

Examining Factors Correlated with Consumer Online Shopping Behaviour

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Abstract Online shopping enables consumers to search for information and purchase products or services through direct interaction with online store. This study aims to examine the correlation of Internet marketing environment, product characteristics, familiarity and confidence, and promotional offers with consumer online shopping behaviour. Two-hundred questionnaires were distributed to the respondents, who are students and staff at a public university in the Federal Territory of Labuan, Malaysia, following simple random sampling as a means of data collection. Correlation analysis was used as a statistical measure to determine the strength of the relationship between one dependent variable and a series of other independent variables. Results revealed that familiarity and confidence was found to greatly correlated with consumer online shopping behaviour followed by promotional offers. A clear understanding of consumer online shopping behaviour can help marketing managers predict the online shopping rate and evaluate the future growth of online commerce.

Keywords Internet marketing environment • Product characteristics • Multiple regression analysis • Malaysia

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1 Introduction

The Internet has changed the way people shop and day-to-day lives. Internet usage has grown rapidly over the past years and has become a common means for delivering and trading information, services, and goods (Albarq 2006). In recent years, shopping online has become the norm and all over the world consumers prefers to shop online as it has many advantages (Ahmad et al. 2010). The Internet-based electronic commerce environment enables consumers to search for information and purchase products or services through direct interaction with online store. Although, purchasing online is still a small part of Internet usage, most analysts expect it will increase dramatically when consumers feel convinced and secure about their purchases and protection of their privacy. Internet shopping in Malaysia is in its infancy (Delafrooz et al. 2009). Web-retailers can only offer certain ranges of products and services to web-shoppers, including e-banking services, technology gadgets, cosmetics, clothing, and the booking of airline tickets (Kwek et al. 2010a). The first groups of products are ones consumers do not need to see personally before purchasing. These products include e-banking services and the booking of airline tickets. This group of products is suitable for Internet shopping because the Internet provides transaction and communication functions. The second groups of products are items consumers prefer to see and touch before purchasing. These products include technology gadgets, cosmetics, and clothing. This group of products is not suitable for Internet shopping because the images and information about the product may not be accurate or sufficient for consumers to perform Internet-based transactions. This study aims to examine the correlation of Internet marketing environment, product characteristics, familiarity and confidence, and promotional offers with consumer online shopping behaviour.

2 Literature Review

Online shopping has eliminated on the consumer's side such traditional shopping inconveniences as battling crowds, standing in long checkout lines, and fighting for parking spaces at a busy mall (Ahmad et al. 2010). The customers are able to evaluate the available products and their prices from a multiplicity of diverse outlets through the Internet. These comparison-shopping sites may save customers' time and money because they can see which retailer has the best price without visiting many websites. Thus, it allows consumers to browse online shopping websites in the privacy of their home (Ahmad et al. 2010).

2.1 *Internet Marketing Environment*

Internet marketing environment is related to a paperless environment where a computer is used as a medium to recognise, reproduce, and store product information that enable online businesses to be operated without limits anytime and

anywhere in 24 h a day, 7 days a week and 365 days a year principle (Haque et al. 2006). Consumers are free to shop at different websites and they are able to switch from one website to another in just a click (Ahmad et al. 2010). Shoppers are more attracted to well-designed online shopping sites that are easy-to-navigate and visually appealing. Thus, the website design does influence shoppers' purchases (Sorce et al. 2005). Through a superior understanding of the web shopper's online purchase intention, web retailers will be able to enlarge valuable and efficient web-shopping strategies to create a centre of attention for new and potential web-shopping customers (Kwek et al. 2010a). Internet marketing is becoming a more and more important strategy for the company to promote, advertise and interact more with online customers. With a good understanding of the web shoppers' online purchase intentions, web retailers will be able to develop effective and efficient web-shopping strategies to attract new and potential web-shopping customers (Kwek et al. 2010b). Therefore, the study hypothesizes that:

H1: The Internet marketing environment significantly correlated with consumer online shopping behaviour.

2.2 *Product Characteristics*

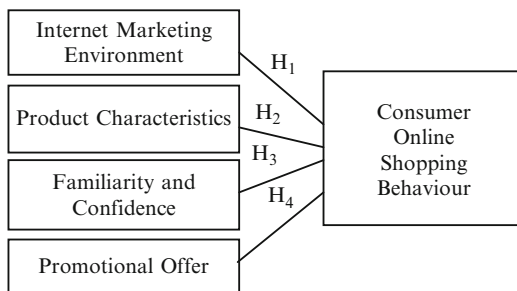
The product is related to anything that can be offered to a market that can satisfy the customers' needs and wants which include services (Kotler and Armstrong 2012). In order to provide more accurate information and a better shopping experience, most of the online retailers are turning to merchandise that allows shoppers to interact with the products and examine them online (Kim and Jihyun 2009). Product characteristics are very important in developing the online business. Besides that, products can include more tangible objects such as cars, computers or cell phones, and these products also include services, events, persons, places, organisations, ideas or a mixture of these (Kotler and Armstrong 2012). Before the consumers purchase products through the Internet, they use the Internet as a cue to identify the characteristics and the brand of a product itself (Kuo et al. 2010). In order to provide more accurate information and a better shopping experience, most of the online retailers are turning to the product virtualization technology that allow the shoppers to interact with the products and examine the products online (Kim and Forsythe 2010). Thus, it is expected that:

H2: Product characteristics significantly correlated with consumer online shopping behaviour.

