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E-Commerce: A Study on Internet Shopping in Malaysia

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Abstract: This study aims to establish a preliminary assessment, evaluation and understanding of the characteristics of internet shopping in Malaysia. Chi-square test was used to determine relationship between current users of online shopping and demographic variables. Samples t-test was used to compare mean differences between users and non-users of internet shopping to use online retailers websites. In addition, correlation coefficient matrix was used to determine the degree of correlation between future online shopping and areas concern of current users of internet shopping. The study revealed that internet shopping in Malaysia is significantly associated with Chinese ethnic group, university degree holders and those who use credit cards and cheque books. The results also indicated significantly mean difference between users and non-users of internet shopping in using retailers' websites to gather product information and compare price of goods and services before taking purchasing decision. This implies that this group of online consumers represents large potential users of internet shopping that can be exploited by online retailers. Therefore, it is essential those necessary efforts are taken to convince them into becoming users of internet shopping in the near future. Finally, online consumers in Malaysia performed lack of confidence and trust for using the internet as they are mainly concerned on issues related to privacy and lack of credibility when dealing with online retailers.

Key words: Internet shopping, e-commerce, e-tailing, online shopping, Malaysia

INTRODUCTION

Internet shopping in Malaysia, which started about two years ago, is considered relatively new and its development at infancy stage. Consumers in Malaysia are slow in showing interest in internet shopping^[1]. However, a study by International Data Corporation (IDC) Asia-Pacific indicates that the future forecast for internet shopping in Malaysia looks bright and promising. IDC estimates that sales revenue generated by internet commerce in Malaysia is expected to grow from US\$ 15 million in 1998 and US\$ 46 million in 1999 to US\$ 2.57 billion in the year 2005^[2]. The expected growth in E-commerce is due to a rapid rise in the number of PCs in Malaysia, as well as growth in the proportion of PCs hooked up to the internet each year. This provides greater opportunities for Malaysians to conduct both business and shop online through the internet^[3]. Despite the statistics and success stories of many online merchants elsewhere, the apprehension of going online by local firms is real, especially for smaller companies. Local companies appear to be lagging and afraid to venture into online

retailing. This is because internet commerce is new and there are no hard and fast rules to live by and no tried and tested business model to imitate^[2]. According to IDC, it is important for the local companies in Malaysia to have a good understanding of the marketplace for their products and their target customers before engaging themselves in online retailing^[2]. With a good understanding of their target customers, online retailers and entrepreneurs are able to develop more effective and targeted online retail operations that meet the requirements and expectations of their new internet shopping customers^[4]. This is critical in order to ensure successful implementation of their online retailing business in Malaysia.

However, there seems to be a lack of understanding and knowledge on consumers' attitudes towards internet shopping. Considering that internet shopping is still at the early stage of development, little is known about consumer attitudes toward adopting this new shopping channel and factors that influence their attitude towards it^[5]. This is especially true in the context of Malaysia where internet shopping is still new and consumers are less familiar and often more skeptical towards online

shopping, but little is known about them. Therefore, this study aims to examine current users of internet shopping in Malaysia with the intention to establish a preliminary assessment, evaluation and understanding of the characteristics of online shoppers in Malaysia.

The emergence of E-commerce is not revolutionarily new and it has existed for quite some time^[6]. Since in the 1970's and 1980's, businesses have been deploying E-commerce via Electronic Data Interchange (EDI) for computer-to-computer exchange of standardized electronic transaction documents within an organization or inter-organizations using proprietary private Value-Added Networks (VANs) as a communication medium. However, this form of traditional E-commerce using private value-added networks as communication medium is costly to install and maintain and has put E-commerce out of reach of many small and medium sized businesses^[7]. The arrival of the commercial use of the internet and its World Wide Web (WWW), has been defining the new E-commerce since 1993^[8]. With the emergence of the internet and World Wide Web (WWW) as a medium for commercial transactions, has put E-commerce into the spotlight and main focus of the international community. This is because the internet and WWW have made it easier, simpler, cheaper and easily accessible for businesses of all sizes and consumers to interact and conduct commercial transactions electronically as compared with the traditional approach of using private value-added networks^[7]. By virtue of the internet's network architecture, E-commerce is born global, where geographical boundaries and political boundaries mean little in this networked environment^[6]. As a result, E-commerce through the internet dramatically shrinks the distance between producers and consumers, who can make their purchases directly without involving traditional 'middlemen' such as retailers, wholesalers and distributors. Although new intermediaries are required (for example network access providers, electronic payment system and authentication and certification services), these are far less labor-intensive than traditional channels^[9].

