

The Study of the Behaviour of Malaysian Consumers Towards Online Shopping

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Abstract: Online marketing in Malaysia is still a new technology breakthrough since it has just begun to invade the Malaysian retailing sector with online shopping services. This study conducting mainly to identify factors might affect the online shopping activity. The results of the study mainly focused on the respondents' characteristics such as demographics information, current shopping orientation, knowledge of Internet, their acceptance and the future prospects for local online shopping which finally show their actual shopping behaviours. The major findings of this study indicated that there are three factors that significantly influence the frequency level of online shopping activities done by Malaysian consumers in this study. Those factors include the online products' prices, consumers' trust towards the Internet stores and their education levels. In conclusion, online consumers in Malaysia still lack of confidence and trust in using the Internet as a shopping channel. They are mainly concerned on issues related to privacy and lack of credibility when dealing with online retailers.

Key words: Malaysian consumer, online shopping, behaviour

INTRODUCTION

Multimedia systems are being developed for an astonishing and ever growing number of applications. The biggest revolution is the Internet, which is greatly used for marketing products and services. According to a report from e-Gain Communication^[1] an approximated 6.6 billion USD worth of merchandises are currently being offered on the Internet for more than 200 million users. 35 million of them are believed to be involved actively in the online marketing world. This represents a huge potential of online ventures by business organisations and the participation of net users exponentially. Connectivity has increased rapidly in both developed and developing countries; with one of the fastest growing regions being Asia. Malaysia is currently spending \$5 billion on building a Multimedia Super Corridor. In Malaysia, the development of Multimedia Super Corridor (MSC) has attracted much attention on the development and implementation of Multimedia. In this regard, the use of multimedia in marketing products and services had increased in the local business activities. It is highly believed that online marketing services can assist retailers in expanding new markets besides offering real time transactions and processing feedback. They provide extensive products and company information to their consumers and also offer value added consumer services.

However, online marketing in Malaysia is still a new technology breakthrough since it has just begun to

invade the Malaysian retailing sector with online shopping services. As a result, the studies regarding consumer behaviour towards online shopping in the Malaysian environment would also be limited number. As the economic and business activities in these markets are increasing from time to time, many researchers and social commentators would be interested and become more curious to develop some studies regarding the factors which might influence the behaviour of consumers involved. Thus, this study conducting mainly to identify factors might affect the online shopping activity. The specific objectives are: a) to identify whether the higher level of prior Internet usage likely to increase level of online shopping activities, b) to identify whether the reasonability of price affects the level of online shopping activities in Malaysia and c) to identify whether higher consumers' trust towards the Internet stores affects the Malaysian consumers' online shopping activities or not.

MATERIALS AND METHODS

Literature review: Developing new kinds of commercial activities in the electronic environment largely hinges on assuring consumers and businesses that their use of network services is secure and reliable, that their transactions are safe and that they will be able to verify important information about transactions and transacting parties, such as origin, receipt and integrity of information and identification

of parties dealt with. Furthermore, consumers want to have control over the collection and use of their personal data and to have appropriate redress mechanisms available in the event of a problem^[2]. The success or failure of the online retail channel depends on whether the consumers use it to purchase products or services. It is important for online retailers to identify the conditions under which their customers use this medium for shopping. While it is clear that factors such as product characteristics, lower prices, convenience in terms of being quick and easy to shop and ability to make comparisons without traffic, access to broader and deeper product selection and a greater variety of store and creating fun to the online browser, play an important role in influencing consumers to purchase products online, there is still more that needs to be done in terms of reducing the risk of dealing with the unknown and possibly unreliable merchant and the time lag between purchase decision or selection and delivery of goods^[3].

To understand the driving forces towards online retailer and consumer relationship, it is important to understand how consumers make their purchase decisions. The classical model of the consumer purchase decision has become generally accepted in the study of marketing and consumer behaviour^[4]. This model maintains that consumers exhibit a predictable sequence of behaviour in making purchases, aimed at solving a perceived problem or satisfying a recognized needs^[5]. The purchase process begins when the consumer becomes aware of a difference between an actual and ideal state of affairs and subsequently identify needs. That recognition is a product of the consumer's end goals, which are the most basic consequences or values that the consumer wants to satisfy^[5]. These end goals range from concrete to abstract. Hierarchy of needs is one representation of this range of human needs. It serves to illustrate the continuum from lower order (basic physiological) needs to higher order (abstract psychological) needs. Maslow conceived of human motivation as a hierarchy. The lowest rung on the hierarchy is occupied by the basic requirements for survival. An individual whose needs are not met has no energy to spare for needs at higher levels. Similarly at each of the other levels a minimum degree of gratification is necessary before motivational attention can turn to the next level up. Thus one form of development consists of progressive need satisfaction.

