# A Study Of E-Shopping Intention In Malaysia: The Influence Of Generation X & Y

<sup>1</sup>Shaheen Mansori (PhD), <sup>2</sup>Cheng Boon Liat (PhD), <sup>3</sup>Lee Hui Shan

<sup>1</sup>INTI International University Faculty of Business, Law and Communication Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

<sup>2</sup>Universiti Tun Abdul Razak Bank Rakyat School of Business and Entrepreneurship Malaysia <sup>3</sup>INTI International University-Faculty of Business, Law and Communication Malaysia

**Abstract:** Developments in the commercial sector, coupled with the increasing popularity of the Internet in recent years, have made Malaysian companies more aware of the importance of E-business in gaining a competitive edge in the global market. Therefore, a better understanding of the factors that influence online shopping intention would help in planning better marketing strategies in targeted segments. In this study, five variables on online shopping intention were selected, namely perceived benefits, website characteristics, perceived risks, perceived pricing as well as product and service attributes. Findings from 200 respondents of Generation X and Y showed that four factors significantly influenced online shopping intention. The one exception was product and service attributes. The generation gap was found to have a moderating effect on the relationships between perceived benefit, website characteristics, and online shopping intention.

**Key words:** Online shopping intention, consumer behaviour, Generation X, Generation Y

## INTRODUCTION

Thanks to globalization, the use of information technology (IT) has spread rapidly, leading to the popularization of the Internet (2002). According to Damanpour and Damanpour (2001), the Internet has not only changed the lifestyle of individuals, but also the way companies conduct businesses, communicate and share information, as well as sell and purchase products and services. Sulaiman *et al.* (2008) highlight the fact that most companies use the Internet to cut marketing costs and to improve competitiveness. They assert that, in line with customer satisfaction and improving the profit margin. Undoubtedly, electronic commerce (E-commerce) is here to stay. Electronic commerce can be defined as commerce that is dependent upon digital communication and information technology. E-commerce is also defined as selling and buying of products and services via computer networks, mainly the Internet (Wen, Chen, and Hwang 2001).

According to Internet World Stats (2010) Malaysian Internet usage rose sharply from 15% of the population in 2000 to 64.6% of the population in 2010, which is equivalent to 17 million Internet users. Hence, it is not surprising that online shopping in Malaysia is on the rise (Paynter and Lim 2001). Based on a survey report by Nielson company, Malaysians spent RM1.8 billion on online shopping in 2010 (The Star, 2010). This figure is estimated to triple in the subsequent three years. Apparently, consumers tend to look for alternative ways to shop more conveniently. Online shopping seems to be a viable option. Invariably, online shopping has created new challenges for companies to come out with better products and services as well as convenient shopping alternatives in order to maximize customer satisfaction (Wen, Chen, and Hwang 2001). Thus, it is crucial to identify the factors affecting online shopping intention in order for companies to improve or devise new business strategies.

# 2.0 Literature Review:

# 2.1 Online Shopping Intention:

Online shopping intention is derived from purchase intention (Close and Kukar-Kinney 2010). Howard and Sheth (1969) define purchase intention as a cognitive state that reflects a consumer's plan to purchase products and services in a specified period of time. Bai *et al.* (2008) affirm that purchase intention is the primary result of pre-purchase satisfaction in an E-commerce context. Close and Kukar-Kinney (2010) define online shopping intention as the intention of online shoppers to purchase products and services via the Internet, or use the virtual shopping cart as a means to buy things during an online session. Accordingly, the virtual shopping cart acts as a functional holding place which is required to temporarily keep or hold the intended purchase items prior to completing the purchase transaction. Chen *et al.* (2010) believe that online shopping intention is the vital predictor of actual purchasing behaviour. They add that it reveals the desire of online shoppers to complete a purchase transaction via the virtual stores or websites.