Electronic retailing over the internet or internet shopping first started in 1994 and it is considered as one form of direct consumer marketing of non-store retailing using online channels^[10]. This new concept of retailing has captured the interest of many retailers and merchants because of the general recognition that online shopping through the internet will establish itself as an alternative channel alongside with traditional offline retail channels such physical retail stores^[11]. Electronic retailing first started predominantly in the form of online storefronts whereby products from a single merchant are offered to consumers through an online catalogue. Merchants tend to choose to establish online storefronts

as an online retailing method when the product brand names and reputations are well established and widely known among consumers, for example The Dell Online Store that sells personal computers^[12].

However, the suitability of the internet for marketing to consumers depends to a large extent on the characteristics of the products and services being marketed^[13]. According to a study by Rajiv Lai and Miklos Sarvary of Stanford Business School in Palo Alto, California, US, products that are being marketed through the internet can be classified into two groups^[3]. The first group of products contains items that consumers do not need to see in person before purchasing. These products, which include everything from computers to compact discs to scanned goods, can be evaluated using just text, pictures and other digitally communicable information. This group of products is ideally suited to "internet shopping whereby the internet could serve significant transaction and communication functions^[13]. The second group of products is termed as 'experience products', which include items that consumers prefer to see and touch before purchasing, such as clothes and groceries. This group of products is not suitable for internet shopping since information about the product's features may not be sufficient for consumers to engage in internet-based transactions. Consumers will only purchase such products from the internet after they have already experienced with them^[3].

Consumers' shop on the internet because they find their choices dramatically increased. They have access too much more information when making purchasing decisions. Busy consumers can save time and find shopping more convenient as online merchants serves their needs individually. Better and greater access to information, combined with lower operating cost for many internet businesses may, in turn, drive reductions in prices or improvements in quality^[7]. Based on the study conducted by Forester research, the reasons why consumers shop online over the internet (Fig. 1).

Convenience is the most prominent factor that motivates consumers to shop online through the internet. The timing, location and buying process through the internet are much more superior to other traditional methods of purchasing goods and services^[15]. The 24 hours availability of online storefront and accessibility from almost any location makes online shopping more convenient to consumers and provides consumers with a powerful alternative channel for making purchases. Ease of research in gathering product information is the second dominant factor that influence consumers to shop online through the internet. In virtual market spaces on the

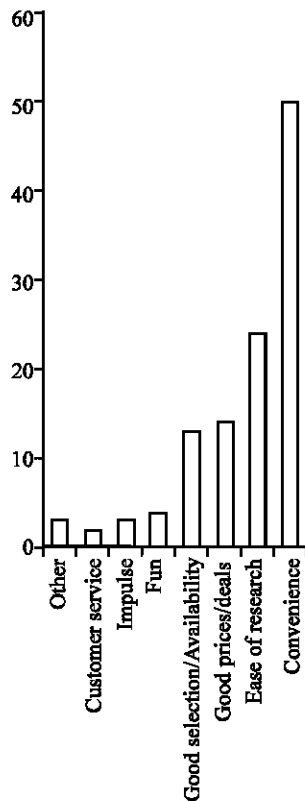


Fig. 1: Reasons why people shop online^[14]

internet, consumer searches for product information are much more effectively and efficiently conducted as compared to traditional channels. This is achieved by employing browser and intelligent search agents such as comparison shopping agents who are designed to simultaneously locate and compare products prices across multiple online retailers^[11]. This makes the buying process on the internet much simpler for the consumers. Some of the well-publicized examples of comparison shopping agents on the internet are BargainFinder, Jango and MySimon.

The third dominant factor that influences consumers to shop online through the internet is the good prices offered by online retailers. The simplest reason for consumers to buy online through the internet is to save money from the cheaper prices offered by online retailers compared to traditional channels. Online retailers are able to offer cheaper prices because of the shrinking cost of information processing, lower operating cost and global reach provided by the internet^[11]. Another main reason that cheaper prices are offered to online shoppers is because of competitive pressure, especially from new online retailers. New online retailers use price as a main competitive weapon to attract customers^[15].