Consumer shopping patterns have been rapidly changing throughout the world. According to^[6]in Malaysia, online shopping is something new but promising. Selling things over the Internet has made it possible for manufacturers to sell their merchandise directly to their customers at a very cheap price. With this

reduction in the distribution channel, whereby wholesalers are bypassed, this has enabled the manufacturers to sell their merchandise at a very cheap price to their consumers. This process drains profits from distributors and redirects them to the manufacturers who therefore provide their merchandise at a very cheap price. A study conducted by TNS Interactive (July, 2000) found that many people in Asia prefer the traditional shopping system whereby they have to pay physical visits to the shopping outlet. This has always been the culture of Asian people. Looking at the Malaysian society, we believe that culture plays a very dominant role in influencing people's purchase behaviour. Visiting shopping malls is a revered family outing and most Malaysians prefer to dine at the shopping complexes where they do their shopping.

According to Savio Chow, the Managing Director of Asian operations for Yahoo, (April 1999), getting Asians to shop online is a head banging experience. We are not yet there. In Malaysia shopping is a revered family outing. Many households love to visit the shopping malls. As such it is not easy for online retailers to capture the attention of Malaysian consumers because they are conditioned to love those family outings to the shopping malls. Similarly, many Malaysians do not like to prepare food in their houses. They mostly love to dine at the shopping malls where they patronize. As such it is not easy to influence Malaysians to purchase products online as they are culturally used to visiting the shopping malls. According to^[6]most Asians share the sentiment that there is no need to go online when there are many shops everywhere. Explicitly this shows that people in Malaysia love to hold and have a feel of the products they buy. Most importantly they have to make sure that they physically see whatever they are buying. Again this is a cultural influence, which cannot be changed overnight.

Some other barriers which have contributed to the unwillingness of Malaysians to shop their products online, are the risks associated with online buying. A high risk associated with buying products online, explains why many consumers are reluctant to shop online^[7]. Another study by^[8] indicated that direct sales purchasers who visited shopping malls perceived less risk in buying their products directly than those who bought through the Internet. Normally people do not like to take costly risks and as such they would not feel compelled to adopt online shopping if the risk they place on it is high.

A country's language is the key to understanding its culture, as spoken language is an observable cultural manifestation^[9]. The impact of language on Online shopping is two fold: It affects the

communication process of online marketers and a foreign language may contain different thinking patterns or indicate varying motivations of prospective customers^[10]. In Malaysia a lot of people mostly prefer communicating in their national language Bahasa Melayu to English, which is also an official language. As such when Malaysians are browsing the Internet, they usually prefer to surf those sites written in Bahasa Melayu to those in English. As such language is also an impediment for the success of online shopping in Malaysia since a lot of online shopping sites are in English. As such web casters have to make sure that they compose their websites in multiple languages to cater for the majority of their targeted audience for their websites.

The differences in the shopping patterns also play a greater role. While consumers in US are well familiar with online and telephone shopping using a credit card, Malaysians simply are not ready. The findings in a study by^[11] found that people need to be well educated and assured about the security of using their credit cards over the Internet. Displaying a credit card number over the Internet is another fear that needs to be eliminated so that people can freely carry their financial transactions over the Internet. Otherwise people would always prefer the traditional shopping and payment system. The costs of accessing the Internet are also currently a burden to certain households. However, in line with this, the Malaysian Government represented by the Minister of Energy, Mining and Telecommunication, Datuk Leo Moggie in December 1999 held talks with Internet Service Providers to lure them into reducing their Internet Access fees so that even the local people in the rural areas can get to surf the Internet at a lower cost.

Risk is defined as a consumer's perception of the uncertainty and adverse consequences of engaging in an activity^[12]. Online commerce will only thrive with a build up of consumer confidence and consumer acceptance. Individual privacy concerns are largely driven by the fear of risks.^[13] mentions a popular viewpoint that consumers will be more reluctant to adopt a new technology if they are apprehensive about it and cannot control it. The risk in this case is the high-tech medium, the Internet, built on advanced technologies. Rapid advances in technology have revolutionized the way we do business. But the Internet as a place to do business has not lived up to expectations. Consumers associate a higher level of risk with an online store purchase than with a traditional store purchase decision^[14].