2.3 *Familiarity and Confidence*

Familiarity is related to the amount of goods in relation to experience that has been accumulated by the consumers (Maenpaa et al. 2008). The familiarity of the customer

Fig. 1 Proposed theoretical framework



with the computer and the Internet and frequency and length of his or her usage, were found to be positively associated with adoption behaviour in general (Man et al. 2005). Kim and Jihyun (2009) highlight the importance to assess the consumer confidence when they going to shop with the online retailer. When the product familiarity is increased, it can improve the consumers' cognitive structures and task performance as well as their ability to analyse, elaborate and remember the product information (Maenpaa et al. 2008). Familiarity becomes more important to increase customer satisfaction and it differentiates between familiar and unfamiliar fields (Kotler and Armstrong 2012). Thus, a better understanding of the technology and its operating processes will definitely alleviate concerns and lead to higher usage of online shopping (Man et al. 2005). Accordingly, the study hypothesizes that:

H3: Familiarity and confidence significantly correlated with consumer online shopping behaviour.

2.4 Promotional Offer

Promotion is related to a form of strategic communication to inform, persuade, and remind the potential buyers of a product in order to influence an opinion or elicit a response (McDaniel et al. 2011). Promotion can bring benefits to the consumers for enjoying shopping and searching for information (Ogunlami and Ogunsiji 2011). Sales promotion, a part of the marketing campaign, consists of a diverse collection of incentive tools, mostly short term designed to stimulate quicker or greater purchase of particular products or services by consumers (Kotler and Armstrong 2012). Sales promotions enhance consumer's number of shopping trips to the store. Hence, the study posits that:

H4: Promotional offer significantly correlated with consumer online shopping behaviour.

Hence, the study proposed the following theoretical framework (Fig. 1):

3 Methodology

Two-hundred questionnaires distributed to the respondents who are students and staff in a public university in the Federal Territory of Labuan, Malaysia following simple random sampling method. All respondents were asked to complete the questionnaire which comprised of three sections. Section A consisted of demographic profile which consists of gender, age, and level of education. While section B examined the consumer Internet shopping experience. Section C examined the consumer shopping behaviour via the Internet. All of these questions were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The four factors applied consisted of Internet marketing environment, product characteristics, familiarity and confidence, and promotional offers adapted from Haque, Khatibi, and Mahmud (Haque et al. 2009). Statistical Package for Social Sciences (SPSS) version 17 computer program was utilized in order to calculate the descriptive analysis. Correlation analysis is used to examine the proposed hypotheses.

4 Results and Discussion

Table 1 depicts frequency analysis of the demographic profile of respondents. 122 (61 %) of the respondents were female and 39 % males. Seventy-seven percentage were aged 21–25 years followed by 11 % aged 26–30 years. More than half of the respondents (62 %) held bachelor degrees.

4.1 Reliability Analysis

Reliability of measurement was tested using the Cronbach's Alpha in order to measure the internal consistency of the scales (Nunnally 1978). Table 2 infers that the Cronbach's alpha values of all variables were greater than 0.70, implying all variables are reliable and have high internal consistency. No item deletion was performed as the reliability for each factor was high.

4.2 Correlation Analysis Between Variables

Pearson correlations were calculated to identify the correlations between the five variables: consumer online shopping behaviour, Internet marketing environment, product characteristics, familiarity and confidence, and promotional offers. The average score of the multi-items for a construct was computed since a single construct in the questionnaire was measured by multiple items, and the score was

Table 1 Demographic profile of respondents

	Frequency	Percentage
Gender		
Male	78	39
Female	122	61
Age (years old)		
Below 20	10	5
21–25	154	77
26–30	22	11
31–35	10	5
Above 36	4	2
Level of Education		
Primary	8	4
Secondary	46	23
Bachelor/Degree	124	62
Master/PhD	22	11

Table 2 Reliability analysis

Variables	Number of items	Cronbach α
Consumer Online Shopping Behaviour (COSB)	3	0.846
Internet Marketing Environment (IME)	4	0.810
Product Characteristics (PC)	4	0.835
Familiarity and Confidence (FC)	8	0.804
Promotional Offer (PO)	4	0.807

Table 3 Correlation analysis

	COSB	IME	PC	FC	PO
COSB	1.000				
IME	0.453**	1.000			
PC	0.123	0.235**	1.000		
FC	0.636**	0.449**	0.156*	1.000	
PO	0.593**	0.565**	0.277**	0.503**	1.000
Mean	11.110	13.440	13.150	27.040	14.280
SD	2.088	2.710	2.550	3.251	2.427

* $p < 0.05$; ** $p < 0.01$

used in correlation analysis and regression analysis. The correlation coefficient value (r) should not go beyond 0.80 to avoid multicollinearity. Since the highest correlation coefficient is 0.636, which is less than 0.80, there is no multicollinearity problem in this research. All major variables were significantly correlated, except product characteristics (Table 3).