Tel: (+606)7982000 & Fax: (+606)7997513 E-mail: Shaheen.mansori@newinti.edu.my

### 2.3 Perceived Benefit:

The attitude and consumer behaviour towards online shopping environment depend on consumers' perception of the activities conducted on the Internet as compared to traditional shopping (Soopramanien and Robertson 2007) time efficiency and convenience are the main factors that influence online shopping (Morganosky and Cude 2000). According to Chen et al. (2010), convenience refers to online shopping practices which can reduce consumers' time and effort in the transaction process. To et al. (2007) find that online shopping is not limited by space, time and weather. Thus, consumers can enjoy more a comfortable, convenient and flexible shopping environment. E-commerce gives consumers the opportunity to economize on time and effort owing to the ease of locating the merchants, selecting the products or services and procuring them (Schaupp and Bélanger 2005). Besides, lack of sociality is one of the preferred online shopping characteristics (To, Liao, and Lin 2007). Lack of sociality refers to the extent of fulfilment to purchase the products through online stores without having human interaction with sales persons or service staff (Lawler and Joseph 2006). To et al. (2007) mention in their research in a Taiwan context that online shoppers can browse through the merchandise as they like via online interface without being followed around or interrupted by sales persons. Thus, it can reduce unnecessary social interaction. Wolhandler (1999) supports the view and comments that the lack of pressure from sales persons contributes to a more enjoyable shopping experience on the Internet. However, Lawler and Joseph (2006) show that lack of sociality does not have a great impact on online shopping, as compared with other factors, in the context of the United States.

Taking into account these considerations, the following hypotheses have been developed for this study: *H1: There is a relationship between "perceived benefit" and online shopping intention.* 

#### 2.4 Website Characteristics:

Website characteristics play an important role in online purchase intention (Beldona, Morrison, and O'Leary 2005). A well-developed website, in terms of content and functions, increases online shopping intention and customer satisfaction, and ultimately increases the return rate (Chen, Hsu, and Lin 2010; Schaupp and Bélanger 2005) Internet users are motivated to engage in online shopping activities because of the stimulating effects of attractive and interesting e-tailer websites (Ganesh *et al.* 2010). Likewise, the findings from Dong and Seon (2010) in the Republic of Korea show that graphics and colours contribute to pleasing and arousing customers when they are engaged in online shopping activities; hence both have subsequent effect on purchase intention.

Ducoffe (1996) defines perceived informativeness as the ability to provide the necessary information to a target audience. According to Hausman and Siekpe (2009), one of the need-satisfying functions in E-commerce is informational content. They have found that an informative website allows online shoppers or prospective customers to compare and evaluate among the alternatives, thus maximizing customer satisfaction and stimulating online purchase intention. Similarly, Schaupp and Bélanger (2005) affirm that a rich content increases the likelihood of online purchases as it helps online customers to make more informed decisions and improve their confidence in online websites (Kim, Kim, and Park 2010).

Other studies indicate the importance of desirable functions in online websites such as product catalogue, price comparison tool, search engine, shopping carts, and tracing mechanisms. Based on the findings by Chen *et al.* (2010) the user-friendly interface and ease of use have significant impact on online purchase intention for Taiwanese Internet users. Schaupp and Bélanger (2005) show that interactive mechanisms enhance the reputation of e-tailers, and impact online shopping intention positively. Therefore, the following hypothesis has been developed:

H2: There is a relationship between "website characteristics" and online shopping intention.

# 2.5 Perceived Risk:

Schaupp and Bélanger (2005) define security risk as a condition or circumstance that might cause economic hardship to network resources or data in terms of destruction, data modification, fraud, abuse and waste. Chen *et al.* (2010) comment that security risk affects online purchase intention. Lim (2003) affirms that the more risk the consumer perceives, the lesser the chance of a business transaction being completed. Lee and Huddleston (2010) suggest that analyzing the types and roles of different perceived risks will provide businesses and e-tailers a better understanding of consumer behaviour with regard to online shopping. Perceived financial risk is also considered as economic risk. It is defined as the possibility of monetary loss due to online shopping (Lim 2003).

Moreover, there is also the possibility of privacy risk, which is associated with the concern of loss of privacy due to consumers having to provide personal information when they shop online (Lee and Huddleston 2010). According to Eastlick *et al.* (2006), privacy can be defined as the ability of consumers to manage, control and selectively disclose their personal information. Thus, Chen *et al.* (2010) suggest that privacy policies are needed to eliminate consumer privacy concerns and enhance online shopping intention. Therefore, the following hypothesis has been developed:

H3: There is a relationship between "perceived risk" and online shopping intention.