When all is said and done, the foundation to success in business is trust. No matter how advanced the technology is, or how sophisticated the products and

services are, or how knowledgeable customers become, the formula for a successful sales transaction comes down to a company building and maintaining a feeling of trust and confidence in its customers^[15,16]. The bond of trust, especially in the depersonalized setting of Internet commerce, is very fragile. If that trust is broken, it would be very difficult for online retailers to realize a sale. The success of online retailing will in turn depend on the extent to which online retailers nurture their relationships with consumers and strengthen their bond of trust^[17].

Trust and risk are closely interrelated^[18]. Trust is a social lubricant that allows consumers to transact with merchants who are not part of their immediate network. Trust in a merchant mitigates the consumer's perception of the risks involved in a purchase situation. The higher the initial perception of risk, the higher the trust needed to facilitate a transaction^[19]. Although education is often positively correlated with an individual's income and it also predicts the level of Internet literacy, this study assumes that education is a significant factor that affects online buying behaviour. With regard to age, it is often reported that younger users spend more time on the Internet than the older folks and that younger users are also more knowledgeable about the Internet in general^[20].

Consumer shopping patterns have been rapidly changing throughout the world. According to^[6] in Malaysia, online shopping is something new but promising. Selling things over the Internet has made it possible for manufacturers to sell their merchandise directly to their customers at a very cheap price. With this reduction in the distribution channel, whereby wholesalers are bypassed, this has enabled the manufacturers to sell their merchandise at a very cheap price to their consumers. This process drains profits from distributors and redirects them to the manufacturers who therefore provide their merchandise at a very cheap price.

A study conducted by^[21] found that many people in Asia prefer the traditional shopping system whereby they have to pay physical visits to the shopping outlet. This has always been the culture of Asian people. Looking at the Malaysian society, we believe that culture plays a very dominant role in influencing people's purchase behaviour. Visiting shopping malls is a revered family outing and most Malaysians prefer to dine at the shopping complexes where they do their shopping. According to^[22] "getting Asians to shop online is a head banging experience. We are not yet there." In Malaysia shopping is a revered family outing. Many households love to visit the shopping malls. As such it is not easy for online retailers to capture the attention of Malaysian consumers because they are conditioned to love those family outings to the shopping malls. Similarly, many Malaysians do not like to prepare food in their houses.

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According to^[6] most Asians share the sentiment that there is no need to go online when there are many shops everywhere. Explicitly this shows that people in Malaysia love to hold and have a feel of the products they buy. Most importantly they have to make sure that they physically see whatever they are buying. Again this is a cultural influence, which cannot be changed overnight. Some other barriers which have contributed to the unwillingness of Malaysians to shop their products online, are the risks associated with online buying. "A high risk associated with buying products online, explains why many consumers are reluctant to shop online"^[7]. Another study by^[8] indicated that direct sales purchasers who visited shopping malls perceived less risk in buying their products directly than those who bought through the Internet. Normally people do not like to take costly risks and as such they would not feel compelled to adopt online shopping if the risk they place on it is high. From the discussion of above literature reviews and the characteristics of current Internet shopping users, the following hypotheses were developed.

Hypothesis I

H₁: Higher level of prior Internet usage will not result an increase level of the use of the Internet for shopping.

Hypothesis II

H₂: Consumers purchasing online (online shoppers) do not buy at reasonable prices.

Hypothesis III

H₃: Higher consumers' trust towards Internet stores does not affect the Malaysian consumers' online shopping activities.

Hypothesis IV

H₄: Higher level of education does not affect the Malaysian consumers' online shopping activities.

Hypothesis V

H₅: Higher level of income does not affect the Malaysian consumers' online shopping activities.

Hypothesis VI

H₆: Fewer males purchase through the Internet than females.

Methodology and Sampling Procedure: A structured questionnaire was used to collect the necessary data whereby it has served as primary data to answer the research questions and objectives pertaining to online shopping in Malaysia. The survey questionnaire consists of 10 distinct sections, each of contain questions

pertaining 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 is indicated highest concentration of Internet users. Even though the sampling method adopted that has limitations in terms of generalisability 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 and also administered through e-mail and postage service.

