is higher than Iran.

In H2a, we predicted that the relationship between perceived Website privacy and online purchase intention is different among Iranians and Malaysians. A chi-square difference test for the path coefficient between perceived Website privacy and online purchase intention resulted in statistical significance ($\Delta\chi^2_{(1)}$=5.529, p<0.05), revealing that this path among the two groups was significantly different. The coefficient path was larger in Iranian group. Thus, the relationship between perceived Website privacy and online purchase intention in Iran is higher than Malaysia.

In H3a, we predicted that the relationship between Website quality and online purchase intention is different among Iranian and Malaysian. A chi-square difference test for the path coefficient between Website quality and online purchase intention resulted in statistical significance ($\Delta\chi^2_{(1)}$=6.616, p<0.05), indicating that this path between the two groups was significantly different. The coefficient path was larger in Iranian group. Therefore, the relationship between Website quality and online purchase intention in Iran is greater than Malaysia.

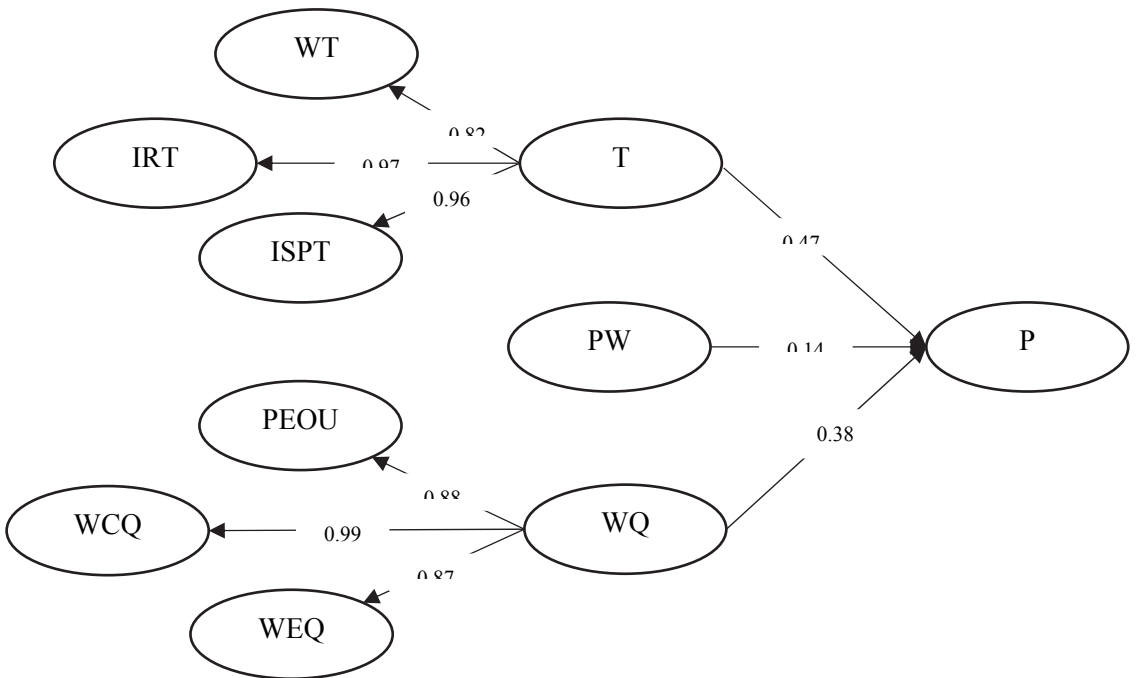The research model for Iran and Malaysia is displayed in Figure 2 and 3.