### 2.6 Perceived Pricing:

Price can be defined as the amount of money that a customer needs to sacrifice in order to obtain a product or service (Ashton *et al.* 2010). Kotler and Keller (2011)state that price is the agreed exchange value to obtain the ownership of products or experience a service. Price can be considered as one of the most important criteria which affect the consumer's purchase intention and decision. In online shopping, pricing normally refers to the price of the product and also the shipping cost or postage (Kim, Kim, and Park 2010).

Perceived pricing is believed to have a significant influence on online purchasing intention (Beldona, Morrison, and O'Leary 2005; Kim, Kim, and Park 2010). The time-saving aspects, convenience and other functional features of online markets facilitate the comparison of prices for similar products; hence online shoppers are becoming more price-conscious (Jiang 2002; Moon, Chadee, and Tikoo 2008). Nevertheless, shipping cost and handling fees may deter online shoppers from making a purchase (Close and Kukar-Kinney 2010) as these could add considerably to the price of the product. Therefore, the following hypothesis has been developed:

H4: There is a relationship between "perceived pricing" and online shopping intention.

## 2.7 Products and Services Attributes:

According to Kotler and Keller (2011) a product or service is the core element in the marketing mix. Jarvenpaa and Todd (1996) show that e-tailers who offer a wide selection or a variety of products are more successful. Yet other studies (e.g., Schaupp and Bélanger 2005) have shown that offering exclusive and specialty products as well as seasonal products are significantly important in online business. This study also highlights the importance of product customization; it is the value-adding feature that might enhance online shopping intention. Product customization refers to the consumer's ability to customize their products or services according to personal preferences (Zhu and Kraemer 2002; Schaupp and Bélanger 2005). Previous studies have also pointed out that customized products or services should be developed to give a competitive edge to online businesses (To, Liao, and Lin 2007).

As online shopping does not involve direct human contact in the transaction, excellent customer service is crucial to achieving customer satisfaction (Ha and Stoel 2009). According to Chen and Tan (2004), customer service quality has a direct influence on the attitude of consumers when using virtual stores. They add that perceived service quality has a positive relationship with customer satisfaction and increase the likelihood to purchase. Besides customer service, delivery of the product is another vital service in e-business. Schaupp and Bélanger (2005) highlight the importance of timely and reliable delivery of products in contributing to customer satisfaction. Therefore, the following hypothesis has been developed:

H5: There is a relationship between "product and service attributes" and online shopping intention.

# 2.8 Proposed Research Framework:

Based on previous literatures and studies, a proposed research framework is designed as below (see Figure 1):

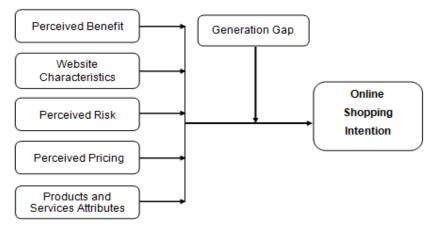


Fig. 1: Proposed Research Framework

# 3.0 Methodology:

Questionnaires were used for primary data collection. Target respondents for the questionnaires were existing and potential online shopping consumers who belonged to Generation X or Y in Malaysia. A total of 200 respondents participated, Owing to time constraint, convenience sampling was adopted for this research. The questionnaires were distributed to participants in public areas in Kuala Lumpur, the capital city of Malaysia,

where there is a high density of population and fairly easy to select respondents who were Internet—users. To minimize response error, the questionnaires were distributed on a face-to-face basis so that the researcher was able to answer queries, if any, from the respondents.

The questionnaire was divided into three parts. All the questions were designed to be close-ended for easy analysis of the feedback. Section A used the "Likert-type scale" to ascertain the level of agreement or disagreement with regard to online shopping intention as well as perceived benefit. Likewise, all the other questions also used the Likert scale used to ascertain level of importance of the other factors that were thought to have influenced consumer's online shopping intention. Research variables included website characteristics, perceived risk, perceived pricing, as well as products and services attributes. In Section B, there were two questions regarding online shopping experience as well as the products which respondents had bought online. Finally, Section C elicited the demographic data of the respondents such as age, gender, marital status, race, income level and education level.

