

Accessing the Effectiveness of Online Shopping Among Malaysian Consumers

Aishath Sheneen Ibrahim, Abdul Highe Khan, Mohammad Khalilur Rahman, Emad Ramezanie

Graduate Research Students, Kulliyah of Economics and Management Sciences, International Islamic University Malaysia

Abstract: Online shopping is becoming popular throughout the world including Malaysia. This study is to determine the factors that contribute to the effectiveness of online shopping among Malaysian consumers based on previous researches. Previous studies examining the role of Subjective norms (SN), previous purchase experience (PPE) and perceived risk (PR) were inconsistent and a higher proportion of the findings were with respect to consumers behavior in the West which cannot be directly applied to a cross-cultural context. The purpose of the study is to investigate the relationships between these variables and the variables of technology acceptance model (TAM) associated with consumer's online shopping intention. The research model reflecting the effects of SN, PPE, PR on TAM constructs has been proposed. In total 258 valid cases were gathered through a web-based self-administered survey. Reliability test was carried out using Cronbach alpha and all constructs tested were above 0.70 which defines high correlation of the constructs. It was found that PR, perceived ease of use (PEOU) and Perceived usefulness (PU) had a positive effect on online shopping. Nevertheless SN had a negative effect on both PU and PEOU. And PPE had a significantly positive effect on PR.

Key words: Online Shopping, Malaysia, Subjective Norms, Previous Purchase Experience, Perceived Risk, Technology Acceptance Model

INTRODUCTION

Globalization and the growth in new technological developments (Ramayah and Ignatius, 2005) has commenced a new era of e-commerce which is viewed by Kalakota and Whinston (1997) as trading of information, goods and services mostly via the internet, leading to the growth of online shopping or e-shopping. These rapid changes in e-commerce has changed the way businesses and customers consume, customize and distribute products (Al-Maghrabi, *et al.*, 2011) creating a lot of competition among the online retailers market (Celik, 2011; Zhou, *et al.*, 2007) whereby lot of retailers are competing against an overcrowded market (Celik, 2011) resulting in the effort of retailers worldwide in consolidating their businesses (Ramayah and Ignatius, 2005) in order to strengthen their scope of success in the online market and gain advantage of the challenges they face today. Due to the low cost of managing these businesses it gives rise to a new and powerful channel for information and communication to both businesses and consumers (Al-Maghrabi, *et al.*, 2011) as well as manufacturers and distributors using the internet as a tool for business (Celuch, *et al.*, 2007). Furthermore, customers have flexibility and wider choices of products. And they are able to access to numerous information from different sources, comparing prices, shopping at their own convenience creating higher chances of switching from different e-tailers and e-service providers. Thus, through online shopping customers have accessibility to a greater selection of products at their convenience without the restriction of time and space (Brynjolfsson and Smith, 2000). Hence, it raises the challenges of retaining and attracting the customers for the online retailers. In order to attain this it is important for online retailers to understand the factors that encourage the consumers to shop online which leads them to complete their e-shopping (Al-Maghrabi, *et al.*, 2011).

The online shopping acceptance also varies between developed and developing countries (Celik, 2011) and there is still a huge research gap among these countries which limits the generalization of research results from developed countries to developing country context (Syed *et al.*, 2008). Results from IDC Malaysia on online shopping statistic among Malaysians showed that internet users in the year 2010 were 17.5 million and internet buyers were 8.9 million (Ong, 2010). Furthermore, the estimation of internet users in the year 2011 and 2012 were 18.3 million and 18.9 million respectively. And the estimation of internet buyers is 9.7 million and 10.5 million respectively in the years 2011 and 2012. Also the online shoppers were distributed into five major job categories which were, top management executives, other white collar workers, business man and self-employed, blue collar workers, retired and unemployed and housewives. In which top management executives were among the heavy online shoppers (Ong, 2010).

Corresponding Author: Abdul Highe Khan, Graduate Research Students, Kulliyah of Economics and Management Sciences, International Islamic University Malaysia
E-mail: khanabdulhighe@yahoo.com; khaniium@gmail.com

Theoretical Background:

It is highly important for the customers to use the technology in order to accept online shopping. According to Zhou, *et al.*, (2007) the technology-oriented view of the consumer acceptance of online shopping is being predicted and explained by examining technical specifications such as website content and design, user interface features and system usability of an online store. Without the acceptance of technology there would not have been an increase in e-commerce. The consumers' willingness to accept the technology leads to the success of electronic market (Zhou, *et al.*, 2007). Hence, the TAM model relates to the technology acceptance attitudes of the customers and was further developed in the 1989 by Davis (Leppel and McCloskey, 2011). This model has been successfully used by many researchers to identify and predict customers behavioral attitudes and intent towards the adoption of a particular technology (Celik, 2011; Ramayah and Ignatius, 2005). The model was based on five variables whereby, measurements used to test these variables were found to be both reliable and valid across diverse settings and information systems (Adams *et al.*, 1992) these variable were usefulness, ease of use, attitude towards use, intention to use and actual use (Chtourou and Souiden, 2010).

