

**MOTIVATION AND CONCERN FACTORS FOR
INTERNET SHOPPING:
A MALAYSIAN PERSPECTIVE**

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ABSTRACT

Electronic Commerce (E-Commerce) growth is increasing at a rapid rate and is replacing traditional commerce. The benefits of shopping online cannot be underestimated. The E-Commerce offers Internet users a wider range of benefits, such as finding the products which cannot be available locally and reducing Internet users' time for searching the related products. Furthermore, the Internet users receive more attractive sales promotional offers from Internet sellers and also through individual e-mail accounts. Despite these motivational factors, there are various transactional and non-transactional issues involved such as, Internet users being uncomfortable while giving their credit card numbers on the Internet, Internet merchants' misuse of users' personal information, lack of help from sales representatives whilst purchasing online and offer of products are in different currencies. These and other factors appear to affect emerging trends of Electronic Commerce in Malaysia. This study therefore, focuses on the concern factors, which affect the online buyers in Malaysia. A total of 579 randomly selected respondents in this research study, who were selected from the three different states in Malaysia namely Penang, Selangor and Kuala Lumpur. The above states were chosen because they are generally known to have a high number of Internet users.

INTRODUCTION

The world is tremendously moving towards Electronic Commerce (E-Commerce) activities. According to International Data Corporation (IDC), E-Commerce consumer's spending will grow from \$118 billion worldwide in 2001 to \$707 billion in 2005. E-Business revenue will grow from 4% of companies' total revenue worldwide in 2000 to 7% in 2001 (Troy Wolverton, 2001). Malaysia needs to take cognisance 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. The current research is carried out in order to get viable solutions to the above problems, particularly in respect of Malaysia.

LITERATURE REVIEW

Inter Agency Task Force on Electronic Commerce, IATFEC (1997), define E-Commerce as "all form of business transactions conducted over public and private computer networks. It is based on electronic processing and transmission of data, text, sound and video. E-Commerce includes transactions within a global Information Economy such as electronic trading of goods and services, online delivery of digital content, electronic funds transfer, electronic share trading, electronic bills of lading, commercial auctions, collaborative designs, engineering and manufacturing, online sourcing, public procurement, direct consumer marketing and after sales service. It includes both products (consumer goods, specialised medical equipment) and services (information services, financial and legal services, traditional services) and new activities (virtual malls). It involves the application of multimedia technologies in the automation and redesign of transactions and workflow, aimed at increasing businesses competitiveness" (<http://e.com.ec/necc/report-19971007.html>).

In adopting the above definitions, the current study considers E-Commerce as a non-linear interaction, without involvement of face to face communication between consumers (Internet users) and companies (Internet sellers) via computer networks to facilitate any kind of commerce transaction (browsing or purchasing products or services) easier, faster and cheaper electronically beyond traditional geographical boundary.

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 (Lai, 2000). 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.

Interestingly, recent findings by Taylor Nelson Sofres, (2001) found that 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 population in Malaysia are Internet users in 2001. Males 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.

There is high demand among Malaysians Internet users conducting online shopping due to E-Commerce provides enormous potential benefits for consumers worldwide. Wider choice ranges, lower prices, and entirely new products have become available in many product categories such as books, CDs, and travel packages, to consumers who are physically far away from the world's centers of traditional commerce. Furthermore, the Internet users could received more attractive sales promotional offers from Internet sellers and also through individual e-mail accounts.

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. For example, Swaminathan et al., (1999) in his 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.

Indeed, easy access to an abundance of current and detailed information on products and services facilitates comparison shopping, aid in product selection and enables consumers to make more informed decisions. There are also no driving or parking costs associated with shopping online. Almost all products will be delivered to the consumers, either instantaneously via electronic medium or by the wide distribution network of the Internet vendors.

Despite those motivational factors, there are various transactional and non-transactional issues involved such as, Internet users being uncomfortable while giving their credit card numbers on the Internet, Internet merchants' misuse of users' personal information, lack of help from sales representatives whilst purchasing online and offer of products are in different currencies. In other words, Electronic Commerce has implications for all stages in an economic exchange, including search and evaluation in the pre-purchase phase, ordering and delivery in the purchase phase, and

after-sales service in the post-purchase phase (Choi et al., 1996; Kalakota & Whinston, 1996). These and other factors appear to affect emerging trends of Electronic Commerce in Malaysia.