Results in Table 3 demonstrated that Internet marketing environment has a significant correlation with consumer online shopping behaviour ($r = 0.453$; $p < 0.05$), signify H1 is supported. Results for H2 revealed that product characteristics is not significantly correlated with consumer online shopping behaviour ($r = 0.123$; $p > 0.05$). Hence, H2 is not sustained. Next, H3 has shown that a significant correlation was found between familiarity and confidence on consumer

online shopping behaviour ($r = 0.636$; $p < 0.05$). p -value for H4 was <0.05 , implying H4 is supported by the data where promotional offer has a significant correlation with consumer online shopping behaviour ($r = 0.593$; $p < 0.05$).

5 Discussion

This study examined the correlation of Internet marketing environment, product characteristics, familiarity and confidence, and promotional offer with consumer online shopping behaviour among 200 students and staff in a public university in Federal Territory of Labuan, Malaysia. Familiarity and confidence is significantly correlated with consumer online shopping behaviour followed by promotional offer, implying hypothesis 3 and 4 were accepted. The correlation coefficient for familiarity and confidence is greater than promotional offers and Internet marketing environment in terms of its correlation with consumer online shopping behaviour. It signifies that familiarity and confidence with the services is the most influential factor to affect consumer online shopping behaviour. Similar results were found by Maenpaa et al. (2008)'s study. Consumers make a distinction between familiar and unfamiliar products online that can affect consumer satisfaction (Haque et al. 2009). Kim (2012) noted that company reputation, structural assurance, and trusting stance, and initial trust beliefs affects consumer attitude to shop online. The new e-vendors with unfamiliar brand name are affected greatly as their brand still not well position in consumer minds. Many customers believe that people who trust a traditional brick and mortar retailer will have a similar level of confidence shopping online for products with the retailer (Kim and Jihyun 2009).

Promotional offer is the second factor that significantly correlated with consumer online shopping behaviour. This result is comparable to Odunlami and Ogunsiji (2011)'s study that promotional offer is a major determinant of consumer online shopping behaviour. Sales promotion can be used to increase sales, usage or trial of products or services, and it is an important component of the overall marketing strategy which can provide an incentive that can reach the target audience. For instance, this promotion can bring benefits to the consumers for enjoying online shopping and searching the information (Odunlami and Ogunsiji 2011). A result has confirmed that consumers put less emphasis on product characteristics which was found to insignificantly correlate with consumer online shopping behaviour. Inability to feel product is one of the limitation where consumers would want to touch and feel most of the goods before buying. This is due to the fact that the shoppers don't trust what product is in the box. Many of the consumers would want to have it opened and checked, right in front of their eyes but this process is not possible while shopping online. Delay in delivery by the web stores where the stock gets delivered after a week or two but shoppers will find out only after completing their payment. These limitations have caused shoppers to be wary about ordering products online. In other words, consumer confidence with online shopping is affected with issues such as shipping costs, privacy, and the inability to touch and

feel products (Castañeda and Montoro 2007; Lim et al. 2011; Narayanasamy et al. 2011; Suki 2006; Suki and Suki 2007; Ramanathan 2011). However, those who believe that online transactions are not secure enough to protect the payment information from disclosure and who tend to buy in great haste when the purchase becomes necessary may eventually be another group to become online shoppers. Experienced Internet users and experienced online shoppers are more likely to be potential future online shoppers.

6 Conclusion

Familiarity and confidence was found to exert a great correlation with consumer online shopping behaviour among students and staff in a public university in Federal Territory of Labuan, Malaysia followed by promotional offer. Hence, the findings provide additional insight into consumers' online shopping behaviour in Malaysia. Results of this study should encourage strategy development for the Internet marketing environment, product characteristics, familiarity and confidence, and promotional offers. A clear understanding of consumer online shopping behaviour can help marketing managers predict the online shopping rate and evaluate the future growth of online commerce. Meanwhile, input regarding what motivates consumers to shop online would help e-vendors in formulating strategy, technology, and marketing decisions as well as website design (Haque et al. 2009).

The retailer or any organization should develop and explore security issues of online transactions making sure they are secure and provide the consumers with confidence to shop online. It is recommended that additional studies be undertaken to examine consumer behaviour and online shopping patterns in other regions and with larger samples. Demographics differences from the perspective of gender, income and education level should also be explored explicitly in order to examine the dissimilar perceptions of consumer online shopping behaviour related to the adoption of and use of information technology (López-Bonilla and López-Bonilla 2008; Ulbrich and Christensen 2011) and mobile commerce (Ozok and Wei 2010). It would be interesting to investigate the effect of the proposed model using multivariate statistical data analysis such as structural equation modeling.

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