There are two major variables in the theory that determines the level of acceptance and the usage of technology (Leppel and McCloskey, 2011) depends on perceived ease of use (PEOU) and perceived usefulness (PU) (Leppel and McCloskey, 2011; Lin and Chou, 2009). Through attitude toward use, PU is partly predicted by PEOU, whereby it explains the intention to use and actual use (Chtourou and Souiden, 2010). Online users attitude towards PU and PEOU is highly important as it decides whether or not users are willing to use the internet as a tool for their shopping purpose and thus, in order to attract the users online shopping should be useful, easy to access and easy to use. As such, the technology's usability and usefulness are some of the factor that attract online shoppers and has been signified in many researches as having a positive relationship with online shopping (Celik, 2011; Ramayah and Ignatius, 2005). Some limitation of TAM is that internet shopping is treated at the outset of the technology whereby, without looking at the temperaments of the potential online shoppers it views e-tailing as a communication medium to purchase (Ramayah and Ignatius, 2005) thus, the reason for purchasing online is unclear as it does not involve intrinsic values of the e-shoppers. Researchers who have incorporated SNs find that normative beliefs have a mixed influence on online shopping (Foucault and Scheufele, 2002) and it has been concluded as having a positive impact on PU and PEOU in other studies (Celik, 2011). On the other hand, PR has been identified as been negatively relating to online shopping by many researchers (Park *et al.*, 2004; Pires *et al.*, 2004; Liao & Cheung, 2001). Based on previous research findings previous satisfaction with regard to PPE has a positive relationship with online shopping (Cho, 2004; Pires *et al.*, 2004) and a satisfactory PPE has been negatively related to PR (Pires *et al.*, 2004). Due to the unpredictable and insecure nature of risk in using the internet for completing the shopping task (Celik, 2011) it is a worthy subject to further investigate on the PPE and PR in this study from a Malaysian context.

Research Framework and Hypotheses:

After being modified for online shopping and extended by adding SN, PR and PPE constructs, TAM is used as a theoretical ground for this study. To provide theoretical rationale for the proposal of the research model, the regarded constructs are defined and related hypotheses are discussed below.

Perceived Usefulness:

There are various benefits of online shopping and consumers prefer online shopping then traditional store shopping for its tremendous benefits. There are no time constrains of online shopping, consumers can order for any product whenever he or she wants. For this reason consumers get enough time to think and then give the order (Kim & Kim, 2004; McKinney, 2004). Another benefit of online shopping is consumer can order from any place where they can use internet (home, office, café etc.) and they can their save their time, there are no place constrains on online shopping because vendors cab display thousands of products on website and for this reason consumers can buy product from lots of choice and at a less price than traditional store (Harn *et al.*, 2006; Delafrooz *et al.*, 2009). In traditional store shopping consumers have pressure to choice the product in short time. But in online shopping they have no such pressure to choose or order any product; they can enjoy window shopping without any kind of pressure .In online shopping it is possible offer huge number of products because there are no physical places in online shopping. Seller is also able cheap price than traditional store. Reason is that there are many retailers in traditional store (Khatibi *et al.* 2006; Delafrooz & Paim, 2011). Thus, based on the discussion above the following hypothesis is proposed:

H1. PU has a positive effect on ONS

Perceived Ease of Use:

The term of perceive ease of use defined as the degree of essential effort to use system. The effort contains two aspects: physical and mental effort and how easy can understand and work with system (Davis, 1989). The element of PEOU includes easy understanding, manageable, clear, elastic and easy to become skillful and in online shopping PEOU is defined by the ease of purchase (Lin & Chou, 2009). According to Jun *et al.*, (2004)

ease of use has impact on consumers' perception in service quality. Ease of use also is determined by a persons' insight on the effort needed for using new technology (Davis, 1989). PEOU is related to the intrinsic motivation with system experience in facilitating the respected outcomes (Venkatesh & Davis, 2000). Furthermore, website characteristics like search functions, download speed and navigation also plays a role in shaping PEOU (Zeithaml *et al.*, 2002a). Definitely, easy access to detailed information on products and services facilities in online shopping, aid in fast and easy selection of products and permits consumers to make more informed decisions (Kalakota & Whinston, 1996) and is known to be a motivational factor to shop online. Moreover, ineffective designed forms force reason potential online shoppers to reduce their purchases in the other words it has negative impact on consumers attitudes (Lim and Dubinsky, 2004). Thus, based on the discussion above the following hypothesis is proposed:

H2. *PEOU has a positive effect on ONS*

Subjective Norms:

According to the study by Fishbein and Ajzen, (1975) cited in Chang, *et al.*, (2010) subjective norm is referred to as the perceived opinion of others with respect to the behavior in question and how this behavior is being influenced by other people's perceived opinions. As such this has a direct impact on the online users' opinion on choosing a particular vendor or engaging in online purchases in the first place. Hence, when it comes to online shopping it is found to be related to the purchase behavior. Indicating that subjective norms having a significant influence on behavioral intention (Ramaya and Ignatius, 2005).