The fourth dominant factor that motivates online consumers to buy goods and services over the internet is

the good selection and availability of wider choice of products offered by online retailers. Online retailers are able to provide a wide range and assortments of products as compared with traditional channels simply because there is no physical space limit on the number of products that online retailers can display on their online storefronts. For example, Barnes and Noble and CD Now are able offer to their customers millions of books and music titles on their websites. Furthermore, the number of online stores that consumers are able to visit through the internet far exceeds the number of physical stores, thus, providing them with a wider selection of products to choose from. There are other less significant factors that influence consumers to shop through the internet. One of the less dominant factors is that consumers find shopping through the internet is fun and entertaining. For example, consumers find that the thrill of online bidding for products at auction sites, such as eBay and OnSale, is fun and entertaining^[15].

The understanding of consumer behaviour in a virtual environment is limited since electronic shopping is only just beginning to penetrate mass markets. As activity in the electronic retailing market grows, it is important to develop an understanding of the factors that affect consumer behaviour in this virtual market space. This will enable online retailers to develop more effective and focused strategies for optimizing the visibility of their product offerings and to encourage consumers to make a purchase decision. An important aspect of consumer behaviour in the virtual market space is the search habits that consumers adopt in gathering information prior to making a buying decision. The first stage in the consumer buying process is the information search. This stage is recognized as an important phase during which promotional messages should reach the intended consumer. Like many other stages of the buying process, information seeking becomes more structured and constrained in the electronic shopping environment^[11]. In particular, the ability to collect product information and make comparisons between different products offering from different online retailers across the globe is often viewed as one of the main competitive challenges of electronic shopping over the internet.

Internet commerce has developed into an information intensive medium and websites intended for transactions become very much information sources for the consumers. There should be a fine balance between providing sufficient information for the consumers to make decisions and too much information which provokes information overload^[11]. From the literature reviews, the characteristics of current internet shopping users, which are the dependent variables, can be explained in terms of the following independent variables as described Fig. 2.

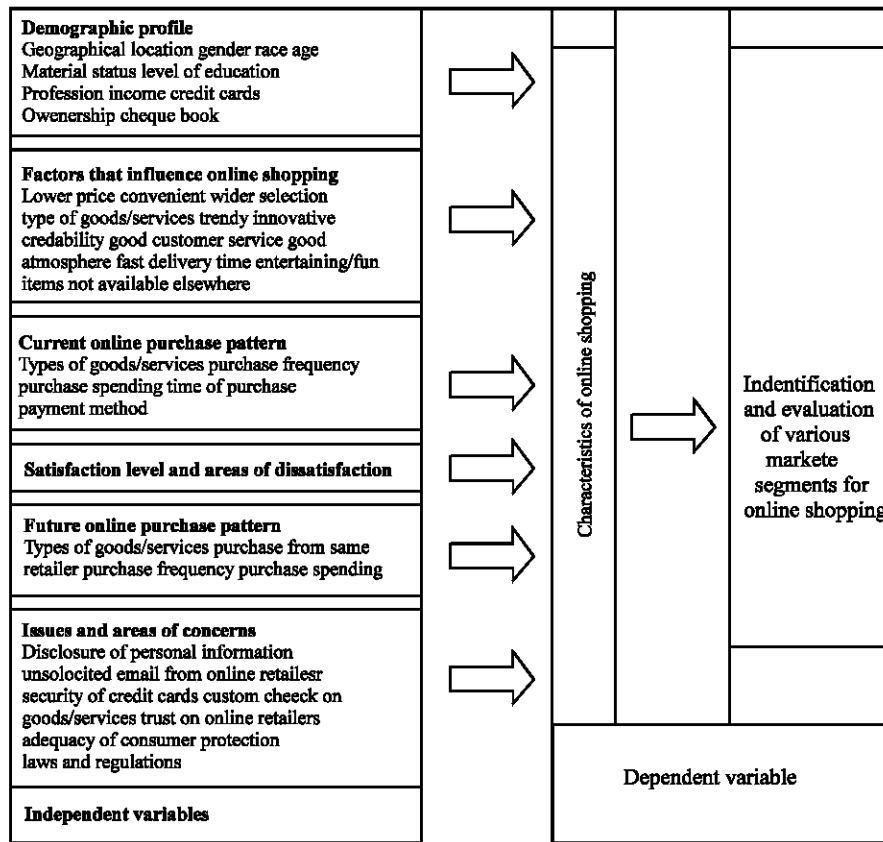


Fig. 2: Theoretical framework for the study

Based upon literature review, with regards to the concept of theoretical framework the following hypotheses were developed.

