

## E-shopping: Current Practices and Future Opportunities Towards Malaysian Customer Perspective

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**Abstract:** The rapid diffusion on the internet widely documented high growth potential of Internet shopping in Malaysia, apparently there is still lack of understanding concerning the characteristics of Internet shopping in Malaysia and its potential impact on consumer marketing. Therefore, this study aims to establish a preliminary assessment, evaluation and understanding of the characteristics of Internet shopping in Malaysia. The results of this study indicated significantly mean difference between users and non-users of Internet shopping using retailers' websites to gather product informations and compare price of goods and services before taking purchasing decision. In addition, results of the study also indicated that this group of non-users of Internet shopping constitutes more than 60% of the total number online consumers in Malaysia. This implies that this group of online consumers represents large potential users of Internet shopping that can be exploited by online retailers. Therefore, it's essential those necessary efforts are taken to convince them into becoming users of Internet shopping in the near future. 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. These issues, if left unchecked, will have a detrimental effect on the future growth of Internet shopping in Malaysia.

**Key words:** Internet Shopping, E-commerce, E-tailing, Malaysia

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### INTRODUCTION

The popularity of interactive media such as the World Wide Web (www) has been growing at a very rapid pace [1]. From a marketing perspective, this has manifested itself primarily in two ways: firstly, a drastic increase in the number of companies that seek to use the www to communicate with (potential) customers, and secondly, the rapid adoption of the www by broad consumer segments for a variety of purposes, including pre-purchase information search and online shopping [2]. The combination of these two developments provides a basis for substantial growth in the commercial use of interactive media. From a consumer's perspective, one of the most important advantages of Internet-based electronic shopping environments relative to traditional, bricks-and-mortar retail settings is the drastically reduced cost of search for information about market offerings [3, 4]. Performing tasks such as identifying products for possible purchase and making price comparisons across vendors tends to require significantly less time and effort in a digital than in a physical market place. This basic difference, which is due primarily to the fundamental technologies for networked digital communication, is further enhanced by the existence of (a) digital shopping malls and other forms of virtual co-location, (b) online decision aids for preference-based

product screening (electronic recommendation agents), and (c) software tools for systematic cross-vendor comparisons (shop bots).

The world is tremendously moving towards Electronic Commerce (E-Commerce) activities. According to International Data Corporation (IDC), E-Commerce consumer's spending was grown from US \$ 118 billion worldwide in 2001 to US \$ 707 billion in 2005. E-Business revenue will grow from 4% of companies' total revenue worldwide in 2000 to 7% in 2001 [5]. Malaysia needs to take cognizance of these trends and react fast in order to be an active participant in the emerging electronic world. However, little information is known about Malaysian Internet users' motivation and concern factors with respect to online shopping. Buying trends and Internet adoption indications have seen the overall Electronic Commerce value in Malaysia rise from US \$18 million in 1998 to US \$ 87.3 million in 1999. IDC believes this will increase to an expected US \$ 5.37 billion by year-end 2004 [6]. The growth of Information Technology (IT) and Government initiatives are expected to accelerate further and motivate individuals to increase their knowledge on Electronic Commerce in the near future. 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 [7]. 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 [8]. This is critical in order to ensure successful implementation of their online retailing business in Malaysia.

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 [9]. 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 Internet shoppers in Malaysia. The penetration of Malaysians shopping online, i.e. people who bought or ordered goods and services online in 2000, was 1% of the total adult population in Malaysia. This corresponded to 4% of the Internet users in the country. Specifically, 24 % of the total adult populations in Malaysia are Internet users in 2001. Male were the dominant Internet users, i.e. 28% of the total population, while 21% were females. The proportion of adult population that used Internet in the last 4 weeks was the highest amongst 15 to 20 years old (50%) followed by the 20 to 29 years olds (39%). The study found that 14% of Malaysian Internet users plan to buy or order goods or services online by the end of 2001.

The arrival of the commercial use of the Internet and its World Wide Web (WWW), has been defining the new e-commerce since 1993 [10]. 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 [11]. 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 [12]. Electronic retailing over the Internet or Internet shopping first started in 1994 [13]. It is considered as one form of direct consumer marketing of non-store retailing using online channels. 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 [14]. 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 [15].

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 [16]. According to a study, products that are being marketed through the Internet can be classified into two groups. The first group of product 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 [16, 17]. 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 [10, 16].

Electronic Commerce also enhances flexibility and convenience. Consumers can enjoy window shopping on the Internet without the pressure to purchase, unlike the traditional shopping environment. Consumers are able to initiate and control non-linear searches, due to the interactive nature of the Internet and the hypertext environment. Another study found that consumers who are primarily motivated by convenience are more likely to make purchases online. Meanwhile, those who value social interactions are less interested in the Internet use for shopping and thus shop less frequently on the Internet and spend less money on E-Commerce [18]. 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 [19]. The 24-hour 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 Internet, consumer searches for product information is 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 which are designed to simultaneously locate and compare products prices across multiple online retailers [14]. 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 understanding of consumer behavior 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 behavior 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 behavior in the virtual market space is the search habits that consumers adopt in gathering information prior to making a buying decision. Internet commerce has developed into an information intensive medium and websites intended for transactions become very much information sources for the consumers. They should find balance between providing sufficient information for the consumers to make decisions and too much information which provokes information overload [14]. From the discussion of above literature reviews and the characteristics of current Internet shopping users, the following hypotheses were developed.

- H<sub>1</sub>: 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).
- H<sub>2</sub>: 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.
- H<sub>3</sub>: 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.

## **MATERIALS AND METHODS**

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 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. The survey was conducted mainly via face-to-face interviews and also administered through e-mail and postage service. A list of e-mail users currently registered with TMNet was obtained from Telekom 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 perform 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 was provided 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 only those are 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 which 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.