To most consumers, the issue of security and privacy over the Internet is the most overwhelming barrier facing the adoption of Electronic Commerce that caused them not to make any purchase on the Internet. Widely publicised security lapses on the Internet, where hackers have accessed personal financial information being sent electronically, have done little to boost consumer confidence in the Internet as a conduit for commerce (Goodwin, 1991).

There is also a great concern, among the Internet users, regarding the security of financial information transmitted over the Internet (Gupta, 1995) i.e. vendor reliability of promise not misuse users' personal and credit card information. Doney and Cannon (1997) label trust as an order qualifier for purchase decisions. Trust is a belief or expectation that the word or promise by the merchant can be relied upon and the seller will not take advantage of the consumer's vulnerability (Geyskens et al., 1996).

If the buyers and sellers have not developed the trust of the technology of buying and selling online, the one who pays, cannot be sure that his credit card number could not be collected somewhere in the web (occur during the data transfer of a credit card number), and be used for some other malicious purposes (OECC, 1997). The trust in a vendor is likely to affect the consumers' perception of vendor's reliability. Luedi (1997) argues that vendors should fulfil transactions by reliably and securely supporting the full spectrum of Electronic Commerce from promotional pricing to secure payment handling.

According to Geyskens et al., (1998) trust is most readily developed when the consumer has a positive trusting stance in general, has had prior interactions with the merchant, interacts with a knowledgeable salesperson with similar or familiar background to the consumer, is protected by strong social and legal structures, and expects to be patronising the merchant for a prolonged period.

In general, consumers tend to be more comfortable providing sensitive information in a realm where they can see with whom they are dealing, revisit the physical location of the business if necessary, and thus, exert a perceived amount of control over the situation (Janes et al., 1997).

Caelli (1997), states that the basis for secure Electronic Commerce on a global scale must eventually include a:

- willingness for consumers, merchants and banks or financial institutions to enter into integrated schemes;
- global, open standardisation of underlying formats, protocols and processes;
- national and international standards for security, technology and management; and
- national and international agreements on the social, economic and legal aspects of the system.

According to Organisation for Economic Co-operation and Development (OECD, 1997), consumer trust in Electronic Commerce will require consumer protection mechanisms that address four key issues: (a) fairness and truthfulness in advertising, (b) labelling and other disclosure requirements such as warranties, guarantees, product standards and specifications, (c) refund mechanism in case of cancelled orders, defective products, returned purchases and lost deliveries, and (d) a means of qualifying merchants in terms of the above.

Ratnasingham (1998) states that it is necessary to facilitate a "complete trustworthy relationship" among the trading partners within the trust context. When this is achieved, trust increases the probability of a trading partner's willingness to expand the amount of information sharing through Electronic Data Interchange (EDI) and explore new mutually beneficial arrangements.

METHODOLOGY

The current study explores the buying behaviour of a sample Malaysian Internet Users' targeted at Business to Consumer (B to C) market segment. The respondents involved in this research study were selected from the population with the condition of having had experience in browsing or purchasing through the Internet (does not specify numbers of years using the Internet). In other words, this is known to be the measurement of Malaysian consumers Internet experience in shopping online. They were drawn from different occupational categories, education, age, gender or ethnic categories but all of them fulfilled the basic condition mentioned earlier. There were 579 randomly selected respondents in this research study, out of which 334 were "Male" and the balance were "Female". They were selected from the states of Penang, Kuala Lumpur, and Selangor in Malaysia. The majority of respondents (472) falls in the age group of "less than 30 years old", were mostly Malays. It can be noted that in the sample, 40% of the respondents were "students" from university community such as undergraduates and MBA students. The results showed that more than half of the total respondents (63%) earned a salary of "less than RM 3,000" per month. Most of the respondents work/study in "Selangor" which represents 42% of total respondents, followed by 31% in "Kuala Lumpur", the metropolitan city of Malaysia (Please refer Appendix 1).