Resulting in a higher utilitarian perception where online shopping convince themselves in this case that their decisions are relevant and correct (Chang, *et al.*, 2010). Thus these reference groups are a driver of online shopping (Parsons, 2002) and increase the likelihood of consumers involving in e-shopping. Malaysians tend to rely on others and wait for their suggestions with regard to doing something anew and engaging in unfamiliar territories (Hasan & Rahim, 2008) as such, they tend to highly value the internal referents experiences and insights with external referents syndications with regard to shopping online and to form their own judgments of its usefulness and ease of use. Thus, the study examines the following hypotheses:

H3. *SN has a positive effect on PU*

H4. *SN has a positive effect on PEOU*

Perceived Risk:

According to study by (Zhou *et al.*, 2007) stated that perceived risk is defined as the consumers' subjective belief of suffering a loss in pursuit of a desired outcome. It has a stronger correlation with willingness to shop online than convenience. The distribution and impersonal nature of e-commerce leads to greater information asymmetry and higher risks than the traditional shopping environment. Perceived risk has been shown to negatively influence consumers' intention to shop online, both for products. Hence, online shoppers who have a positive attitude with regard to shopping online will be trusting, confident and shows reliability to the online vendors.

Reliability is associated with perceived risk of online shopping and is the most important factor which has a high influential effect on online shopping (Alam & Yasin, 2010; Hassan & Abdullah, 2000) Reliability is closely associated with risk as it is a measure of consumers' perceptions (Jun *et al.*, 2004). Online consumers obviously want to receive the right quality and quantity of items which are ordered by them within the time frame. It is also promised by the retailers and they expected the bill accurately (Jun *et al.*, 2004; Hassan & Abdullah, 2000). When a customer purchases the products or services they expect the certain standard of service from the online company. The time of delivery is very important for the online customers. For this reason, the customers might expect the standard to be reliable and maintainable. Responsiveness is the marketers' willingness to help and provide prompt services to customers. The lack of prompt service and responsiveness are the most common negative perceived phenomenon in online shopping (Alam *et. al.*, 2008). Usually, retailers have to serve Internet users twenty four hours in a day. Reliable response is an important factor of service quality because it can influence the customers' satisfaction (Kalakota & Whinston, 1996).

Trust is the social lubricant that allows consumer to transact with commercial dealer (Haque & Khatibi, 2006; Hassan & Abdullah, 2000). The success of the Internet develops and matures will largely depend on gaining and maintaining the trust of visitors. It will be a significant event that depends on consumer commerce. The concept of trust will affect a number of factors essential to online transactions including security and privacy. Development of e-commerce can be potential by customer's trust. Consumers' trust is the important component of the online shopping. Therefore without trust, the development of the Internet shopping will not reach in its goal. According to the study by (Kim *et al.*, 2009) trust directly affects a consumer's purchase decision in combination with perceive risk Based on this the following hypothesis was developed:

H5. *PR has a positive effect on ONS*

Previous Purchase Experience:

Online marketing environment affects the way consumers view and build relationships. To maintain and give an added value to the online shopping experience trust is highly important (Syed, *et al.*, 2008). The perception of trust one of the main factors in PR comes with the internet shopping experience. Whereby, online shoppers will develop their perception on online shopping to be effortless and perceive it to be useful based on the positive experience of engaging in the tasks being executed effectively without any problems (Ramayah and Ignatius, 2005). As positive online experience will lead to repetitive consumers for the same e-tailer and e-service provider; reinforcing their visit habit to a particular website that the e-shopper had a good experience with (Hassan and Rahim, 2008). Likewise, some consumers abandon their online shopping carts due to the website downloading problems resulting in the consumer not returning to that particular e-tailer or e-service provider due to the encountered bad experience (Hassan and Rahim, 2008) this effects the reliability of the vendor in terms of quality. Positive experience also comes with the acceptance of the online consumers on the relevant risks in online shopping. Consumers who had not been involved in any kind of online shopping raise the safety concern issue of providing their personal billing information via the internet (Paynter and Lim, 2001). Since, it is highly possible for intruders to steal confidential information with regard to a customers credit card information stored in the web servers which has insufficient protection These concerns are highly important (Chang and Chen, 2009) and thus in order to reassure the customers the e-tailers and e-service providers should address the issue of risk involved in transmitting their personal details such as credit card numbers (Leppel and McCloskey 2011). Besides this consumers are also concerned with the online vendors' reliability. Since they are not confident whether they are dealing with an honest vendor or not. In terms of providing them with the correct information, the delivery of the right product purchased, whether the product paid for is worth the price are some of the main concerns from online shoppers (Paynter and Lim, 2001) and the reason why they are not engaged in online shopping (Paynter and Lim, 2001) Thus, the reliability and the trust of businesses on the Web is one of the key concerns for online consumers. However, it is difficult to evaluate the credence attribute with regard to the privacy and security of the e-tailers and e-services even though the reliability concerns is bound to subside with experience (Mauricio, *et al.*, 2010). Thus a positive PPE has a positive impact on the PR. As such based on the discussion above the following hypothesis is proposed:

H6. PPE has a positive effect on PR

Research Methodology:

Figure 1 below shows the research model proposed for determining the effectiveness of online shopping based on the framework presented above.

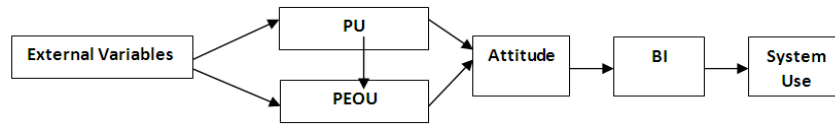


Fig. 1: The original TAM (Davis *et al.* 1989).