The various statistical techniques are used in this study. Frequency Distribution Analysis is used to determine a demographic profile of the survey respondents and the current users of Internet shopping. In addition 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. 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.

**RESULTS AND DISCUSSION**

The results of this study showed that 61.6% of the respondents are male while 38.4% of the remaining respondents are female. Respondents are categorized into four levels of age group, which include the range of age <20, 21-30, 31-40, 41-50 years old. From the (Table 1) describe that majority respondents comprise 46.6%, which is range within 21-30 years. This is followed by an age ranging 31-40 as indicated 33.8% of the total respondents and 41-50 years, which covers 14.4% and finally very small percentage 5.0% respondents is from the range of less than 20 years.

Table 1: Demographic Profile of Survey Respondent

Variables	Frequency	Percentage
Less than 20 years	18	5.0
21-30 years	168	46.6
31-40	122	33.8
41-50	52	14.4
Gender		
Male	222	61.6
Female	138	38.3
Race		
Malay	252	70.0
Chinese	73	20.3
Indian	26	7.2
Others	9	2.5
Occupation		
Professional	242	67.2
Student	29	8.1
Others	89	24.7

Frequency analysis is used to determine method of payment that is mainly used by users of Internet shopping in making payment for their online purchases. The results showed that majority 75.1% of online consumers use credit cards to make payment for their online purchases and this is followed by bank draft/money order 15.2%, cheque, cash and delivery was carried very small percentages which is 4.7% and 3.5% respectively (Table 2).

Table 2: Method of Payment

Method of Payment	Frequency	Percentage
Credit Cards	274	75.1
Bank draft/Money order	51	15.2
Cheques	16	4.7
Cash on delivery	14	3.5
Others	5	1.5

**Hypothesis Testing and Discussion:** Described from (Table 3), Chi-square test results showed that there is a

significant relationship or association between Internet shopping and race, level of education, credit card and cheque book ownership (p-value is less or equal to 0.05). Credit card ownership is most significantly associated with Internet shopping among the demographic variables, (p-value of 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-value is (0.002). Followed by Malay (0.099) and Indian 0.497. 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-value of 0.009. d) In terms of online consumers who owned chequebook, 43.8% are users of Internet shopping with p-value of 0.011. Other demographic variables are found to be not significant and therefore are not related or associated with Internet shopping.

Table 3: Chi-square Test Result between Internet Shopping and Demographic Variables

Demographic Variables	Value	df	Sig.
Geographical Location	0.025	1	0.875
Gender	1.777	1	0.183
Race:			
Malay	4.627	2	0.099
Chinese	12.085	2	0.002*
Indian	1.400	2	0.497
Other	2.571	2	0.0276
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 levels (2-sided)

The results showed in (Table 4) there is significant relationship between online shopping through the Internet and purchasing through TV/telephone (p-value of 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 as compared to other factors.

Table 4: Pearson Chi-square Test Results b/w Internet Shopping and other Purchasing Methods

Purchasing Method	value	df	Sig.
Ordinary Stores	0.470	1	0.493
Catalogue/Mail Order	0.976	1	0.323
TV/Telephone	10.743	1	0.001*
Direct Selling via Salesman	3.047	1	0.081

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

Table 5: Independent Sample t-test Result of Users and Non-Users of Internet Shopping in Using Online Retailer's Websites

	Leven's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Level	
								Lower	Upper
Equal variances assumed	4.908	.027	7.212	358	.000	.80	.11	.58	1.02
Equal variances not assumed			7.194	282	.000	.80	.11	.58	1.02

Note: Significant level at 0.05%

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 price on goods and service.

Results derived from (Table 5) showed that F statistics is 4.908 with a p-value of 0.027, which is less than 0.05 levels, indicating Levene's test of equal variance cannot be used and the null hypothesis is rejected. The result of t-test showed 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 degrees of freedom (df) and p-value of less than 0.05. 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.

### CONCLUSION

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 behavioral 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 and about two third of online consumers who shop through TV/telephone shopping channel are also users of Internet shopping. In addition, this study reveals that there is a significant difference between users and non-users of Internet shopping in using retailers' websites to gather information and compare price 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 price of goods and services before making a purchase.

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, and indicates future online purchase frequency through the Internet for the majority of online shoppers is likely to remain the same as it is currently. Finally, major areas of concern and issues currently faced by users of Internet shopping and to assess their impact on future online purchases. 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 though the Internet as compared with other traditional shopping channels. Despite the high growth potential of retail e-commerce and ongoing interest in Internet shopping in Malaysia, apparently there is still lack of understanding concerning the characteristics of online shoppers in Malaysia and its potential impact on consumer marketing. This is mainly attributed to the fact that Internet shopping is new in Malaysia and just beginning to take its place as an alternative channel for consumers to shop for goods and services. 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, Telekom Malaysia as the main telecommunication and Internet service provider in the country and the Government of Malaysia. For online Retailers need to ensure that online shopping process through their websites is designed and made as easy, simple, and convenient as possible. The web site should also be designed in such way not to confuse potential Malaysian buyers, who are generally not familiar with this new form of shopping. They should ensure that they provide an efficient delivery service to their customers. In addition to develop a privacy policy for their customers on

discloser on personal information in order to lessen their concern for privacy. In line with its vision, strategic direction and business objectives, it is imperative for Telekom Malaysia to take up a major role in leading the country towards an e-commerce era. As a leading telecommunications and Internet service provider in the country, Telekom Malaysia needs to provide 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 digitised products such as computer software, music, videos and games through the Internet, which are currently popular and frequently purchased by users of Internet shopping. 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. This will encourage more retailers and merchants to market their product and services through the Internet.

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