H₁: There is no relationship or association between online shopping through the internet and demographic variables (geographical location, gender, race, age, marital status, number of children, level of education, profession, income, credit card and cheque book ownership).

H₂: There is no relationship or association between online shopping through the internet and purchasing of goods and services through ordinary stores, catalogue/mail order, TV/telephone and direct selling via salesman.

H₃: There is no difference between users and non-users of internet shopping in using online retailers' web sites to gather product information and compare prices on goods and services.

H₄: There is no significant correlation between future online purchase variables (purchase frequency, online spending and same online retailers) and currents areas of concern of internet shopping users variables (disclosure of personal information, receipt of unsolicited E-mail, security of payment using credit cards, custom

checks, trust in online retailers and adequacy of customer protection laws).

MATERIALS AND METHODS

A structured questionnaire was used to collect the necessary data whereby it will serve as primary data to answer the study questions and objectives pertaining to online shopping in Malaysia. The survey questionnaire consists of 10 distinct sections, each of which contains questions pertaining to different parts of the study. In view of time and cost constraints and also because of large population of internet users in the country, a convenience sampling method is used to collect data mainly from the current internet users in Klang Valley which has the highest concentration of internet users. Even though the sampling method adopted has limitations in terms of generalisability as compared to other method of sampling, it is assumed that the sample represent the whole population of internet users in Malaysia. The survey was conducted mainly via face-to face interviews also administered through E-mail and postage service. A list of E-mail users currently registered with TMNet was

obtained from Telecom Malaysia and the survey questionnaire was only E-mailed to those internet users who agreed to participate in the survey. This step was taken to avoid complaints from the internet users and also to increase the number of respondents. Apart from the ability to reach large target respondents and inexpensive way to conduct the survey, the survey through E-mail also enabled respondents to easily provide extensive responses to open-ended questions in describing their experiences in online shopping. This is particularly important because since internet shopping in Malaysia is still new and at the infancy stage, extensive responses from open-ended questions will provide valuable input to the study so that a better understanding of online shopping in Malaysia can be achieved. Besides E-mail, the survey questionnaire was posted on the usenet group and only those related to Malaysia were used. This is to ensure that the target respondents are only those who reside in Malaysia.

Total 450-sample sizes are found to be adequate for this study, of which 420 questionnaires were received. Each of the response received was screened for errors, incomplete and missing responses. Efforts were also taken to contact the affected respondents through E-mail for clarification and corrections, especially for missing or blanks responses. However, those responses that had more than 25% of the questions in the survey questionnaire that have been left unanswered or incorrectly answered were discarded from data analysis. For those responses that had a few blank answers (less than 25% of the questions) and which involve 5-point interval-scaled questions were assigned with a mid-point scale of 3. After the screening process was carried out, only 360 responses were considered complete and valid for data analysis. This represents a success rate of 86%, which is considered to be good in view of time and cost constraints.

Statistical analysis: The various statistical techniques that are used in the data analysis are described. Frequency distribution analysis is used to determine a demographic profile of the survey respondents and the current users of internet shopping. The frequency distribution analysis is also used to determine method of payment, current and future usage pattern of online shopping, areas of dissatisfactions and reasons for not purchasing goods and services online among non-users of internet shopping. Cross-tab and Chi-square test are also used to the determine relationship between online shopping and other conventional method of shopping such through ordinary stores, catalogue/mail order, TV/telephone and direct selling via salesman. The

independent samples t-test is used to compare mean differences between users and non-users of internet shopping in using online retailers' websites to gather product information on goods and services. Finally pearson correlation coefficient matrix is used to determine the degree of correlation between future online purchases and areas of concern of current users of internet shopping.

RESULTS AND DISCUSSION

Frequency distribution analysis is used to examine and describe the demographic profile of current users of internet shopping with the intention of providing a preliminary assessment of current internet shoppers in Malaysia.