In this study, the six hypotheses were being tested by using the Chi-Square (χ^2) Test. The calculated chi-square (χ^2) value for each hypothesis was computed by the SPSS program function. Based on the 5 percent significance level, we will compare the calculated chi-square (χ^2) value with the critical chi-square (χ^2) statistics value that is shown in the Chi-square (χ^2)_distribution table. Therefore, we will decide to:

- Reject the Null hypothesis if the calculated chi-square (χ^2) value exceeds critical chi-square (χ^2) statistics value at 5% significance level; or
- Accept the Null hypothesis if the calculated chi-square (χ^2) value is less than critical chi-square (χ^2) statistics value at 5% significance level.

Multiple regression analysis has also been used for the purpose of our hypothesis testing. It is meant to determine the factors that might significantly affect the frequency of online shopping activities done by Malaysian consumers (online shoppers). From the results, we will suggest the useful factors among all tested independent variables that can influence the frequency of online shopping activities done by Malaysian consumers (online shoppers). Based on the result, we will be able to analyse the factors that affect the Malaysian consumers' behaviour towards online shopping.

For that purpose, we have applied The Model of Multiple Regression with six Independent Variables as described below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon_1$$

Where,

β_0 = Y intercept (a constant, the value of Y when all X values are zero)

β_1 = The regression coefficient associated with each X
 β_1 = Slope of Y with variable X1 holding X2, X3, X4, X5 and X6 constant

β_2 = Slope of Y with variable X2 holding X1, X3, X4, X5 and X6 constant

β_3 = Slope of Y with variable X3 holding X1, X2, X4, X5 and X6 constant

β_4 = Slope of Y with variable X4 holding X1, X2, X3, X5 and X6 constant
 β_5 = Slope of Y with variable X5 holding X1, X2, X3, X4 and X6 constant
 β_6 = Slope of Y with variable X6 holding X1, X2, X3, X4 and X5 constant
X = Independent variable
 X_1 = Independent variable 1 (level of prior Internet usage)
 X_2 = Independent variable 2 (price)
 X_3 = Independent variable 3 (consumers' trust towards Internet stores)
 X_4 = Independent variable 4 (level of education)
 X_5 = Independent variable 5 (level of income)
 X_6 = Independent variable 6 (gender)

Hypothesis Testing and Discussion: Result describe from (Table 2), chi-square test results showed that there is significant relationship or association between Internet shopping and respondents demographic profile (p-value is less or equal to 0.05). As the overall results indicated for hypothesis testing which based on the Chi-Square test results and there is only one independent variable that significantly affect respondents Internet shopping of our study.

The only useful predictor of online shopping frequency in this study is the prices of the products offered by online retailers (0.000). This means the other five predictors which included level of prior Internet usage, consumers' trust towards Internet stores, education level, income level and gender do not significantly influence the frequency of online shopping transactions done by Malaysian consumers in our study. Hence, the overall findings of Chi-Square test lead to the conclusion that Malaysian online shoppers buy at reasonable prices from the online retailers. This means that only online products' prices can significantly affect the behaviour of Malaysian consumers towards online shopping.

Base on the computed results of Multiple Regression Model (Table 3), we could derive a multiple regression equation as below:

Y = Dependent variable (the frequency of online shopping transactions done by Malaysian consumers)

For the final conclusion of our hypothesis testing findings, compare to Multiple Regression analysis results and Chi-Square Test results in order to suggest the most important findings and comment upon the predicted results derived from both tests.

Table 1: Demographic Profile of Survey Respondents

Descriptions	Frequency	Percentage
Gender:		
Male	138	46
Female	162	54
Race:		
Malay	137	45.7
Chinese	72	24
Indian	73	24.3
Other	18	6
Age:		
20 and below	6	2
21-25	134	44.7
26-30	84	28
31-35	32	10.6
36-40	21	7
41 and above	23	7.7
Level of Education:		
Primary School	1	0.3
Secondary School	84	28
Diploma	94	31.3
Undergraduate	91	30.3
Postgraduate	30	10

Table 2: Chi-square result between the Internets User and Respondents profile

Descriptions	Value	df	Likelihood ratio	Asymp. Sig. (2-sided)
Level of prior Internet usage	3.67	4	5.263	0.453
Price of Products	44.34	8	40.15	0
Consumers' trust	6.53	4	7.19	0.163
Education level	10.5	6	10.59	0.105
Income level	10.92	10	11.64	0.364
Gender	4.96	2	4.99	0.084
Race:				
Malay	3.62	2	4.32	0.097
Chinese	10.08	2	9.43	0.003
Indian	1.45	2	2.67	0.487
Other	2.52	2	4.12	0.421