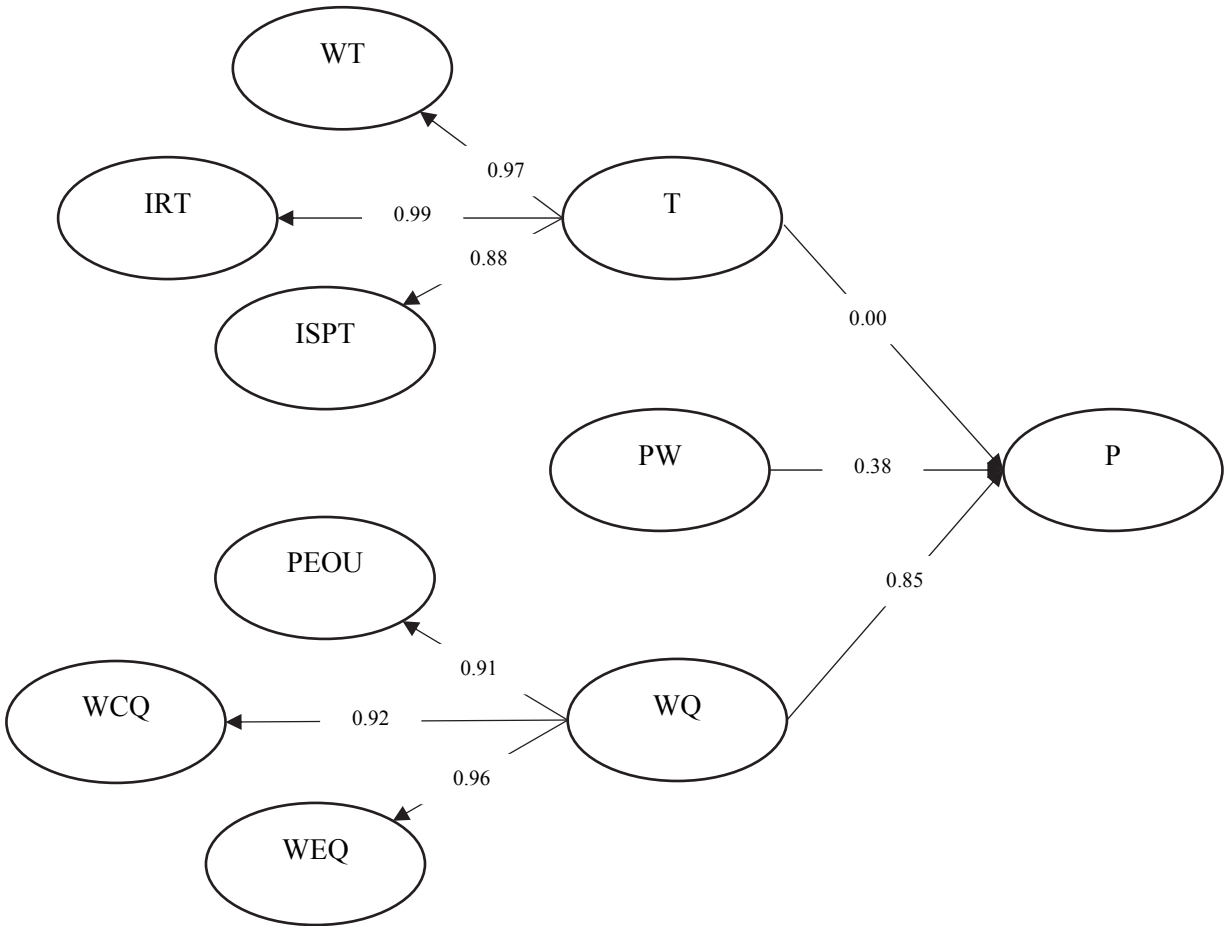Figure 2: Factors affecting online purchase intention in Malaysia

Figure 3: Factors affecting online purchase intention in Iran

5. DISCUSSION AND IMPLICATION

This study examined the impact of Website trust (H1), perceived Website privacy (H2) and Website quality (H3) on online purchase intentions. As we expected from our literature all three hypotheses were accepted in both countries. In addition, our cross-cultural comparison between the Iran (individualism, high uncertainty avoidance, low power distance, low masculinity) and Malaysia (collectivism, low uncertainty avoidance, high power distance and high masculinity) in relationships among Website trust, Website quality and perceived Website privacy in an online setting revealed that, as expected, the impact of all three factors on purchase intention was different among countries. The impact of Website trust (H1b) was greater in Malaysia than in the Iran. The findings affirm Hofstede's theory (1997) that individualists are much more likely to trust others.