The results of this study showed that 61.6% of the respondents are male while 38.3% of the remaining respondents are female. In this study, the respondents are categorized into 4 levels of age group, which include the range of age <20, 21-30, 31-40, 41-50 years old. From the Table 3 below the majority, which comprises of 46.6% of the respondents, which is range within 21-30 years. This is followed by an age ranging 31-40 which covers 33.8% of the total respondents and 41-50 years age which covers 14.4% and finally very small percentage 5.0% respondents is from the range of less than 20 years (Table 1). The results in Table 2 show that majority of online consumers use credit cards (76.1%) to make payment for their online purchases and this is followed by bank draft/money order (14.2%), cheque, cash and delivery was carried very small percentages which is 4.5 and 3.7%, respectively (Table 2).

Mean value analysis is used to identify and examine dominant factors that influenced online consumers to shop online through the internet. Table 3 shows the result of mean value of important factors that influenced online consumers to shop online (where 1 being the least important and 5 being the most important factor). Based on the results shown in Table 3, the most important and dominant factors that influenced online consumers to shop online through the internet are convenient (3.83), cannot get items elsewhere (3.83) and cheaper price (3.73).

Hypotheses testing: The main aim of this part of the study was to test the four hypotheses that were developed earlier for this study. The Pearson Chi-square, independent samples t-test and Pearson correlation matrix are used to test the hypotheses and result of the tests were presented and discussed separately.

Derived from Table 4, the Pearson Chi-square test results showed significant relationship association

Table 1: Demographic profile of survey respondents

Variables	Frequency	Percentage
Less than 20 years	20	5.0
21-30 years	166	46.6
31-40 years	120	33.8
41-50 years	54	14.4
Gender		
Male	220	61.6
Female	140	38.3
Race		
Malay	250	70.0
Chinese	75	20.3
Indian	24	7.2
Others	11	2.5
Occupation		
Professional	240	67.2
Student	31	8.1
Others	89	24.7

Table 2: Method of payment

Method of payment	Frequency N = 360	Percentage
Credit Cards Bank	272	76.1
Draft/Money order	53	14.2
Cheques	15	4.5
Cash on delivery	15	3.7
Others	5	1.5

Table 3: Mean value of factors that influence online shopping

Variables	Mean±SD (N=360)
Convenient	3.83±1.24
Cannot get items elsewhere	3.83±1.26
Cheaper price	3.73±1.56
Others	3.20±2.05
Innovative	3.18±1.47
Wider selections	2.95±1.06
Customized/Personalized	2.84±1.28
Types of goods/Services	2.63±1.11
Trendy	2.62±1.28
Can get latest items	2.56±1.32
Good customer service	2.37±1.33
Fast delivery	2.28±1.17
Entertaining/Fun good	1.25±1.16
Atmosphere	2.14±0.90
Credibility	2.14±1.15

association between internet shopping and race, level of education, credit card and cheque book ownership ($p \leq 0.05$). Among the demographic variables, credit card ownership is most significantly associated with internet shopping ($p=0.009$). The relationship between internet shopping and these demographic variables are affecting the number of users of internet shopping in the following manner: a) within ethnic groups, Chinese are the highest users of internet shopping (47.1%) and most significantly associated with internet shopping of $p=0.002$, followed by Malay (0.097) and Indian (0.496). b) within level of education, university graduates are the highest users of internet shopping (0.001) followed by diploma holders (0.212) and secondary school (0.242). c) among online consumers who owned credit card, 41.9% are users of internet shopping with $p=0.009$. d) among online

Table 4: Pearson Chi-square test result between internet shopping and demographic variables

Descriptions	p-value	df	Asymp. sig. (2-tailed)
Geographical location	0.025	1	0.875
Gender	1.767	1	0.179
Race:			
Malay	4.527	2	0.097
Chinese	12.075	2	0.002*
Indian	1.410	2	0.496
Other	2.561	2	0.272
Age	8.123	4	0.059
Education:			
University graduate	10.721	1	0.001*
Diploma	1.560	1	0.212
Secondary level	1.369	1	0.242
Profession	12.027	12	0.444
Income	13.665	10	0.189
Credit card ownership	6.767	1	0.009*
Cheque books ownership	6.432	1	0.011*

Note: * Significant at 0.05 level (2-sided)

Table 5: Pearson Chi-square test results between internet shopping and other purchasing methods

Purchasing Method	p-value	df	Asymp. sig. (2-tailed)
Ordinary stores	0.471	1	0.493
Catalogue/Mail orde	0.974	1	0.323
TV/Telephone direct selling	10.740	1	0.001*
via Salesman	3.047	1	0.081

Note: * Significant at 0.05 level (2-sided)

consumers who owned cheque book, 43.8% are users of internet shopping with $p=0.011$. Other demographic variables are found to be not significant and therefore are not related or associated with internet shopping.