### 4.0 Findings And Discussions:

### 4.1 Profile of Respondents:

This research was based on the data collected from 200 respondents, of whom 100 were from Generation X while the remaining 100 respondents were from Generation Y. There were 104 females and 96 males. Of the respondents from Generation Y, 63 were between 18 to 24 years old while the ages of 37 respondents ranged between 25 and 31 years. As for Generation X, 53 respondents were in the age range of 32 to 38 years, while the remaining 47 respondents were between 39 and 45 years old. As far as marital status was concerned, 118 respondents were single, 74 were married and 8 divorced. In terms of ethnicity, 107 respondents were Chinese, followed by 61 Malays, 27 Indians, 5 respondents were of other racial origins.

The majority of the respondents had shopped online before. Eighty-three per cent of the respondents from Generation Y had online shopping experience. Seventy-nine per cent of the respondents from Generation X had shopped online. In terms of online products and services, travelling was the most popular choice among the online shoppers, followed by books/ magazines, fashion/beauty and IT/electronics.

Table 1: Summary of Respondents' Profile

		Number	Particulars		Number
Particulars					
Gender	Male	96	Marital Status	Single	118
	Female	104		Married	74
				Divorced	8
Age	18-24	63	Race	Malay	61
•	25-31	37		Chinese	107
	32-38	53		Indian	27
	39-45	47		Others	5

### 4.2 Reliability and Validity:

Cronbach's alpha value is employed and computed to measure the consistent reliability among online shopping intention and five factors that affecting online shopping intention (perceived benefit, website characteristics, perceived risk, perceived pricing as well as products and services attributes). The results show that values of Cronbach's alpha value for every construct are in the range between 0.750 and 0.884 (see Table 2). Thus, it can be concluded that all the variables are reliable in this research.

In order to achieve validity, factor analysis is employed in this research to ensure that the measurement items of the five (5) variables are all corresponding with the construct by testing on the factor loading of each item. Based on the findings, the KMO values for the five (5) independent variables are in the range from 0.711 to 0.800 which are in the suggested range by Hair *et al.* (2011). Besides, all of the five (5) constructs are in the significance level of 0.1%. In term of factor loading, the values are in between of 0.598 and 0.891 (see Table 2). As a result, it can be concluded that all the variables are in an adequate validity range and fit to the model.

Table 3: Results for Factor Analysis

Tuble 5. Results for Lucioi Finally 515						
Construct	KMO Value	Cronbach's Alpha				
Perceived Benefit	0.776	0.799				
Website Characteristics	0.728	0.762				
Perceived Risk	0.800	0.853				
Perceived Pricing	0.789	0.839				
Products and Services Attributes	0.711	0.750				

## 4.3 Factors Affecting Online Shopping Intention:

To test on the relationship between independent variables (perceived benefit, website characteristics, perceived risk, perceived pricing as well as products and services attributes) and online shopping intention, multiple regression analysis is employed in the research (see Table 4). Based on the results, adjusted R<sup>2</sup> of the

value of 0.45 indicates that 45percent (%) of online shopping intention can be explained by the five (5) independent variables. Besides, F test of the model is 33.620 (p-value=0.000) shows that the overall regression is significant at 0.1% level. Therefore, it can be concluded that the model is fit to the data. In term of multicollinearity analysis, VIF in this model shows a value in between 1.074 and 1.707 while the values of TOL are from 0.586 to 0.932. Both are in the range as suggested by Hair et al. (2011). As a result, the constructed model is acceptable where variables have no multicollinearity. Consistent with H1, perceived benefit has significant influence on online shopping intention (β=.765, t=12.854, p-value <0.01) Indeed, the results show that perceived benefit has the strongest influence among five variables. Website characteristics and perceived risk have negative influence on online shopping intention at 5% significance level (Website Characteristics: β=-.237, t=-2.309, p-value <0.05; Perceived Risk: β=-.172, t=-2.011, p-value <0.05). Thus, H2 and H3 are supported. Nevertheless, the negative results show that the current website characteristics and perceived risk have not up to consumers' expectation. As H3 explicated, perceived pricing also have significant influence towards online shopping intention (β=.147, t=1.825, p-value <0.10). Lastly, the research results do not provide support for the hypothesis H5 that products and services attributes have relationship with online shopping intention ( $\beta$ =-.003, t=-0.026, p-value >0.10n.s.).