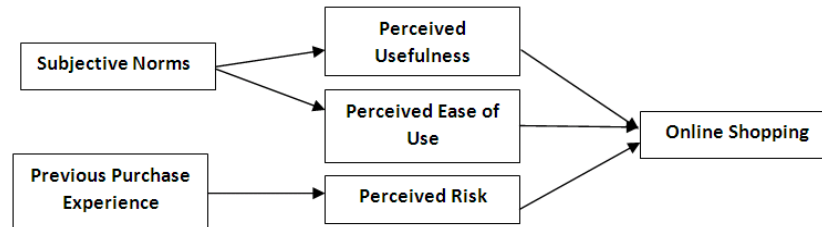


Fig. 2: Research and measurement models.

Research Sample:

In order to reach the actual online shoppers and test the hypothesized research model shown in Figure 1, a self-completed online survey was employed. An email message including the statement of research purpose, the invitation to participate in the survey and the hyperlink for directing participants to the questionnaire was sent to 400 Malaysians through online groups and social networks. A total of 258 effective responses were obtained which represents 51.6 percent response rate. The sample characteristics are provided in Table 1. Since the questionnaire was distributed online the sample closely represents the average population of Malaysian online shoppers. The demographic information of the respondents is analyzed through frequency distribution. Among the respondents 55.4 percent were male and 44.6 percent were female. And the largest number of participants,

31.4 percent, ranged in age 24-35. Majority of online user are married which accounted for 61.2 percent. Among the participants from the ethnic groups Malays accounted for 43.4 percent followed by Indians 28.3 percent and Chinese 27.1 percent. The sample can be described as well educated. Almost 38 percent of the participants had a college graduate degree. Last but not least, the monthly personal income of 51.6 percent of the participants was between \$ 3000-\$ 4999. With regard to the online experience 46.5 percent of the participants have 1-3 years of purchase experience. For online product purchase behavior the results shows that majority of respondents buy Clothing/Accessory/Shoes from online and their percentage is 32.6 percent. 26 percent and 20.2 percent of the participants buy airline tickets/ movies and Book/DVD/CD respectively. This is shown in table 1 below.

Table 1: Demographic Information of the Respondents.

Descriptions	Frequency	Percentage
Gender:		
Male	143	55.4
Female	115	46.6
Age:		
24 and below	70	27.1
25-34	81	31.4
35-44	61	23.6
45-54	31	12
55 and above	15	5.8
Marital Status:		
Single	100	38.8
Married	158	61.2
Ethnic Group:		
Malay	112	43.4
Chinese	70	27.1
Indian	73	28.3
Others	3	1.2
Academic Qualification:		
Certificate/ Diploma	53	20.5
College Graduate (Bachelor)	98	38
Master's Degree	71	27.5
Doctoral Degree	20	7.8
Others	16	6.5
Profession:		
Student	71	19.2
Job Holder	138	26.0
Business Owner	92	40.4
Academician	33	7.6
Home Maker (Housewife)	17	5.1
Others	3	1.7
Monthly Income:		
Below \$ 1000	45	17.4
\$ 1000-\$ 2999	50	19.4
\$ 3000-\$ 4999	133	51.6
\$ 5000 and Above	30	11.6
Online Purchase Experience		
Less than 1 Years	71	27.5
1-3 Years	120	46.5
4-7 Years	63	24.4
7 Years and above	4	1.6
Online Product Purchase Experience		
Food/Beverage	18	7
Clothing/Accessory/Shoes	84	32.6
Toys	5	1.9
Book/DVD/CD	52	20.2
Computer/Electronics	32	12.4
Others (Air ticket, Movie)	67	26

Measurement Development:

We used structured questionnaire to collect the essential data on the effectiveness of online shopping among Malaysian consumers. There were total 61 questions to measure the six constructs of the research model including demographic information of the respondents. 6-point interval-scale was used in the measurements and the highest scale represents strongly agree and lowest scale represents strongly disagree. The PU and PEOU constructs measurements were adapted from Celik, (2011) and were properly modified in order to attain the shopping goals based on customers' beliefs regarding the efficiency and effortlessness of online shopping. Likewise for the ONS construct the measurements were adapted and modified based on Celik, (2011) studies.

SN construct measurements item one to eight were adapted from Chang *et al.*, (2010) without any modification. Finally, PR and PPE constructs measurements items were originally made based on the need of the study.

Data Analysis and Results:

Reliability Analysis:

To test the goodness of all variables the test that was carried out was the reliability analysis using the Chronbach’s alpha coefficient. Cronbach’s Alpha was chosen to analyze the degree of onsistency among the items in a construct. The study by Hair *et al.*, (2010) indicates that the cronbach alpha must be at least 0.70 for the results to be deemed as reliable. The value for each variable is above 0.70 and it indicates that the variables are reliable. The result of reliability analysis is given below.

Table 2: Reliability Analysis.