DATA COLLECTION METHOD

The collection of data was carried out by using self-administered questionnaire. The questions were presented mostly close-ended style with well-structured questions. The questionnaires were distributed to the respondents chosen at random at various locations such as cyber cafes, higher learning institutions' labs, and shopping malls by referring to Telekom Malaysia yellow pages directory (1999/2000). This study applies a stratified random sampling technique as a sampling method.

QUESTIONNAIRE DESIGN

Following the literature review, questionnaires were developed to determine the extent of Internet users' motivation and concern factors when browsing or purchasing through the Internet. The questions were designed and presented within two sections of the Questionnaire, stated as follows:

Section A requires the users to furnish the factors that motivated them to browse or purchase through the Internet and also the concerned factors. There are 38 statements in question 1 of section A, while 44 statements are placed in question 2 of Section A. Six-point likert scale ranging from 1 (strongly agree) to 6 (strongly disagree) are being applied in both questions as it allows the respondent to evaluate each item on its own merit, to rate different items equally, and to consider each item without the confounding influence of other items. Questions are set in close-ended structure by applying interval type of scaling method. A six-point scale was used to minimise tendencies of Malaysian respondents who prefer the "central or mid-point" as found for instance, in a five-point scale.

Section B comprises of the respondents' personal background, such as gender, age, ethnicity, present occupation, highest educational level, monthly income, and work/study place. Respondents' demographic profiles are designed in the close-ended structure of questions, and consists of eight questions, which begin with question 20 and ends up with question 27. Additional questions on how long they have used the Internet, how frequently they use it their past experience shopping online, are also included in this section. The interval scaled measurement was selected as the level of measurement in this section.

RELIABILITY AND VALIDITY OF SURVEY QUESTIONS

The research began with a pilot study among thirty members of the university community, which includes MBA students, lecturers and tutors in institutions of higher learning. These sample groups known as computer literate, highly knowledgeable in areas pertaining to Electronic Commerce and more likely to conduct online shopping.

The pilot study was conducted in order: (i) to check for the relevance of the variables selected, (ii) to check for face validity of the questionnaire, and (iii) to see the reliability of the questionnaire. Sets of preliminary questionnaire were distributed to the respondents and their responses on the Internet usage, and any motivation and concern factors when browsing or purchasing through the Internet, were taken into contention. It was conducted to determine the content validity, i.e. the sampling adequacy of the content of a measuring instrument (Kerlinger, 1979).

In addition, comments and suggestions from the experts, who are considered knowledgeable in the same area of interest has confirmed the content validity of the questionnaire items. Thus, the instrument provides adequate coverage of the topics included in the study. Their input was useful in generating and constructing the final questionnaire that appeared to have no significant ambiguities or problems, which were then distributed to target respondents.

After the survey was administered, the data were assessed for reliability and construct validity using Cronbach Alpha coefficient (Nunally 1978). The construct validity for this research was established using factor analysis; a multivariate technique which would confirm the dimensions of the concept that have been operationally defined, as well as indicate which items are most appropriate for each dimension. Factor with eigenvalues greater than 1.00 and factor loading greater than 0.30 were considered to have adequate convergent validity (Zeller and Carmines, 1980).

OPERATIONAL VARIABLES

The variables used in this study were gleaned from literature reviewed in the field relevant to Internet shopping behaviour (i.e. motivation and concern factors).

Variables are chosen based on several research done in other countries (for example, Korgaonkar & Wolin, 1999; Phau & Poon, 2000). Some of the questionnaire items were also selected with slight modifications from two well-known Internet URLs such as (i) www.gvu.gatech.edu/user_surveys/surveys-199810/questions/use.html, and (ii) www.interasia.org/methods/questionnaire.html.

The rest of the questionnaire items were developed based on the observations of the researcher, readings from literature and consultations with experts on the same area of interest.

STATISTICAL TECHNIQUE USED

Data in this study were analysed using Statistical Package for Social Science (SPSS) Version 10.0. Factor analysis was used in order to analyse interrelationships among Internet users' motivation and concern factors when browsing or purchasing through the Internet in terms of their common underlying dimensions (factors) through condensing the survey items into a smaller set of dimensions (factors) with a minimum loss of information (Hair et al., 1992).

DATA ANALYSES & DISCUSSIONS

Question 1 in Section A of the questionnaire has listed out some of the Internet users' motivation factors in making decisions to browse or purchase through the Internet. The question contains 38 items, most of which are interrelated.