The results (Table 5) showed that there is a significant relationship and association between online shopping through the internet and purchasing through TV/telephone ($p=0.001$) whereby 71.4% of online consumers who use TV/telephone as method of purchasing goods and services are also users of internet shopping. Other variables are found to be not significant. The Independent samples t-test is used to compare mean differences between users and non-users of internet shopping in using online retailers' websites to gather product information and to compare prices on goods and service. The results of the independent sample t-test are shown Table 6.

The results in Table 6 shows that the F statistics is 4.908 with a $p=0.027$, which is less than 0.05 level, indicating that the Levene's test of equal variance cannot be used and the null hypothesis is rejected. Therefore, t-test of equal variance not assumed is used instead. The result of t-test shows that the difference in means between users and non-users of internet shopping is significant with t-value is equal to 7.194 with 282.87 degrees of freedom (df) and $p \leq 0.05$.

Table 6: Independent sample t-test result of users and non-users of internet shopping in using online retailers' websites

	t-test for equality of means								
	Leven's test for equality of variances							95% Confidence interval of the difference	
	F-value	Sig.	t-value	df	Sig. (2-tailed)	Mean difference	SE difference	Lower	Upper
Equal variances assumed	4.908	0.027	7.212	358	0.000	0.80	0.11	0.58	1.02
Equal variances not assumed			7.194	282.87	0.000	0.80	0.11	0.58	1.02

Note: Significant at 0.05

Table 7: Pearson correlation coefficient matrix between future online purchases and areas of concern of internet shopping users

Variables	Future purchase freq.	Purchase fr. same online retailers	Future online spending	Disclosure of personal Info.	Receive unsolicited E-mails	Security of credit cards	Custom checks	Trust in online retailers	Consumer protection laws
Future Purchase Frequency	136								
Purchase fr. Same Online Retailers	.413**	136							
Future online spending	.000	.390**	136						
Disclosure of personal Info.	.108	.150	.136	136					
Receive unsolicited E-mails	.210	.081	.951	.136	136				
Security of Credit Cards	.077	.052	0.195*	.000	.136	136			
Custom checks	.374	.550	.023	.997	.007	.136	136		
Trust in Online Retailers	.146	.152	.107	-.071	.062	.136	.136	136	
Consumer Protection Laws	.089	.078	.213	0.411	.475	.136	.136	.136	136
Future Purchase Frequency	.106	.275**	.059	.396**	.007	.013	.007	.013	.007
Purchase fr. Same Online Retailers	.220	.001	.493	.000	.937	.884	.001	.001	.001
Future online spending	0.260**	.377**	.292**	-.042	.205*	0.351**	.004	.004	.004
Disclosure of personal Info.	0.002	.000	.001	.630	.017	.000	.965	.002	.002
Receive unsolicited E-mails	136	136	136	136	136	136	136	136	136
Security of Credit Cards	0.084	-.003	.181*	-.291**	.221**	0.379**	-.100	0.222**	0.084
Custom checks	0.333	.975	.035	.001	.010	.000	.247	0.009	0.333
Trust in Online Retailers	136	136	136	136	136	136	136	136	136

Note: First, second and third rows are sig. Level and number (N) respectively, ** Correlation is significant at the 0.01 level (2-tailed),

*Correlation is significant at the 0.05 level (2-tailed)

Therefore, there is a significant mean difference between users and non-users of internet shopping in using retailers' websites to gather product information and compare prices of goods and services before making a purchase decision.

The Pearson correlation coefficient matrix is used to measure the strength, direction and significance of correlation between future online purchases and current areas of concern of internet shopping users. The results derived from Table 7 that there is a significant ($p \leq 0.01$) and positive correlation (0.260) between future purchase frequency and online shopping users' level of trust in online retailers. This indicates that users of internet shopping will increase their future online purchase frequency when their level of trust in online retailers increases. Result showed positive correlation (0.292) between future online spending and internet shopping users' level of trust in online retailers where ($p \leq 0.01$).