Variables/ Dimensions	Mean	Standard Deviations	Cronbach alpha
Subjective Norms	3.01	1.16	.787
Previous Purchase Experience	4.44	0.772	0.81
Perceived Ease of Use	4.5	0.779	0.819
Perceived Usefulness	4.79	0.743	0.741
Perceived Risk	4.15	0.902	0.857

Factor Analysis:

The main reason to do factor analysis is to show the homogeneity of the items. In factor analysis, the KMO value is quite satisfactory, the KMO value is 0.865, chi-Square value approximately 2751.695 and significance level is 0.000. The result shows the five (5) significant components in initial eigen values. A first component is 7.333 and its variance is 28.203 and second component of total is 2.869 with 11.033 of variance. The cumulative percentage is 58.069. Factor analysis also confirmed that the construct validity of the scales could be performed adequately. The factor loading for all items exceeding the minimum value of 0.50 were considered in this study. Those items that did not meet the requirement and that were dropped are SN9, SN10, SN11, PPE1, PPE2, PPE3, PPE6, PEU5, PEU6, PU1, PU6, PU7, PU8, PR1, PR8, ONS1, ONS2, ONS3. ONS4, ONS6, and ONS7.

Table 3: KMO and Bartlett’s Test.

Parameters	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.865
Bartlett’s Test of Sphericity: Approx. Chi-Square	2751.695
Df	325
Sig	.000

Table 4: Total Variance Explained.

Factor	Initial Eigenvalue			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.333	28.203	28.203	7.333	28.203	28.203	4.531	17.428	17.428
2	2.869	11.033	39.236	2.869	11.033	39.236	3.500	13.463	30.891
3	2.023	7.781	47.016	2.023	7.781	47.016	2.580	9.922	40.814
4	1.678	6.452	53.469	1.678	6.452	53.469	2.396	9.217	50.031
5	1.196	4.601	58.069	1.196	4.601	58.069	2.090	8.039	58.069

Table 5: Factor Analysis.

		Components				
		1	2	3	4	5
SN1	It is very important that my friends approve of me shopping via Internet.	.763				
SN2	When online shopping is concerned, I usually do what my friends are doing.	.772				
SN3	I consult with my spouse before shopping online	.744				
SN4	My spouse influence the decisions I make shopping online	.677				
SN5	It is very important that my family approve of my shopping via Internet.	.717				
SN6	When online shopping is concerned, I usually do what my family is doing.	.751				
SN7	It is very important that other people (except my family and friends) approve of my shopping via Internet.	.738				
SN8	When online shopping is concerned, I usually do what other people (except my family and friends) are doing.	.649				
PPE4	I am satisfied to use the same online shopping provider despite the previous experience.					.545
PPE5	I am satisfied with shopping frequently using the Internet.					.706
PPE7	I am satisfied to shop online with the same vendor whom I had had a good experience with.					.595

PPE8	I am satisfied to purchase products and services using online.				.604
PEU1	I find doing online shopping and web based online transaction easy.			.601	
PEU2	I find interaction through web pages clear and understandable.			.653	
PEU3	I find it is easy to become skillful at using the internet to accomplish my shopping tasks			.736	
PEU4	I feel comfortable in surfing websites to shop online			.746	
PU2	I can save the effort of visiting stores, when I do online shopping			.660	
PU3	There are no time restriction in online shopping			.706	
PU4	I can order product from any part of the world through online shopping			.806	
PU5	I can order product from lots of options when I do shopping online			.697	
PR2	I am confident that my credit card number is secured when I do online shopping		.791		
PR3	I am confident that I will receive quality service when I shop online.		.699		
PR4	I am confident on the reliability of the internet vendors.		.693		
PR5	I trust the digital signature for online shopping.		.752		
PR6	I have trust in online shopping.		.548		
PR7	I am confident that my personal information will not be hampered when online shopping.		.692		

Hypothesis Testing:

The causal relationship of the constructs was assessed using regression analysis as summarized below.

Hypothesis	Hypothesis Variables	Standardized coefficient (Beta)	Significance	Remarks
			(p value)	
H1	PU has a positive effect on ONS	0.109	.049	Supported
H2	PEOU has a positive effect on ONS	0.158	0.009	Supported
H3	SN has a positive effect on PU	-0.271	0.000	Not supported
H4	SN has a positive effect on PEOU	-0.373	0.000	Not supported
H5	PR has a positive effect on ONS	0.426	0.000	Supported
H6	PPE has a positive effect on PR	0.463	0.000	Supported

PU= Perceived Usefulness, PEOU= Perceived Ease of Use, SN= Subjective Norms, PR= Perceived Risk, PPE= Previous Purchase Experience, ONS= Online Shopping.

Hypothesis 1: PU has a Positive Effect on ONS:

The results of this study show that the association between PU and ONS is positive. The multiple regression result shows PU has a beta of 0.109 and significant p value is 0.049. The significant value is smaller than alpha at 0.05 and hypothesis is accepted. Indicating that effectiveness of online shopping can be maintained by increasing Malaysian consumers’ perceived usefulness.

Hypothesis 2: PEOU has a Positive Effect on ONS:

The results of this study show that the association between PU and ONS is positive. The multiple regression result shows PEOU has a beta of 0.158 and significant p value is 0.009. The significant value is smaller than alpha at 0.05 and hypothesis is accepted. As supported by many studies on other countries, also from Malaysian customers’ perspective perceived ease of use has a greater impact in engaging in online shopping.