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

Reliability test: The reliability of a measure indicates the extent to which the measure is without bias (error free) and free hence offers consistent measurement across time and across the various items in the instrument^(2,3). In other words, the reliability of a measure indicates the stability and consistency which the instrument measures the concept and helps to assess the goodness of the measure. However, for the purpose of our study, we have only concentrated on Interitem Consistency Reliability . Interitem Consistency Reliability is a test of the consistency of respondents' answers to all the items in a measure. The most popular test of Interitem consistency reliability is the Cronbach's coefficient alpha, which is used for multi point-scaled items and the Kuder-Richardson formulas, used for dichotomous items. The higher the coefficients, the better the measuring instrument. The measurement of scales in a study is

considered as reliable if the computed Cronbach's coefficient alpha is well above 0.70.

Total 350 sample sizes are found to be adequate for this study, of which 320 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 300 responses which were considered complete and valid for data analysis. This represents a success rate over 90%, 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.

All the primary data, which have been collected in this study, were analysed using Statistical Package for Social Science (SPSS). Therefore, for that purpose, an inspection of the descriptive analysis of the dependent and independent variables was being organised. Testing the hypotheses proposed in this study involved developing and administering a questionnaire to a convenient sample of consumers, assessing the reliability and validity of the scales employed and conducting a series of Chi-square test on each hypothesis developed. For the same purpose of hypothesis testing, Multiple Regression Analysis with path coefficients in order to determine the useful factors (independent variables) that significantly affect the dependent variable of our study.

RESULTS AND DISCUSSION

The reliability test computed via the SPSS program has shown the Cronbach's alpha (α) coefficient value of 0.7506 to assess the reliabilities of the scales

Table 3: Coefficients of Multiple regression analysis

Descriptions	Coefficients(β)	t ratio	Sig.
Intercept	-9.371	-.013	.989
Level of prior Internet Usage	.342	1.982	.051
Prices of products offered Online	-.192	-5.004	.000
Trust towards Internet Stores	.284	2.725	.008
Education level	.202	3.125	.003
Income Level	3.158	.710	.480
Gender	-.142	-1.348	.182

Note: * Significant at 0.05 levels (2-sideed)

used in our designated questionnaire. The value of 0.7506 indicates the reliability of our study at 75.06 percent level. This shows that the findings of our study are reliable, well above the 0.70 level of Cronbach's alpha coefficient value that has been recommended.

The results of the study showed that 46.0% of the respondents are male while 54.0% of the remaining respondents are female. Of which Malay (45.7%) occupied highest percentage, followed by Indian and Chinese 24.3 and 24.0%, respectively and only 6.0% from other. Respondents are categorized into six levels of age group which include the range <20, 21-25, 26-30, 31-35, 36-40 and >40 years old. From the (Table 1) indicated majority respondents comprised 44.7% which is ranged 21-25 years, it is followed by an age group 26-30 as indicated 28.0%, between 31-35 indicated 10.6%, 36-40 indicated 7.0% of the total respondents and 41 and above which cover 7.7%, finally small percentages 2.0% respondents from the range of 20 years and less. In respect of education level diploma holder securing highest percentage (31.3%), undergraduate (30.0%), secondary school (28.0%) and postgraduate and primary school level 10.0% and 0.3% respectively.

$$Y = -9.371 + 0.342 X1 - 0.192 X2 + 0.284 X3 + 0.202 X4 + 3.158 X5 - 0.142 X6$$

Frequency of online shopping = - 9.371 + 0.342 level of prior Internet usage - 0.192 price + 0.284 trust towards Internet store + 0.202 education level + 3.158 income level - 0.142 gender

Table 3 below displays the coefficients and statistics for multiple regression equation for our study, which includes all six predictors. Based on the results, we could identify the useful predictors of the frequency of online shopping in this study. As we are using the level of significance of 5 percent ($\alpha = 0.05$), at 70 degree of freedom, we will identify the significant predictors by looking at t-statistics associated with each predictor which is below -2 or above +2. It means we will consider the absolute value of t-statistics which more than 2. Similarly, we can either examining the associated probability (Sig.) of each predictor that presented in

(Table 3). As we used 5 percent significance level, we will select the significant predictors (dependent variable) by looking at the probability (Sig.) value that less than 0.05. The above procedures will be used in each of hypothesis testing to decide which significant and insignificant predictors of frequency of online shopping.