Table 4: Results for Multiple Regression Analysis Model Summary R Square Adjusted R Square Std. Error of the Estimate

1 .681 <sup>a</sup> .464	.450	.67744					
a. Predictors: (Constan	t), Products	and Services Attributes,	, Perceived Benefit,	Perceived Risk, Perce	eived Pricing, Web	site Char	acteristics
		Unstandardized Coefficients	Standardized Coefficients	t	Collinearity Statistics		Conclusion
ndependent Variables		В	Beta		Tolerance	VIF	
Perceived Benefit (H	1)	.765	.700	12.854***	.932	1.074	Supported
Website Characteristi	cs (H2)	237	156	-2.309**	.603	1.659	Supported
Perceived Risk (H3)		172	118	-2.011**	.807	1.239	Supported
Perceived Pricing (H4	4)	.147	.120	1.825*	.635	1.576	Supported
Products and Services	Attributes	(H5)003	002	026n.s.	.586	1.707	Rejected
a.Dependent Variable:	Online Sho	pping Intention		** P < .05.			

Model: F= 33.620\*\*\*

\* P < 10

\*\*\* P < .01. n.s.= Not Significant

Table 5: Results for Moderation Test

	Unstandardi zed Coefficients Std. E Error		Standardized Coefficients		Sig.
Independent Variables			Beta	t	
Perceived Benefit	868	.074	.794	.655 0	.00
Website Characteristics	.373	.150	246	2.492 4	.01
Perceived Risk	.207	.128	141	1.617 7	.10
Perceived Pricing	148	.106	.121	1. 389 6	.16
Products and Services Attributes	100	.147	.066	.6 80 7	.49
Perceived Benefit with Generation	.279	.119	542	2.341 0	.02
Website Characteristics with Generation	379	.213	.864	1. 777 7	.07
Perceived Risk with Generation	070	.163	.166	31 7	.66
Perceived Pricing with Generation	.019	.162	041	.114 9	.90
Products and Services Attributes with Generation	.197	.202	466	.975 1	.33

a. Dependent Variable: Online Shopping Intention

#### **Moderation Results:**

To fulfil hypothesis H6 which is to test whether generation (X&Y) can be the moderator in factors that affecting online shopping intention, moderation test is employed. Perceived benefit has significant moderation relationship with online shopping intention at 1% level (t=-2.341, p-value =0.020). Besides, website characteristics have slight moderation relationship with online shopping intention at 90% confidence level (t=1.777, p-value=0.077). It can be concluded that Generation X & Y can influence the direction or strength of the relationship between perceived benefit and website characteristics towards online shopping intention. Nevertheless, the findings show that Generation X&Y cannot moderate the relationship between remaining independent variables (perceived risk, perceived pricing as well as products and services attributes) and online shopping intention(t=0.432, p-value =0.667; t=-0.114, p-value =0.909; t=-0.975, p-value =0.331).

## **Conclusions And Implications:**

Although there are many studies on consumer behaviour in e-commerce, there has been little attempt to focus on the online behaviour of different target segments. The primary purpose of this research was to provide a deeper insight into the factors that affected online shopping intention of Generation X and Y in Malaysia. Five variables had been identified for this study, namely perceived benefit, website characteristics, perceived risk, perceived pricing as well as product and service attributes. With exception of the last factor, i.e. product and service attributes, all the other factors were found to have significantly influenced online shopping intention. Additionally, perceived benefit is the most significant factor affecting online shopping intention followed by website characteristics and perceived risk. In terms of moderation effect, the generation gap was found to have moderated the relationship between "perceived benefit" and "website characteristics" towards online shopping intention while there is no moderation effect on the remaining three factors. Furthermore, Generation Y placed greater emphasis on website characteristics and pricing when shopping online compared to Generation X. Nevertheless, both generations shared similar views on perceived benefit.

These findings would be useful in the development of a more comprehensive model to facilitate a better understanding of online shopping intention. As this study compared online consumer behaviour of Generation X and Y in this country, the findings would provide a better insight of Malaysian online shopping intention and help plan more effective online marketing strategies.