Hypothesis 3: SN has a Positive Effect on PU:

The results for this hypothesis shows a negative effect on perceived usefulness with respect to subjective norm where, the regression coefficient beta is (-0.271) and significance of p value is 0.000. Hence, H3 is not supported. Meaning that the lesser the advice or opinions that customers get from other parties the more positive customers feel in their judgment with regard to perceived usefulness of online shopping.

Hypothesis 4: SN has a Positive Effect on PEOU:

The results on the relationship between SN and PEOU also showed a negative relation where the regression coefficient beta is (-0.373) and significant p-value is 0.000. Thus, H4 is also not supported in Malaysian context. In this case subjective norm creates an opposite reaction to perceived ease of use. Malaysian customers trust their own ability in using the internet and to become skillful without the approval or assistance from family or friends.

Hypothesis 5: PR has a Positive Effect on ONS:

The result of this study indicates that Standardized coefficient (Beta) of H5 is 0.426 and significance p-value is 0.000 that is supported. Although in previous studies perceived risk effective negatively to Online shopping (Parks *et al.*, 2004; Pires *et al.*, 2004) in this study perceived risk has been measured based on the

confidence level and trust Malaysian consumers have on online shopping as such the result been positive. Which is supported by other studies in whereby it states that trust beliefs reduces the perception of risk involve in shopping online (Becerra & Korgaonkar, 2011; Schibrowsky *et al.*, 2007). Thus, this hypothesis is supported.

Hypothesis 6: PPE has a Positive Effect on PR:

The result of this study indicates that Standardized coefficient (Beta) of H6 is 0.463 and significance of p-value is 0.000. Hence, previous purchase experience has a positive effect on perceived risk. In the Malaysian the measurement of previous perceived risk was based on the satisfaction received from the previous purchase experience. Which could be the main reason that the hypothesis has been supported as a satisfied experience (Pires *et al.*, 2004; cho, 2004) relates to building trust and confidence in engaging in online shopping (Becerra & Korgaonkar, 2011).

Discussions and Conclusion:

The results indicate the relationships between Malaysian online consumers perceptions of the factors that influence their intention to buy through online. The factors that have a higher significant level is previous purchase experience in terms of satisfactory level and perceived risk with regard to the consumers' confidence level and trust in online shopping. These two factors have a higher impact on the effectiveness of online shopping among Malaysian consumers. E-tailers need to consider these factors when establishing their online stores. E-tailers must give the customers a satisfactory purchase experience to build trust in the online stores and to benefit from repeat customers. Thus, consumer perception with regard trust and confidence in terms of a positive purchase experience to reduce perceived risks should be a definitive factor to be considered when formulating e-commerce strategies in making online shopping more effective to the Malaysian consumers. Futhermore, E-tailers and e-service providers must engage in increasing the confidence level of the online users to maintain the effectiveness of online shopping. In order to gain and capture the confidence of the online consumers they could be backed up by a well known reputable third party (Paynter and Lim, 2001). Vendors must assure the security of the consumers' sensitive information by enhancing perceived corporate credibility (Mauricio, *et al.*, 2010) so that the impact of perceived risk can be reduced with regard to the usage intentions. It is highly important for vendors to improve the clearance of the risks and make it more noticeable by way of providing their capability, trustworthiness and using their expertise to give clear explanation and visualization of privacy and security protection (Mauricio, *et al.*, 2010); further improving the effectiveness of online shopping to provide a better purchase experience for the consumers.

Perceived usefulness and perceived ease of use are the other two factors that contribute significantly to Malaysian consumers to shop online. Effectiveness of these two factors can still be further improved with better and easier to use websites and focusing more on the customers rather than the technology. Since the satisfaction and perceived value of the online users is affected by the website design (Chang and Wang, 2011) it is an important dimension which should be highly considered by e-tailers. Furthermore, if the forms in the website are designed poorly it may tend to contribute to the potential e-shoppers to lose sight on their online shopping carts and purchases (Ramayah and Ignatius, 2005) thus, reducing the internet shopping ease of use perception and usefulness the online shoppers have perceived. If the trouble that consumers have to face with regard to the interaction of website outweigh the benefit of online shopping than the potential e-shoppers may move onto the conventional way of shopping (Ramayah and Ignatius, 2005). In order to avoid this it is highly important for the managers to come up with options that can give benefit to the online users. As such they have to give more attention to the website design (Chang and Wang, 2011). With respect to this, online shoppers' providers can give options for the consumers to choose from map view or table view in which case the tabular view is more effective in deliberate decision making (Huang and Kuo, 2010) which could enhance the satisfaction of the users. In addition to this online shopper providers should also consider more ways of personalization, providing friendly interface and abundant information (Chang and Wang, 2011) to the online shoppers. Thus, in order to differentiate from other online stores e-tailers can take into consideration in making Malaysian customers a part of a "community" (Strategic Decision, 2011) so that they have a feeling of belongingness in the online stores. This in turn will increase the effectiveness of online shopping among consumers.