Based on the regression results shown (Table 3) there is a positive value of β_1 (partial coefficient of prior Internet usage) of 0.342 which indicated frequency level of online shopping activities has been positively affected by level of prior Internet usage. This means value of frequency of online shopping increases by 0.342 per unit increase in level of prior Internet usage when other five factors; price, consumers' trust towards an Internet store, education level, income level and gender are held constant. However, the results shown (Table 3) gives the evidence that level of prior Internet usage (X_1) is not a useful predictor of the frequency level of Malaysian consumers' online shopping activities. This factor has been identified as insignificant in our findings based on its probability (Sig.) value of 0.051, which is more than 0.05. Similarly, the t-statistics of X_1 is shown as 1.982 which is less than 2. Therefore, accepted the null hypothesis I (H_1) and stated that ' β_1 (partial coefficient of level of prior Internet usage) equals to 0'. This means that the higher level of prior Internet usage will not result an increase level of the use of the Internet for shopping'.

For hypothesis two results shown a negative value of β_2 (partial coefficient of price) of -0.192 which shows that frequency level of online shopping activities experienced by Malaysian consumers has been negatively affected by the prices of products offered online. The partial coefficient (β_2)-0.192 indicates that the mean value of frequency of online shopping decreases by 0.192 per unit increase in prices of products offered online when other five factors; level of prior Internet usage, trust towards Internet stores, education level, income level and gender are held constant. In addition, results shown in significant evidence that prices of products offered via the Internet (X_2) is a useful predictor of the frequency level of Malaysian consumers' online shopping activities. Price factor has been indicated as a significant predictor of online shopping activity frequency because of its probability (sig.) value that approximates 0.000, which definitely less than 0.05. Similarly, the value t-statistics of X_2 is -5.004 which is less than -2. Therefore, reject the Null Hypothesis II (H_2) and stated that ' β_2 (partial coefficient of price) equals to 0 and result again is supported the expected negative relationship, between online shopping frequency and price.

For hypothesis three there is a positive value of β_3 (partial coefficient of trust) of 0.284 which described

frequency level of online shopping activities experienced by Malaysian consumers has been positively affected by the consumers' trust towards Internet stores. The partial coefficient (β_3) is 0.284 indicated that the mean value of frequency of online shopping increases by 0.284 per unit increase in consumers' trust towards Internet stores if other five factors; level of prior Internet usage, are constant. The trust factor was indicated as a significant predictor of online shopping activity frequency because of its probability (sig.) value approximates 0.008, which definitely <0.05. Similarly, the value t-statistics of (X_3) is 2.725 exceeds +2. Therefore, reject the Null Hypothesis III (H_3) and highlighted that ' β_3 (partial coefficient of trust) equals to 0. Thus, the result supported the expected positive relationship, between online shopping frequency and consumers' trust (Table 3). For the purpose of hypothesis testing, the results significant evidence that education level (X_4) is a useful predictor of the frequency level of Malaysian consumers' online shopping activities because of its probability (sig.) value that approximates 0.003, which less than 0.05. Similarly, the value t-statistics of X_4 is 3.125 which exceeds +2. Therefore, reject the Null Hypothesis IV (H_4), which stated that ' β_4 (partial coefficient of education level) equals to 0' and highlighted positive relationship, between online shopping frequency and education level.

On the other hand, results shown (Table 3) for hypothesis five and six and evidence that income level (X_5) and gender (X_6) are not useful predictors of the frequency level of Malaysian consumers' online shopping activities. Those factors have been identified as insignificant in our findings based on its probability (Sig.) value of 0.480 and 0.182 respectively which is more than 0.05. Similarly, t-statistics of (X_5) and (X_6) is shown as 0.710 and -0.139 which is less than 2. Therefore, accept the Null Hypothesis five and six. This means that the higher level of income and gender does not affect the Malaysian consumers' online shopping activities.