Cronbach coefficient alpha was used to assess the reliability of a multi-item measurement scale. In the current study, motivation factors had coefficient alpha of 0.9478 which exceeded the recommended value of 0.70 by Nunally (1978). Thus, it is reliable for further analysis.

Since the items were numerous, factor analysis was carried out in order to identify the underlying factors and a smaller set of important variables relevant to Internet users' motivation factors. The criteria used to determine the number of factors to extract was an eigenvalue greater than or equal to 1.00. Items with factor loading of greater than 0.50 on the factor were considered adequate indicators of that factor. The data analysis and interpretation of how consumer motivation may be a factor in their decision to shop online are given below.

FACTOR 1: ACCESSIBILITY MOTIVATION

The most important motivation factor when browsing or purchasing through the Internet rated by the 579 respondents was "Accessibility Factor". "Instant access to detailed information" was eliminated from this factor because its factor loading is lesser than the fixed criteria of 0.50, causing Factor 1 to comprise of ten statements with 14.548% of variance. The eigenvalue for this factor was 13.268. Out of the ten statements, the statement "easy access to wider information" was the most important statement with a loading of 0.805. The next highest statement was "faster access to latest information" which constituted 0.780 factor loading. This was followed by "the best source to search for information" with a loading of 0.668. The Internet benefit of "reduce need for intermediaries" was cited as the least important item in this factor with a loading of 0.537 (Please refer Appendix 2).

FACTOR 2: RELIABILITY MOTIVATION

The second factor was categorised under "Reliability Factor" which accounted for 13.624% of variance. The eigenvalue for this factor was 3.186. The statements "web pages are visually attractive" and "convenient order cancellation process" had been eliminated from this study due to their factor loading are lesser than 0.50. Thus, Factor 2 yielded with seven factors. From the results obtained, it showed that "freight charges clearly stated" was the most important item in this section with 0.814 factor loading compared to six other statements. Whereas, the second important factor was "prices of product clearly stated" with a loading of 0.807. However, 0.507 factor loading was accounted in the statement "web pages are loaded faster" (Please refer Appendix 2).

Zellweger (1997) suggests that the Internet provide consumers with information that allows for price comparisons. Similarly, Alba et. al. (1997) support the views of Zellweger (1997) and states that the Internet increases price comparisons and intensifies competition among the online vendors who try to attract potential buyers.

FACTOR 3: CONVENIENCE MOTIVATION

The next group of dimension (i.e. Factor 3) is related to "Convenience Factor", consisted of six statements with 10.546% of variance. The eigenvalue for this factor was 1.821. Shopping convenience is acknowledged to be the primary motivating factor in consumer decisions to buy at home (Gillett, 1976). It includes the time, space and effort saved by a consumer and it includes aspects such as an ease of placing and cancelling orders, returns and refunds, timely delivery of orders (Gehrt, Yale and Lawson, 1996).

All of the items in this factor had factor loading greater than 0.50, with the exception of one item, i.e. "faster source of getting product information" because it had a loading of less than 0.50, therefore, it was eliminated from this factor. The least important statement for Factor 3 was "more product variety for selection" with a factor loading of 0.501. However, the most important statement claimed by the respondents was "no crowd of people shopping", with factor loading accounted for 0.798. This was followed by 0.743 factor loading in the next statement of "no traffic jam" (Please refer Appendix 2).

FACTOR 4: DISTRIBUTION MOTIVATION

There were four statements that were loaded in this factor. The statement "no stress from customer service people" was eliminated because it did not reach the criteria of factor loading of greater than or equal to 0.50, which constituted of 9.204% of variance. Eigenvalue for this factor was 1.531.

The most important statement in this factor was "orders are delivered in good condition" with the highest loading of 0.752. This is followed by "better product return service" with a loading of 0.747. The statement "orders are delivered on time" rank in third place with 0.716 factor loading. Whilst the statement "more convenient shopping on the Internet" is the least important statement in "Distribution Motivation Factor" with a factor loading of 0.598 (Please refer Appendix 2). Most of the attributes relate to distribution pattern of online shopping, therefore this factor is called "Distribution Motivation Factor".