Although the above factors are significantly related to positive online shopping, considering subjective norm to these two factors perceived usefulness and ease of use result in a negative relationship. It could be due to the fact that most of the Malaysian consumers who are using online shopping are highly educated and proficient enough that they do not seek the guidance from close relatives, spouse, friends or other parties. And since Malaysian consumers are more technologically savvy and are experienced, they are comfortable in their own judgments with regard to choosing where to shop, how to use the internet and is skillful in using the internet to accomplish their shopping tasks. Thus, requiring less approval from other parties and relies mostly on their skills and experience. Furthermore, the findings that subjective norms have a stronger negative impact on perceived ease of use indicates than it does on perceived usefulness construct indicates that the more easy to navigate through the online stores the less likely the Malaysian customers are to engage in opinions of others in

using online shopping. Thus, e-tailers have to take this into consideration in making online shopping more effective with respect to the ease of use, so that less influence will be from others with regard to making decisions online.

All in all the study indicates that effectiveness of online shopping among Malaysian consumers can be further improved based on the studied factors. Although the study has been conducted based on the real online shoppers there is a possibility that self-administered survey could result in the participants not been honest about the results and also since the IP addresses from the participants were not accumulated for due to time constraint there is a possibility of participants submitting the questionnaire more than once. However, it is highly unlikely since the participants are believed to be also facing time constraints and are probable not to engage in the same questionnaire twice. Further research can be conducted based using other methods such as in depth interviews, unstructured questionnaires etc. in order to come to a more precise conclusion. And further research can be done to identify the relationship between subjective norms and previous purchase experience.

REFERENCES

- Adams, D.A., R.R. Nelson, P.A. Todd, 1992. Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication. *MIS Quarterly*, 16(2): 227-247.
- Alam, S.S., N.M. Yasin, 2010. An Investigation into the Antecedents of Customer Satisfaction of Online Shopping. *Journal of Marketing Development and Competitiveness*, 11(2): 210-216.
- Alam, S.S., Z. Bakar, H.B. Ismail, M.N. Ahsan, 2008. Young Consumers Online Shopping: An Empirical Study. *Journal of Internet Business*, 5: 81-98.
- Al-Maghrabi, T., C. Dennis, S. Halliday, 2011. Antecedents of Continuance Intentions towards E-Shopping: The Case of Saudi Arabia. *Journal of Enterprise Information Management*, 24(1): 85-111.
- Becerra, E.P., P.K. Korgaonkar, 2011. Effects of Trust Beliefs on Consumers' Online Intentions. *European Journal of Marketing*, 45(6): 936-962.
- Brynjolfsson, E., M.D. Smith, 2000. Frictionless Commerce? A Comparison Of Internet and Conventional Retailers. *Management Science*, 46(4): 563-85.
- Celik, H., 2011. Influence of Social Norms, Perceived Playfulness and Online Shopping Anxiety on Customers' Adoption of Online Retail Shopping: An Empirical Study in the Turkish Context. *International Journal of Retail & Distribution Management*, 39(6): 390-413.
- Celuch, K., S. Goodwin, S. Taylor, 2007. Understanding Small Scale Industrial User Internet Purchase and Information Management Intentions: A Test of Two Attitude Models. *Industrial Marketing Management*, 36(1): 109-20.
- Chang, H.H., S.W. Chen, 2009. Consumer Perception of Interface Quality, Security, and Loyalty In Electronic Commerce. *Information & Management*, 46(7): 411-7.
- Chang, H.H., Wang Hsin-Wei, 2011. The Moderating Effect of Customer Perceived Value On Online Shopping Behavior. *Online Information Review*, 35(3): 333-359.
- Chang Man-Ling, Lai M., Wu Wann-Yih, 2010. The Influences of Shopping Motivation on Adolescent Online-Shopping Perceptions. *African Journal of Business Management*, 4(13): 2728-2742.
- Cho, J., 2004. Likelihood to Abort an Online Transaction: Influences from Cognitive Evaluations, Attitudes, and Behavioral Variables. *Information & Management*, 41: 827-838.
- Chtourou, M.S., N. Souiden, 2010. Rethinking the TAM Model: Time to Consider Fun. *Journal of Consumer Marketing*, 27(4): 336-344.
- Davis, F.D., 1989. Perceived Usefulness, Perceived Ease Of Use And User Acceptance Of Information Technology. *MIS Quarterly*, 13(3): 319-39.
- Delafrooz, N., L.H. Paim, 2011. Determinants of Financial Wellness Among Malaysia Workers. *African Journal of Business Management*, 5(24): 10092-10100.
- Delafrooz, N., L.H. Paim, S.A. Sidin, A. Khatibi, 2009. Factors Affecting Students' Attitude toward Online Shopping. *African Journal of Business Management*, 3(5): 200-209.
- Fishbein, M., I. Ajzen, 1975. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley. As cited in Chang, Man-Ling., Lai, M., and Wu, Wann-Yih. 2010. The influences of shopping motivation on adolescent online-shopping perceptions. *African Journal of Business Management*, 4(13): 2728-2742.
- Foucault, B.E., D.A. Scheufele, 2002. Web Vs Campus Store? Why Students Buy Textbooks Online. *Journal of Consumer Marketing*, 19(5): 409-423.
- Hair, J.F., R.E. Anderson, R.L. Tatham, W.C. Black, 2010. *Multivariate Data Analysis*. Ney Jersey: Prentice Hall.
- Haque, A., A. Khatibi, 2006. The Study of the Behavior of Malaysian Consumers towards Online Shopping. *Asian Journal of Information Technology*, 5: 12-19.