174

By contrast, members of collectivism society restrict themselves to the group relationships and restrain trusting others (Yamagishi and Yamagishi, 1994). Also according to Bhawuk & Brislin (1992) those high on the individualism scale are characterized as trusting of others, focused on utilitarian views of exchange and competence, competitive and self-reliant. However, our result is inconsistent with some previous researches. For example, Jarvenpaa, S.L. et al. (1999) have found no strong cultural effects regarding the antecedents of trust. Our study also shows that perceived Website privacy had stronger impact in Iran than in the Malaysia. A possible explanation to this may come from Hofstede (1991) theory regarding the impact of uncertainty avoidance (the extent to which the members of a culture feel threatened by uncertain or unknown situations) on the perceived risk. Lower scores are sings of weak levels of uncertainty avoidance and higher scores are sings of strong levels of uncertainty avoidance. In cultures with weak uncertainty avoidance, innovative ideas, deviant and behaviour are tolerated. In contrast, in cultures with strong uncertainty avoidance, "emotional need for rules" is needed. This may explain why Iranians have more concerns about their privacy than Malaysians towards purchasing online (H2b). This finding is also consistent with previous researches that found cultural difference in the impact of privacy risk on purchasing online (Kailani and Kumar, 2011; Choi and Geitsfield, 2004; Roth, 1995). As mentioned earlier Website quality significantly influenced purchase intention for the Iranian respondents but not significantly for the Malaysian. This is consistent with previous studies. Kim and Lee (2006) found that the relationship between website quality dimensions and purchase intention varied between the two countries (US and Korea). This may be explained by McCoy, Galletta & King (2006) work which found that cultures with high collectivism (Malaysia) seem to nullify the impact of Website quality (perceived usefulness and/or perceived ease of use) from accepting a technology.

These findings offer that marketers can concentrate on improving certain dimensions to develop their shopper's satisfaction but the outcome of these attempts may not necessarily is shopper's decision to buy. For example, Malaysian shoppers generally tended to derive satisfaction from privacy and quality of a website but when deciding an actual purchase, it seemed to be trust that finally encouraged their decision to buy. So, Malaysian online shopping channel managers can focus on security concerns of their Websites. For the Iranian sample, it appeared to be Website privacy and Website quality that ultimately influenced shoppers to purchase from the site. These findings suggest that when entering a foreign market, e-marketers should make and evaluate their websites based on their research and understanding of how the target market shoppers perceive and respond to Website privacy and Website quality.

The main limitation of this research is that we have chosen limited number of retail Website in both countries. Therefore, our results should not be generalized to other websites. In addition, this study did not investigate any product-specific

variables for either the Iran or Malaysian websites. Future research should observe product variables such as price, country-of-origin, product quality, brand recognition and other variables. Eventually, this study did not examine the impact of gender differences on purchase intention.

REFERENCES

Al Kailani, M., & Kumar, R. (2011). Investigating Uncertainty Avoidance and Perceived Risk for Impacting Internet Buying: A Study In Three National Cultures. *International Journal of Business and Management, 6*(5), 76.

Aladwani, A. M., & Palvia, P. C. (2002). Developing and Validating an Instrument for Measuring User-Perceived Web Quality. Information & Management, *39*(6), 467-476.

Andalib, Z., & Danaee, H. (2013). A Study on Measuring the Quality of University Website. Management Science Letters, *3*(7), 1955-1960.

Bavarsad, B., Rahimi, F., &Mennatyan, M. A. (2013). A Study of the Effects of Websites Perceived Features on the Intention to Use E-Shopping. World Applied Programming, *3*(6).