FACTOR 5: SOCIALISATION MOTIVATION

The fifth factor grouped dimensions related to "Socialisation Factor" which accounted for an additional 3.175% of the variance. The eigenvalue for this factor was 1.375.

Of the three variables selected in this factor pertaining to socialisation, the most important variable was that they "could have foreign friends" with a loading of 0.795. The next statement was they "could practice foreign languages by communicating with people from other countries". This also had the same factor loading of 0.795. The least important variable pertaining to this factor was to "allow unrestricted discussion of current issues" which constituted a loading of 0.580 (Please refer Appendix 2).

FACTOR 6: SEARCHABILITY MOTIVATION

Factor six describes "Searchability Factor" which accounted for an additional 1.978% of variance from Factor 5.

However, there were only two statements which resulted in this factor and the most important variable claimed by respondents was "owning a credit card" which had a loading of 0.672. This is followed by "need few movement to find product" which had a loading of 0.586. Eigenvalue for this factor was 1.088 (Please refer Appendix 2).

FACTOR 7: AVAILABILITY MOTIVATION

The final factor in motivation factor was "Availability Factor", which consisted of only one statement with 3.399% of variance. The statement "availability of products on the Internet that cannot be found locally" had a loading of 0.500. The eigenvalue for this factor was 1.065 (Please refer Appendix 2).

In conclusion, seven motivating factors: accessibility (i.e. the most important factor), reliability, convenience, distribution, socialisation, searchability, and availability (i.e. the least important factor) were extracted, which accounted for 61.402% of total variance. Of the 38 items, 33 items which pertain to these factors were selected based on criteria of eigenvalue greater than or equal to 1.00, factor loading of 0.50 or higher, and suppress the absolute value less than 0.50 factor loading. A review of the eigenvalues and factor loading indicated that all of these factors were appropriate for further analysis and the model possessed convergent validity (i.e. the extent to which a measure correlates highly with other measures designed to measure the same construct, Churchill, 1979).

Despite these motivational factors, there were other concern factors appear to affect emerging trends of shopping online among Malaysian Internet users.

There were 44 items with regard to concern factor listed in the second part of Section A of the questionnaire. In order to determine whether the concern factors are applicable for subsequent analysis, Cronbach coefficient alpha test was conducted and it was found that the concern factor yielded coefficient alpha values of 0.9622, in fact it is exceeding the recommended level of 0.70 by Nunally (1978). Therefore, the items selected for concern factor are considered reliable for subsequent analysis and the results are discussed below.

FACTOR 1: PRIVACY CONCERN

The most significant concern factor related to consumers' decision of yet to shop online was "Privacy". This factor accounted for 13.195% of variance and consisted of eight statements with eigenvalue of 17.112. All of these statements were loaded when meeting the factor loading criteria of greater than 0.50, after removing the statement "unauthorised use of credit card numbers".

The majority of the respondents felt positively that "their database may be sold to others" when they key in personal identifications such as credit card numbers and demographic information. It was cited as the first most important variable with factor loading of 0.806. Indeed, when purchasing online, they had the perception that their "personal information may be shared with other businesses without their consent", and this had a loading of 0.786. However, samples concerned with the statement "Internet sellers may overcharge from ones' credit card" had a loading of 0.692. The fifth

important variable that the sample faced was "misuse of my personal information by Internet sellers" which constituted 0.688 of factor loading. The results also showed that they strongly agreed to the statement "product purchased through Internet may be delivered to another person" with a loading of 0.552 (Please refer Appendix 3).

In fact, the majority of the samples were very much concerned with the terms of privacy of personal information such as not willing to present credit card numbers to any disreputable Internet sellers for every online payment for product purchased. Luedi (1997) suggests that successful Internet marketers should attract and retain consumers by providing personalised and compelling content coupled with a sense of community relevant to them, especially during their online shopping activities.

FACTOR 2: RELUCTANCE TO CHANGE CONCERN

Factor 2 describes the "Reluctance to Change Factor", which contained seven statements. This accounts for 11.274% of variance with eigenvalues of 2.538.