## Managerial Implications:

It is suggested that in order to boost e-commerce, the government should strive to educate the public about the benefits of online shopping in Malaysia. For instance, the government could collaborate with famous e-tailers in Malaysia such as mudah, lelong, and ebay Malaysia to enhance awareness of e-commerce. In this way, it will also indirectly help to achieve one of the goals of Vision 2020 of Malaysia, i.e. the transformation of the nation into a high-technology country. As perceived risk is one of the major concerns of online shoppers, the Malaysia government therefore should enforce more stringent rules and regulations to safeguard the interests of online shoppers.

Moreover, as shown in this study, website characteristic is one of the important concerns of consumers with regard to online shopping intention. Unfortunately, the results of this study showed that existing websites or virtual stores in Malaysia were not up to the expectations of consumers. Therefore, it is vital for e-businesses to improve their website functions such as functional mechanism, user-friendliness and website design. Besides, regularly maintaining and upgrading the website content is essential so that the quality is consistent and the information is up to date. As a result, websites of virtual stores should be developed as one of the competitive advantages for e-businesses.

Although pricing is not the main consideration for online shoppers, e-business can play around with the pricing to attract more customers, particularly those from Generation Y. Special discounts or sales promotions for specific products could attract more online shoppers. Moreover, as word-of-mouth is the most effective and inexpensive marketing tool, e-businesses should exploit this marketing tool among youngsters. Campaigns such as "incentives for introduction and recommendation" could be carried out to attract more new customers as well as instil customer loyalty.

Lastly, although product and service attributes do not impact online shopping intention as much as the other four variables, they should not be ignored. In a competitive global market, e-businesses should also benchmark with successful companies with excellent products and services to achieve continuous improvement. Quality products and services are always valued by consumers, and over time, would boost the image and reputation of the company.

# Limitations and Future Studies:

This study is not without limitations. Firstly, the adjusted R square of 45% shows that there are still 55% of gap that can be fulfil by developing a more comprehensive research model. Besides, the distribution of the questionnaires was limited only to certain areas in the capital city. Hence the data obtained did not reflect the

views of the general Malaysian public. Next, biasness risk might have hindered the accuracy of the findings. Thus, it is suggested for future studies, there should be more variables, moderators and mediators so that a more comprehensive research model can be developed. Furthermore, a combination of qualitative and quantitative research is suggested as consumer behaviour is subjective. To conclude, a longitudinal study over a longer period and with a larger sample size is recommended to achieve more accurate results.