Belanche, D., Casaló, L. V., & Guinalíu, M. (2011). Website Usability, Consumer Satisfaction and the Intention to Use a Website: The Moderating Effect of Perceived Risk. *Journal of Retailing and Consumer Services*, *19*(1), 124-132.

Bhatia, K. (2012). *Infographic - Digital Stats for IRAN - TFOUR.ME*. *TFOUR.ME*. Retrieved 7 April 2015, from http://tfour.me/2012/10/inforgraphic-digital-stats-for-iran/

Bhawuk, D. P. S., & Brislin, R. (1992). The Measurement of Intercultural Sensitivity Using the Concepts of Individualism and Collectivism. *International Journal of Intercultural Relations*, *16*, 413-36.

Brown, M., Gottlieba, U., & Muchira, R. (2005). Privacy Concerns and Purchase of Travel Product Online. Information and Communication Technologies in Tourism 2005, 285-295.

ByounghoJin, Jin Yong Park, Jiyoung Kim. (2008). Cross-Cultural Examination of the Relationships among Firm Reputation, E-Satisfaction, E-Trust, and E-Loyalty. International Marketing Review, *25*(3), 324 - 337.

Byrne, B.M. (2009), Structural Equation Modeling with AMOS: Basic Concepts, Applications and Programming, Routledge/Taylor & Francis, New York, NY.

Chang, H. H., & Chen, S. W. (2008). The Impact of Online Store Environment Cues on Purchase Intention: Trust and Perceived Risk as a Mediator. Online Information Review, *32*(6), 818-841.

Chen, Y. H., Hsu, I., & Lin, C. C. (2010). Website Attributes That Increase Consumer Purchase Intention: A Conjoint Analysis. *Journal of Business Research, 63*(9), 1007-1014.

Cheol Park Jong, & Kun Jun. (2003). A Cross Cultural Comparison of Internet Buying Behavior, International Marketing Review*, 20 I5, 534 – 553.

Choi, J., & Geistfeld, L. V. (2004). A Cross-Cultural Investigation of Consumer E-Shopping Adoption. *Journal of Economic Psychology*, *25*(6), 821-838.

Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. Psychometrika, *16*(3), 297-334.

Dabholkar, P. A., & Sheng, X. (2012). Consumer Participation in Using Online Recommendation Agents: Effects on Satisfaction, Trust, and Purchase Intentions. *The Service Industries Journal, 32*(9), 1433-1449.

Delafrooz, N., Paim, L. H., & Khatibi, A. (2011). Understanding Consumers Internet Purchase Intention in Malaysia. *African Journal of Business Managemen*t, *5*(3), 2837-2846.

Emarketer.com,. (2015). *Worldwide Ecommerce Sales to Increase Nearly 20% in 2014 - eMarketer*. Retrieved 7 April 2015, from http://www.emarketer.com/Article/Worldwide-Ecommerce-Sales-Increase-Nearly-20-2014/1011039

Featherman, M. S., Miyazaki, A. D., & Sprott, D. E. (2010). Reducing Online Privacy Risk to Facilitate E-Service Adoption: The Influence of Perceived Ease of Use and Corporate Credibility. *Journal of Services Marketing, 24*(3), 219-229.

Flavián, C., Guinalíu, M., & Gurrea, R. (2006). The Role Played By Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty. Information & Management, *43*(1), 1-14.

Forrester.com. (2015). *Forrester Research: Marketing: European Online Retail Market Worth €233.9 Billion By 2018*. Retrieved 7 April 2015, from https://www.forrester.com/European+Online+Retail+Market+Worth+2339+Billion+By+2018/-/E-PRE7084

Galanxhi-Janaqi, H. & Nah, F. F. H. (2004). U-Commerce: Emerging Trends and Research Issues. *Industrial Management & Data Systems,* 104 (9), 744-755.