Out of the seven statements, the most important variable was "I don't trust digital signature" which obtained a loading of 0.763. Next, the respondents were also worried of "occurrence of virus transmission when purchasing online" and this had a loading of 0.605. However, respondents "prefer to support local businesses" than Electronic Commerce which constituted 0.593 factor loading. This statement was supported by respondents "cannot see the real product" statement with 0.504 loading (Please refer Appendix 3).

FACTOR 3: QUALITY CONCERN

The "Quality Concern Factor" was considered as the third most important factor besides "Privacy Concern Factor" and "Reluctance to Change Concern Factor". The factor accounted for 9.006% of variance with eigenvalues of 1.402. Five statements were loaded in this factor after the removal of the statement "can't bargain the price" (i.e. had lower factor loading than 0.50).

Most of the respondents felt positively that it was "difficult to judge the quality of the product" when making purchases through the Internet, which was identified as the most important variable with a loading of 0.710. They also positively claimed to the argument that "perishable products cannot be purchased safely through the Internet" with a factor loading of 0.679. The respondents found that there was "a high tax for overseas orders" when purchasing through the Internet with 0.637 factor loading. Beside that, there was "no after sales service for products purchased" which had a loading of 0.573. However, there were respondents who were "worried of doing business with disreputable firms" with factor loading of 0.509 (Please refer Appendix 3).

FACTOR 4: SECURITY CONCERN

Factor six described "Security Concern" with 9.006% of variance and contained six variables with eigenvalues of 1.402. Consumers' perception of unsatisfactory security on the Internet is one of the primary reasons hindering online shopping.

The statement "product return information not clearly stated in the web pages" with factor loading of 0.692, was treated as the most important item in this factor. The majority of the respondents agreed that there were "line congestion" when browsing or purchasing through Internet with a

loading of 0.676. In addition, they were very much concerned with the security of product purchased through Internet because there were "unavailable shipment to buyers' country" which constituted a factor loading of 0.648. (Please refer Appendix 3). Thus, respondents were much concerned about the unclear statement of the information on product to be returned in Internet sellers' web pages. Thus, if Internet sellers do not practice these, respondents will have negative perception towards online shopping transaction, and cause them to neglect repeat purchases. The final conclusion leads to the respondents' disbelief in online shopping transaction.

FACTOR 5: TRUST CONCERN

The next factor, the "Trust Concern Factor", has only two statements, which accounted for 5.944% of variance with eigenvalue of 1.313. Originally, five statements were loaded in Factor 5 but the statements "no help of sales representatives", "product prices in different currency" and "inconsistent pricing among Internet sellers" were eliminated since they do not fulfill the criteria of factor loading greater than 0.50.

Out of two variables in this factor, the most important statement was "free promotional gift may not be as valuable as promised" which had a loading of 0.552. There were "limited methods of payment" for online payment transactions for products purchased", with a factor loading of 0.547. It was ranked as the least important item categorised in the "Trust Factor" (Please refer Appendix 3).

FACTOR 6: CONNECTION SPEED CONCERN

The sixth factor describes "Connection Speed Concern Factor" and contained two statements with 4.513% of variance and with eigenvalue of 1.102.

Of the respondents surveyed, the majority of them perceived that there was "slow connection speed" involved when browsing online. This statement was the most important statement respondents claimed, with 0.665 factor loading. In addition, they claimed that they were concerned with "longer time taken to download information from the Internet", which had a loading of 0.607 (Please refer Appendix 3). For example, Zellweger (1997) states that buyers become extremely frustrated especially when pages contain irrelevant information and has caused slow downloadable process.

The Internet users were very concerned with the connection speed because the depth level of information search depended on the computer speed i.e. kilobits per second (kbps) used. The faster the speed, the more information would be retrieved and later, more satisfaction level will be gained.

FACTOR 7: PAYMENT CONCERN

The "Payment Concern Factor" was considered as the seventh most important factor and this factor accounted for an additional 0.194% of the variance from Factor 6. The eigenvalue for this factor was 1.089.

"High expenses involving e.g. electricity bills, etc." were removed from this factor because of the factor loading is lesser than the recommended factor loading of 0.50 by Hair et al. (1995). Therefore, the factor is left with only two statements. "No credit card" statement was rated as the most important variable under this Seventh Factor with 0.670 factor loading. Respondents also claimed about "longer delivery time involved" when purchasing through the Internet, which had a

loading of 0.526 (Please refer Appendix 3). The indication was that Malaysian Internet users generally need some help from Internet sellers to cut down the time involved for online product purchased which was due to online payment. In addition, banking institutions in Malaysia should provide more opportunities for customers of different age groups to own credit cards.