This indicates that users of online shopping will increase their future online purchase spending when their level of trust in online retailers increases. For future purchases from same online retailers and internet shopping users' level of trust in online retailers, the result showed positive correlation (0.377) at the 99% level of significance. Between future purchase from same online retailers and internet shopping user's concern on custom checks on goods that were purchased through the internet. The result indicated significantly positive (0.275) with 99% level of significance. This indicates that users of internet shopping will purchase from the same online retailers when their concern for custom checks on goods purchased from overseas online retailers increases.

There is a significant and positive correlation (0.413) between future online purchase frequency and future purchase from same online retailers. This indicates that users of internet shopping will increase their future

purchase frequency with the same online retailers. Results showed positive correlation (0.390) between future online purchase frequency and future online spending, between future online spending and future online purchase from the same online retailers (0.577), between internet shopping users' concern on disclosure of personal information and custom checks on goods purchased through the internet from overseas retailers (0.396), between internet shopping users perception on the level of security of payment using credit cards and level of trust in online retailers (0.351) and between internet shopping users perception on the level of security of payment using credit cards and adequacy of consumer protection law and regulations. These indicated that as users of internet shopping increase their future online purchase frequency, online spending, concern on the disclosure of their personal information increase, perception on level of security of payment using credit cards increase and, perception on the adequacy consumer protection law and regulations are also increase positively.

The results derived from Table 7, all the future online purchase variables indicated positive correlation except between internet shopping users' concern on disclosure of personal information and their perception on adequacy of consumer protection law and regulations. This result showed significantly negative correlation (-0.291) with the 99% level of significance. This indicates that as online shopping users concern on the disclosure of personal information increase, their perception on the adequacy consumer protection law and regulations decrease.

CONCLUSIONS AND IMPLICATION

This study is to examine and understand the profiling characteristics of current users of online shopping through the internet and its relationship with demographic variables and other relevant consumer behavioural patterns with the intention of establishing a target market for online shopping in Malaysia. In profiling the characteristics of internet shopping users in Malaysia, the study also reveals that there is a significant relationship between internet shopping and shopping through TV/telephone. The result of the study indicates the more than two third of online consumers who shop through TV/telephone shopping channel are also users of internet shopping. The result of the study also reveals that there is a significant difference between users and non-users of internet shopping in using retailers websites to gather information and compare prices of products before making a purchase decision. Users of internet shopping make use of online retailers websites more often than non-users of

internet shopping to gather product information and compare prices of goods and services before making a purchase.

The next objective of the study is to establish internet shopping users' preference in choosing online retailers. The finding of the study also implies that consumers are looking for cheaper prices and bargains when they shop online through the internet. This is also one of the dominant factors that motivate online consumers in Malaysia to shop online as mentioned earlier. The finding suggests that online retailers need to provide competitive prices for their products in order to attract online shoppers to their websites and encourage them to make a purchase decision. However, this will lead to intense price competition among online retailers and the level of competition is expected to increase even further with the availability of intelligent search engines and comparing shopping agents that enable online consumers to easily compare product offerings from various online retailers. Thus, in order to avoid intense price competition, online retailers need to find other ways to differentiate themselves from their competitors.

The result also shows that the median time of online purchase made through the internet is on special occasions. However, the study also discover the time of online purchase is significantly associated with race or ethnic group of online consumers and those who own cheque books. In establishing future purchase pattern of internet shopping in Malaysia, the result of study indicates future online purchase frequency through the internet for the majority of online shoppers is likely to remain the same as it is currently. However, the result of the study also shows the future online purchase frequency is significantly and positively correlated with future online spending and future purchase from the same online retailers. Therefore, it can be concluded that as users of internet shopping increases their purchase frequency, their online spending will also increases and they more likely to make future purchases from the same online retailers.

Finally, this study is to identify and examine major areas of concern and issues currently faced by users of internet shopping and to assess their impact on future online purchases. The result of the study shows that users of shopping in Malaysia are most concerned with privacy in disclosing personal information to online retailers when they make their purchases through the internet. The study also finds that there are significant correlations among the areas of concerns and issues faced by users of internet shopping these are concern on custom checks on goods, adequacy of consumer protection law and regulations, level of trust on online

retailers and adequacy of consumer protection laws. In addition, the findings of the study imply that majority of non-users of internet shopping in Malaysia is still lack of confidence and trust in using the internet to purchase goods and services. There is also a lack of awareness among the majority of non-users of internet shopping on the benefits that can be gained in shopping through the internet as compared with other traditional shopping channels.