Gao, J., Zhang, C., Wang, K., & Ba, S. (2012). Understanding Online Purchase Decision Making: The Effects of Unconscious Thought, Information Quality, and Information Quantity. Decision Support Systems*, 53*(4), 772–781.

Garbarino, E., & Strahilevitz, M. (2004). Gender Differences in the Perceived Risk of Buying Online and the Effects of Receiving a Site Recommendation. *Journal of Business Research*, *57*(7), 768-775.

Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. Omega, *28*(6), 725-737.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis. Englewood Cliffs: Prentice Hall.

Hanafizadeh, P., Behboudi, M., Ilani, M. A., & Kalhor, R. (2012). Why Do Iranians Avoid Shopping on the Internet? *International Journal of Online Marketing, 2*(2), 44-56.

Harn, A. C. P., Khatibi, A., & Ismail, H. (2006). E-Commerce: A Study on Online Shopping In Malaysia. *Journal of Social Sciences, 15*(5), 232-242.

Hassan, R., Ghani, E. K., & Said, J. (2009). Part Time Students' Benefit Perception on Online Shopping In Malaysia. Canadian Social Science*, 5*(4), 72-80.

Hoffman, D. L., & Novak, T. P. (2009). Flow Online: Lessons Learned and Future Prospects. *Journal of interactive marketing, 23*(1)*, 23-34.*

Hofstede, G. (1983). National Cultures in Four Dimensions: A Research-Based Theory of Cultural Differences among Nations. International Studies of Management & Organization*,* XIII(1–2), 46–74.

Hofstede, G. (1997). Cultures and Organizations: Software of the Mind, McGraw-Hill, New York, NY.

Hong, I. B., & Cho, H. (2011). The Impact of Consumer Trust on Attitudinal Loyalty and Purchase Intentions in B2C E-Marketplaces: Intermediary Trust vs. Seller Trust. *International Journal of Information Management, 31*(5), 469-479.

Hsu, C. L., Chang, K. C., & Chen, M. C. (2011). The Impact of Website Quality on Customer Satisfaction and Purchase Intention: Perceived Playfulness and Perceived Flow as Mediators. Information Systems and E-Business Management*, 10*(4), 549-570.

Internetworldstats.com. (2015)*. Malaysia Internet Usage and Telecommunications Reports*. Retrieved 7 April 2015, from http://www.internetworldstats.com/asia/my.htm

Internetworldstats.com. (2015). *Top 50 Countries with Highest Internet Penetration Rates -Country Literacy Rates*. Retrieved 7 April 2015, from http://www.internetworldstats.com/top25.htm

Jarvenpaa, S. L., Tractinsky, N., & Saarinen, L. (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer-Mediated Communication*, *5*(2), 0-0.

Jayawardhena, C., Wright, L. T., & Dennis, C. (2007). Consumers Online: Intentions, Orientations and Segmentation. *International Journal of Retail & Distribution Management, 35*(6), 515-526.

Jiyoung Kim, Kiseol Yang, Bu Yong Kim. (2013). Online Retailer Reputation and Consumer Response: Examining Cross Cultural Differences. *International Journal of Retail & DistributionManagement, 4*(9), 688 - 705.

Jung-Hwan Kim, & Chungho Kim. (2010). E-Service Quality Perceptions: A Cross-Cultural Comparison ofAmerican and Korean Consumers. *Journal of Research in Interactive Marketing, 4*(3) 257 - 275.

Kelly, E. P., & Erickson, G. S. (2004). Legal and Privacy Issues Surrounding Customer Databases and E-Merchant Bankruptcies: Reflections on Toysmart. Com. Industrial Management & Data Systems, *104*(3), 209-217.

Khare, A., & Rakesh, S. (2011). Antecedents of Online Shopping Behavior in India: An Examination. *Journal of Internet Commerce*, *10*(4), 227-244.