- Harn, A.C., A. Khatibi, H. Ismail, 2006. E-Commerce: A Study on Online Shopping in Malaysia. *Journal of Social International Science*, 15(5): 232-242.
- Hassan, H.H., S.A. Rahim, 2008. Factors Affecting Online Purchasing Behavior. *Journal Komunikasi, Malaysian Journal of Communication*, 24: 1-19.
- Hassan, Y., N.F. Abdullah, 2000. Influencing Factors on Consumer Choice Towards Online Shopping. *Faculty of Business Management*, 1-12.
- Huang Yu-feng, Kuo Feng-yang, 2010. An Eye-Tracking Investigation of Internet Consumers' Decision Deliberateness. *Internet Research*, 21(5): 541-561.
- Jun, M., Z. Yang, D.S. Kim, 2004. Customers' Perceptions of Online Retailing Service Quality And Their Satisfaction. *International Journal of Quality & Reliability Management*, 21(8): 817-840.
- Kalakota, R., A. Whinston, 1997. *Electronic Commerce: A Manager's Guide*. Reading, MA: Addison-Wesley. As cited in Fillis, I. and Wagner, B. (2005). E-business development: An exploratory investigation of the small firm. *International Small Business Journal*, 23(6): 604-634.
- Kalakota, R., A.B. Whinston, 1996. *Frontiers of Electronic Commerce*. MA: Addison-Wesley Publishing.
- Khatibi, A., A. Haque, K. Karim, 2006. E-Commerce: A Study on Internet Shopping In Malaysia. *Journal of Applied Science*, 6: 696-705.
- Kim, D.J., D.L. Ferrin, H.R. Rao, 2009. Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration. *Information System Research*, 20(2): 237-257.
- Kim, E.Y., Y.K. Kim, 2004. Predicting Online Purchase Intentions for Clothing Products. *European Journal of Marketing*, 38(7): 833-897.
- Leppel, K., D.W. McCloskey, 2011. A Cross-Generational Examination of Electronic Commerce Adoption. *Journal of Consumer Marketing*, 28(4): 261-268.
- Liao, Z., M.T. Cheung, 2001. Internet-Based E-Shopping and Consumer Attitudes an Empirical Study. *Information & Management*, 38(5): 299-306.
- Lim, H., A. Dubinsky, 2004. Consumers' Perceptions Of E-Shopping Characteristics: An Expectancy-Value Approach. *Journal of Services Marketing*, 18(7): 500-513.
- Lin Pei-Chun, Chou Yu-Hwa, 2009. Perceived Usefulness, Ease of Use, and Usage of Citation Database Interfaces: A Replication. *The Electronic Library*, 27(1): 31-42.
- Mauricio, S., M.S. Featherman, A.D. Miyazaki, D.E. Sprott, 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.
- McKinney, L.N., 2004. Creating a Satisfying Internet Shopping Experience via Atmospheric Variables. *International Journal of Consumer Studies*, 28(3): 268-283.
- Ong, K., 2010. Online Shopping Statistics in Malaysia. *Humanwebsites.com.my* [blog], 28 May. Available at: <http://humanwebsite.com.my/blog/online-shopping-statistics-in-malaysia.html> [Accessed 20 December 2011].
- Park, J., D. Lee, J. Ahn, 2004. Risk-Focused E-Commerce Adoption Model: A Cross-Country Study, *Journal of Global Information Management*, 7: 6-30.
- Parsons, A.G., 2002. Non-Functional Motives for Online Shoppers: Why We Click. *Journal of Consumer Marketing*, 19(5): 380-392.
- Paynter, J., J. Lim, 2001. Drivers and Impediments to E-Commerce in Malaysia. *Malaysian Journal of Library & Information Science*, 6(2): 1-19.
- Pires, G., J. Stanton, A. Eckford, 2004. Influences on the Perceived Risk of Purchasing Online. *Journal of Consumer Behaviour*, 4(2): 118-131.
- Ramayah, T., J. Ignatius, 2005. Impact of Perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment on Intention to Shop Online. *Journal of Systems Management*, 3(3): 36-51.
- Schibrowsky, J.A., J.W. Peltier, A. Nill, 2007. The State of Internet Marketing Research. *European Journal of Marketing*, 41(7/8): 722-33.
- Strategic Decision, 2011. Everyone's Getting the Online Habit but Don't Write off the Traditional Activities. *Strategic Decision*, 27(8): 25-27.
- Syed, Bakar, Z., H.B. Ismail, M.N. Ahsan, 2008. Young Consumers Online Shopping: An Empirical Study. *Journal of Internet Business*, 5: 81-98.
- Venkatesh, V., D. Davis, 2000. A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Information Systems Research*, 46(2): 186-204.
- Zeithaml, V., A. Parasuraman, A. Malhotra, 2002a. Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge. *Journal of the Academy of Marketing Science*, 30(4): 362-375.
- Zhou, L., L. Dai, D. Zhang, 2007. Online Shopping Acceptance Model: A Critical Survey of Consumer Factors in Online Shopping. *Journal of Electronic Commerce Research*, 8(1): 41-62.