This new emerging concept of retailing has captured the interest of retailers and businesses, financial institutions, telecommunication service providers, government officials and even consumers because by virtue of its unique characteristics. Internet shopping has the potential of becoming a dominant alternative shopping channel in the near future that cannot be easily challenged by the conventional retailing method. The recommendations that can be derived from the findings of the study are produced and divided into three parts, namely, for the online retailers, Telecom Malaysia as the main telecommunication and internet service provider in the country and the Government of Malaysia, Based on the findings of the study, it is recommended that online retailers to consider taking the following initiatives in order to increase their chances of success in retailing business through the internet. Online retailers need to ensure that online shopping process through their websites is designed and made as easy, simple and convenient as possible for online consumers to shop through their websites. The websites should also be designed in such a way not to confuse potential online buyers in Malaysia, who are generally not familiar with this new form of shopping. With easy to use and user-friendly websites will encourage new buyers to make a purchase decision and are more likely to return for repeat purchases. Online retailers need to ensure that they provide an efficient delivery service to their customers, especially in delivering physical goods to their customers. In particular, goods that are purchased for special occasions and also perishable goods that are easily spoiled need to be delivered to customers in a timely manner. One way to achieve this is for online retailers to keep an adequate stock of goods and implement a tracking system that would enable both online retailers as well as customers to track and be informed on the delivery status of goods. However, this can only be accomplished through streamlining and integration of online retailers current business operation processes with their suppliers, warehouses and delivery companies. There is a need for online retailers to develop a privacy policy for their customers on disclosure of personal information in order to lessen their concerns for privacy. The policy should

clearly state that the information collected would be kept confidential and not shared or passed to another party without their consent. There should also be an avenue for customers to request for the removal of their personal information from the online retailer's database.

In line with its vision, strategic direction and business objectives, it is imperative for Telecom Malaysia to take up a major role in leading the country towards an E-commerce era. As the leading telecommunications and internet service provider in the country, Telecom Malaysia needs to provide a cheaper internet access in order to encourage more consumers to become internet users. This is to accelerate the growth of internet users in Malaysia with the intention of creating a critical mass for online shopping to take off in Malaysia. Introduce more affordable high speed internet access to cater for online consumers who require high bandwidth in the delivery of digitized products such as computer software, music, videos and games through the internet, which are currently popular and frequently purchased by users of internet shopping. This can be achieved by using low cost ADSL (Asymmetric Digital Subscriber Line) technology which makes use of the existing fixed telephone copper wires to deliver high speed internet access of up to 2 MB sec^{-1} which should be sufficient to cater for the fast delivery of digitized products. Establish a one stop center for retailers and merchants who intend to operate online retailing through the internet. The main aim is to provide necessary advice and quick solutions to retailers and merchants in marketing their products through the internet; among the services that can be provided by the one stop center are consultancy services, multimedia application development, content creation, website/application hosting facilities and portal services.

Although the government has taken several key steps in supporting and promoting the growth of E-commerce in the country, nevertheless they can still play their role especially in accelerating the development of retail E-commerce, which are currently lacking compared with other developed nations. In this respect, The Government needs to establish commercial codes that govern commercial transactions between businesses and consumers through the internet. These commercial codes and practices will serve as a standard practice by online retailers that cover various aspect of internet shopping including consumer privacy, security and resolution of disputes. By having these commercial codes and practices the government is able to verify and certify online retailers that meet the requirements of the commercial codes and this will help to raise trust and confidence in consumers to shop online through the internet.

Sales tax on internet transactions should not be imposed by the government at this introductory stage of internet shopping because it will have a negative impact on consumers' decision to shop online through the internet. Even if sales tax is imposed on internet transaction, it will be difficult for the government to track the transaction especially when it involved digitized products such computer software, where the product is electronically delivered to consumers. At the same time, government should introduce tax breaks and other incentives for companies that are involved in internet shopping and other E-commerce activities. This will encourage more retailers and merchants to market their product and services through the internet.

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