Kim, E. Y., & Kim, Y. K. (2004). Predicting Online Purchase Intentions for Clothing Products. *European Journal of Marketing*, *38*(7), 883-897.

Kim, S., & Lee, Y. (2006). Global Online Marketplace: A Cross-Cultural Comparison of Website Quality. *International Journal of Consumer Studies, 30*: 533–543.

Lallmahamood, M. (2007). An Examination of Individual's Perceived Security and Privacy of the Internet in Malaysia and the Influence of This on Their Intention to Use E-commerce: Using an Extension of the Technology Acceptance Model. *Journal of Internet Banking and Commerce, 12*(3), 1-26.

Linda C. Ueltschy Robert F. s Peter Yannopoulos. (2004). A Cross National Study of Perceived Consumer Risk towards Online (Internet) Purchasing. Multinational Business Review, *12*(2), 59 - 82

Ling, K. C., Chal, L. T., & Piew, T. H. (2010). The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience toward Customers' Online Purchase Intention. International Business Research, *3*(3), P63.

Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002). WebQual: A Measure of Website Quality. Marketing theory and applications, *13*(3), 432-438.

Mahmud Mohammadian, M. G. (2014). A Study of Factors Influencing Online Brand Trust in Online Service Retailing. *Switzerland Research Park Journal, 103*(2).

Malhotra, M. K., & Grover, V. (1998). An Assessment of Survey Research in POM: From Constructs to Theory. *Journal of Operations Management, 16*(4), 407-425.

Manfreda, K.L., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2006). Web Surveys Versus Other Survey Modes: A Meta-Analysis Comparing Response Rates. *International Journal of Market Research*, *50*(1), 79-104.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. Academy of management review, *20*(3), 709-734.

McCoy, S., Galletta, D., & King, W.R. (2006). Appling TAM across Cultures: The Need for Caution. *European Journal of Information Systems, 16*, 81-90.

Mcknight, D. H., & Chervany, N. L. (2002). What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology. *International Journal of Electronic Commerce*, *6*, 35-60.

Mee, L. Y., Seng, Y. C., & Chai, L. T. (2010). Online Search and Buying Behaviour: Malaysian Experience. Canadian Social Science, *6*(4), 154-166.

Mona Afshardost, SepidehFarahmandian, Seyed Mohammad Sadiq Es-haghi (2013), Linking Trust, Perceived Website Quality, Privacy Protection, Gender and Online Purchase Intentions. *IOSR Journal of Business and Management, 13*(4), 63-72.

Mukherjee, A., & Nath, P. (2007). Role of Electronic Trust in Online Retailing: A Re-Examination of the Commitment-Trust Theory. *European Journal of Marketing*, *41*(9/10), 1173-1202.

Nguyen, J., & VU, K. P. (2011). Does Privacy Information Influence Users' Online Purchasing Behavior? Human Interface and the Management of Information. Interacting with Information,6771, 349-358.

Norizan Kassim & Nor Asiah Abdullah, (2010). The Effect of Perceived Service Quality Dimensions on Customer Satisfaction, Trust and Loyalty in E-Commerce Settings. *Asia Pacific Journal of Marketing and Logistics, 22*(3), 351 - 371.

Pound, R. (1915). Interests of Personality. *Harvard law review*, *28*(4), 343-365.

Qingji Fan, JeoungYul Lee, JoongIn Kim, (2013). The Impact of Web Site Quality on Flow-Related Online Shopping Behaviors in C2C E-Marketplaces.*Managing Service Quality: An International Journal, 23*(5), 364 - 387.

Ramayah, T., & Ignatius, J. (2009). Intention to Shop Online: The Mediating Role of Perceived Ease of Use. *Middle–East Journal of Scientific Research*, *5*(3), 152-155.

Roth, M. S. (1995). The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies. *Journal of Marketing Research, 32*(2), 163–175.