#### REFERENCES

- Ashton, A..S, N. Scott, D. Solnet, & N. Breakey, 2010. 'Hotel restaurant dining: The relationship between perceived value and intention to purchase', Tourism and Hospitality Research, 10(3): 206-18.
- Bai, B., R. Law, & I. Wen, 2008. 'The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors', International Journal of Hospitality Management, 27(3): 391-402.
- Beldona, S., A.M. Morrison, & J. O'Leary, 2005. 'Online shopping motivations and pleasure travel products: a correspondence analysis', Tourism Management, 26(4): 561-70.
- Chan, B. & S. Al-Hawamdeh, 2002. 'The development of e-commerce in Singapore: The impact of government initiatives', Business process management journal, 8(3): 278-88.
- Chen, L.D. & J. Tan, 2004 'Technology Adaptation in E-commerce::: Key Determinants of Virtual Stores Acceptance', European Management Journal, 22(1): 74-86.
- Chen, Y.H., I. Hsu, & C.C. Lin, 2010. 'Website attributes that increase consumer purchase intention: A conjoint analysis', Journal of Business Research, 63(9): 1007-14.
- Close, A.G. & M. Kukar-Kinney, 2010. 'Beyond buying: Motivations behind consumers' online shopping cart use', Journal of Business Research, 63(9): 986-92.
- Damanpour, F. & J.A. Damanpour, 2001. 'E-business e-commerce evolution: perspective and strategy', Managerial Finance, 27(7): 16-33.
- Ducoffe, R.H., 1996. 'Advertising value and advertising on the web', Journal of advertising Research, 36(5): 21-35
- Eastlick, M.A., S.L. Lotz, & P. Warrington, 2006. 'Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment', Journal of Business Research, 59(8): 877-86.
- Ganesh, J., K.E. Reynolds, M. Luckett, & N. Pomirleanu, 2010. 'Online shopper motivations, and e-store attributes: An examination of online patronage behavior and shopper typologies', Journal of Retailing, 86(1): 106-15.
- Ha, S. & L. Stoel, 2009. 'Consumer e-shopping acceptance: Antecedents in a technology acceptance model', Journal of Business Research, 62(5): 565-71.
- Hair, J.J.F., M.W. Celsi, A.H. Money, P. Samouel, & M.J. Page, 2011. Essentials of business research methods, ME Sharpe Inc.
- Hausman, A.V. & J.S. Siekpe, 2009. 'The effect of web interface features on consumer online purchase intentions', Journal of Business Research, 62(1): 5-13.
  - Howard, J.A. & J.N. Sheth, 1969. The theory of buyer behavior, John Wiley, New York.
- Jarvenpaa, S.L. & P.A. Todd, 1996. 'Consumer reactions to electronic shopping on the World Wide Web', International Journal of Electronic Commerce, pp. 59-88.
- Jiang, P., 2002. 'A model of price search behavior in electronic marketplace', Internet Research, 12(2): 181-90.
- Kim, J.U., W.J. Kim, & S.C. Park, 2010. 'Consumer perceptions on web advertisements and motivation factors to purchase in the online shopping', Computers in Human Behavior, 26(5): 1208-22.
- Koo, D.M. & S.H. Ju, 2010. 'The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention', Computers in Human Behavior, 26(3): 377-88.
  - Kotler, P. & K. Keller, 2011. 'Marketing management. Global edition', Pearson Education.
- Lawler, J & A. Joseph, 2006. 'A study of apparel dress model technology on the web', Journal of Information, Information Technology, and Organizations, 1: 59-73.
- Lee, H.J. & P.T. Huddleston, 2010. 'An investigation of the relationships among domain-specific innovativeness, overall perceived risk and online purchase behaviour', International Journal of Electronic Marketing and Retailing, 3(1): 1-4.
- Lim, N., 2003. 'Consumers' perceived risk: sources versus consequences', Electronic Commerce Research and Applications, 2(3): 216-28.
- Moon, J., D. Chadee, & S. Tikoo, 2008. 'Culture, product type, and price influences on consumer purchase intention to buy personalized products online', Journal of Business Research, 61(1): 31-9.
- Morganosky, M.A. & B.J. Cude, 2000. 'Consumer response to online grocery shopping', International Journal of Retail & Distribution Management, 28(1): 17-26.

Paynter, J & J. Lim, 2001. 'Drivers and impediments to e-commerce in Malaysia', Malaysian Journal of library and Information science, 6(2): 1-19.

Schaupp, L.C. & F. Bélanger, 2005, 'A conjoint analysis of online consumer satisfaction', Journal of Electronic Commerce Research, 6(2): 95-111.

Soopramanien, D.G.R & A. Robertson, 2007. 'Adoption and usage of online shopping: An empirical analysis of the characteristics of "buyers" "browsers" and "non-internet shoppers", Journal of Retailing and Consumer Services, 14(1): 73-82.

Stats, I.W., 2010. Malaysia Internet Usage Stats and Marketing Report, viewed 17 September 2011, <a href="http://www.internetworldstats.com/asia/my.htm">http://www.internetworldstats.com/asia/my.htm</a>.

Sulaiman, A., J. Ng, & S. Mohezar, 2008, 'E-ticketing as a new way of buying tickets: Malaysian perceptions', Journal of Social Science, 17(2): 149-57.

To, P.L., C. Liao, & T.H. Lin, 2007. 'Shopping motivations on Internet: A study based on utilitarian and hedonic value', Technovation, 27(12): 774-87.

Wen, H.J., H.G. Chen, & H.G. Hwang, 2001, 'E-commerce Web site design: strategies and models', Information management & computer security, 9(1): 5-12.

Wolhandler, H., 1999. 'Real Numbers Behind the Online Retail Industry', ActiMedia Research.

Zhu, K & K.L. Kraemer, 2002. 'E-commerce metrics for net-enhanced organizations: Assessing the value of e-commerce to firm performance in the manufacturing sector', Information Systems Research, 13(3): 275-95.