CONCLUSIONS

This study makes significant contributions to knowledge in relation to the online retailers and consumer perceptions of problems and prospects within the online retail industry in Malaysia. Furthermore it provides insights into the Malaysian consumers' characteristics, shopping behaviours and practices, which may be essential for online retailers in order to provide better services and penetrate broader into the Malaysian market while providing new and satisfactory innovations to the Malaysian consumers. The results of the study mainly focused on the respondents' characteristics such as

demographics information, current shopping orientation, knowledge of Internet, their acceptance and the future prospects for local online shopping which finally show their actual shopping behaviours. The hypothesis testing results derived the influences of factors; prior usage of Internet, price, trust, education, income and gender towards the level of online shopping activities in Malaysia. The mathematical tests used in interpreting the findings were Chi-square and Multiple Regression Model. The major findings of this study indicated that there are three factors that significantly influence the frequency level of online shopping activities done by Malaysian consumers in this study. Those factors include the online products' prices, consumers' trust towards the Internet stores and their education levels.

The suggestions that can be derived based on our findings which indicated into three parts, namely, online retailers, Telekom Malaysia as the main telecommunication and Internet provider in this country, finally Government of Malaysia. For the online retailers should ensure online shopping process through their websites and made as easy, simple and convenient. The web sites should also be designed such way which is not confused for potential new buyers. In addition, privacy policy needs to be developed for their customers and ensure personal informations in order to lessen their concern for privacy. As a leading telecommunication and Internet provider in this country, Telekom Malaysia need to provide cheaper Internet access in order to encourage customers to become Internet user. Although the Government of Malaysia has take initiative several steps for supporting and promoting the growth of e-commerce, especially they can play role in accelerating the development of retail e-commerce which are currently lacking compared to other developed nations.

REFERENCES

1. Hoque, C. and J. Lohse, 1999. Retailers move toward new customer relationships. *Direct Marketing*, pp: 20-42.
2. Pallab, T. 1999. Marketing on the Internet. *J. Consumer Marketing*, pp: 27-59.
3. Robertson, V. and F. Kennedy, 1998. Problems and strategies in services marketing. pp: 33-46.
4. Boston Consulting Group, 1998. The state of online retailing 1.0. Summary of key findings, available from <http://www.shop.org/research/reshighlights.html>
5. Peter, 1996. Construct validity: A review of basic issues and marketing practices. *J. Marketing Res*, pp: 133- 145
6. Julie Schmit, 1999. USA TODAY, Consumer Magazine, pp: 18-22
7. Gillett, G., 1999. Customer Relationship Management, Prentice Hall, New York, pp: 215- 255
8. Peterson, 1998. A national consumer satisfaction. *J. Customer Satisfaction*, pp: 16-36
9. Terpstra and Sarathy, 1997. Going global overnight. *InfoWorld*, p: 1
10. Jeannet, M. and E. Hennessey, 1990. How information gives you competitive advantage. *Harvard Business Review*.
11. Jasper M. and J. Lan, 1997. Measuring Customer Satisfaction, Second Edition, ASQ Quality Press, Milwaukee, WI.
12. Dowling, T. and M. Staelin, 1996. Successful marketing on the Internet, *J. Consumer Res.*, pp: 103- 123.
13. Koehler, J., 1997. Privacy and emerging electronic payments. *Credit World*, pp: 29-31.
14. Akaar L.P. and P. Korgaonkar, 1990. A Conjoint investigation of the relative importance of risk relievers in direct marketing, *J. Advertising Res*, Au, pp: 38- 44.
15. Mand, 1998. The effect of sample size and proportion of buyers in the sample on the performance of list segmentation equations generated by regression analysis. *J. Direct Marketing*, pp: 13-22.
16. Guly, 1998. Operations research in industry: New opportunities in a changing world. *Operations Res*, pp: 531-542.
17. Richards, M., 1997. New directions in marketing. *Nations Business* pp: 24-26.
18. Mayor, 1995. Relationship marketing: Bringing quality customer service and marketing together. *J. Marketing*, pp: 1-21.
19. Greenstein and Hess. 1998. Consumer behaviour: fundamentals and strategies, prentice hall, Englewoods Cliffs, NJ, pp: 73.
20. Burke, F., 1997. Frontiers of On-line Financial Services in Cronin. M.J. (Ed.), *Banking and Finance on the Internet*, Van Norstrand Reinhold, NewYork, pp: 19-74.
21. TNS Interactive., 2000. Taylor nelson sofres (tns) interactive global ecommerce study, available from: www.tnssofres.com/interactive.
22. Savio, C., 1999. Globalizing the rest of the world. *Harvard Business Review*, pp: 50-1.
23. Sekaran, Uma., 2000, *Research Methods for Business (A Skill Building approach)*, 3rd Edn, John Wiley and Sons, Inc.