Ruben Huertas-Garcia, Agusti Casas-Romeo, Esther Subira. (2013). Cross-Cultural Differences in the Content and Presentation of Web Sites. Kybernetes, *42*(5), 766 - 784.

Rueter, T. (2015). *E-Commerce Sales - Global e-commerce will increase 22% this year - Internet Retailer*. *Internetretailer.com*. Retrieved 7 April 2015, from https://www.internetretailer.com/2014/12/23/global-e-commerce-will-increase-22-year

Salisbury, W. D., Pearson, R. A., Pearson, A. W., & Miller, D. W. (2001). Perceived Security and World Wide Web Purchase Intention. *Industrial Managemen*t & Data Systems, *101*(4), 165-177.

Salo, J., & Karjaluoto, H. (2007). A Conceptual Model of Trust in the Online Environment. *Online Information Review, 31*(5), 604-621.

Sin, S. S., Nor, K. M., & Al-Agaga, A. M. (2012). Factors Affecting Malaysian Young Consumers' Online Purchase Intention in Social Media Websites. Procedia-Social and Behavioral Sciences*, 40*, 326-333.

Smith, R., Deitz, G., Royne, M. B., Hansen, J. D., Grünhagen, M., & Witte, C. (2013). Cross-Cultural Examination of Online Shopping Behavior: A Comparison of Norway, Germany, and the United States. *Journal of Business Research, 66*(3), 328-335.

Sonia San Martín, Carmen Camarero, & Rebeca San José, (2011). Dual Effect of Perceived Risk on Cross-National E-Commerce, Internet Research*, 21*(1), 46 - 66.

Statista. (2015). *Mobile commerce penetration in Asia Pacific 2014 Statistic*. Retrieved 7 April 2015, from http://www.statista.com/statistics/255214/mobile-commerce-penetration-in-asia-pacific-countries/

Taylor, C. R., Franke, G. R., & Maynard, M. L. (2000). Attitudes toward Direct Marketing and Its Regulation: A Comparison of the United States and Japan. *Journal of Public Policy and Marketing, 19*(2), 228–237.

Tudoran, A., Olsen, S. O., & Dopico, D. C. (2009). The Effect of Health Benefit Information on Consumers Health Value, Attitudes and Intentions. Appetite, *52*(3), 568-579.

Udo, G. J. (2001). Privacy and Security Concerns as Major Barriers for E-Commerce: A Survey Study. Information Management & Computer Security, *9*(4), 165-174.

Warren, S. D., & Brandeis, L. D. (1890). The Right to Privacy. Harvard law review, *4*(5), 193-220.

Webb, H. W., & Webb, L. A. (2004). SiteQual: An Integrated Measure of Web Site Quality. *Journal of Enterprise Information Management*, *17*(6), 430-440.

Weber, E. U., & Hsee, C. (1998).Cross-Cultural Differences in Risk Perception, But Cross-Cultural Similarities in Attitudes towards Perceived Risk. Management science, *44*(9), 1205-1217.

Wolfinbarger, M., & Gilly, M. C. (2003). eTailq: Dimensionalizing, Measuring and Predicting eTail Quality. *Journal of retailing, 79*(3), 183-198.

Wu, J. J., & Chang, Y. S. (2006). Effect of Transaction Trust on E-Commerce Relationships between Travel Agencies. Tourism Management, *27*(6), 1253-1261.

Yamagishi, T., & Yamagishi, M. (1994). Trust and Commitment in the United States and Japan. Motivation and emotio*n, 18*(2), 129-166.

Yi, C., & Jiang, Z. (2007). The Antecedents of Online Consumers' Perceived Usefulness of Website: A Protocol Analysis Approach. Human-Computer Interaction. HCI Applications and Services*, 4553, 142-149.

Yoo, B., & Donthu, N. (2001). Developing a Scale to Measure the Perceived Quality of an Internet Shopping Site (SITEQUAL). *Quarterly Journal of Electronic Commerce, 2*(1), 31-47.