FACTOR 8: NON-DISCLOSURE OF COMPLETE PRODUCT INFORMATION CONCERN

The final important factor extracted after having factor analysed the process, was "Non-disclosure of Complete Product Information Concern" with 4.243% of variance and eigenvalue of 1.030.

This factor also contained two statements, and the most important variable the respondents claimed was that they were very concerned with "non-disclosure of complete company information in every Internet sellers' web pages" and this statement contained a loading of 0.812. Indirectly, the respondents also rated "non-disclosure of complete product information in Internet sellers' web pages" as second and the least important concern factor, which had a loading of 0.802 (Please refer Appendix 3). Malaysian Internet users were willing to conduct online shopping, when Internet sellers provided full disclosure for every item or product placed in their web pages with precise facts and figures, because as consumers, they expect value for every cent spent for product purchased. This must be done in order to promote consumer awareness and willingness to do online shopping with reputable Internet sellers.

As a summary, there were eight factors extracted in concern factor with cumulative percentage of 62.405% of variance. This has been further confirmed in the rotated factor analysis using varimax rotation factor loading. The pertaining factors were privacy (i.e. the most important factor), reluctance to change, quality, security, trust, connection speed, payment and non-disclosure of complete product information concern factors (i.e. the least important factor). The current result indicates that all of these factors had eigenvalues greater than and equal to 1.00 and the 34 remaining items out of 44 items had factor loading greater than 0.50. These findings provide support that the model possessed convergent validity (i.e. "the extent to which a measure correlates highly with other measures designed to measure the same construct", Churchill, 1979).

CONCLUSION

Each firm is vying with each other to develop additional customers or at least to retain the existing customers. The development of information technology and the growth of the communication network has radically transformed the local networks and connected them to the international markets. In short, the rapid diffusion of Internet technology into the commercial arena has given rise to an emergence of new types of trades, new services, and new innovative entrepreneurs. The current technological development with respect to the Internet has given rise to a new marketing system. It has fostered the evolution of a new concept known as Electronic Commerce.

The computer-oriented consumers are identified as "techno-savvy", therefore Internet consumers are early adopters of E-Commerce. The online facility benefits the consumers in many ways, including easy availability of information, the interactive nature of the Internet and hypertext environment. These allow the users in-depth search, intelligent product comparisons, quick, convenient and inexpensive evaluation of the offerings of various suppliers. Moreover, there is a wider availability of "hard to find" products and greater selection of items.

Factor Analysis revealed that seven important motivation factors such as accessibility (the most important factor when shop online), reliability, convenience, distribution, socialisation, searchability, and availability were identified. Internet Shoppers could gain the ability to search for products not on display, gather in-depth information without taking up the salesperson's time, and even purchase or pay for products for immediate or subsequent delivery, when conducting online shopping.

Although, there are many benefits both to the customers and the manufacturers, there are some limitations too. Survey of the Internet users indicated that the vendor reliability and security of financial transactions hamper the online transactions. Secondly, the majority of the consumers used the Internet to browse or search rather than actually purchase something.

In this study, eight important Internet users' concern factors were also identified, namely privacy (the most impeding factor to shop online), reluctance to change, quality, security, trust, connection speed, payment and non-disclosure of complete product information. Therefore, electronic transactions should be secure, reliable, and trusted in order to attract and maintain existing users of the Internet. Such measures would increase Internet users confidence on the credibility of Internet sellers. In short, the consumers hope that trading through the electronic media is safe and dependable and also they expect good value for their money. But in practice these expectations may not be fully met.

CONTRIBUTIONS AND DIRECTION FOR FURTHER STUDY

Major contribution of the study could be the list of motivations and concerns that Malaysian consumers may have with shopping online. The list is comprehensive and may prove useful for further theoretical development with either the Malaysian population or a cross-cultural population. This could also be a useful paper for online marketers who are interested in exploring the Malaysian market, thereby they can win the confidence of the consumers and also understand potential visitors' behaviours.

Secondly, the information derived from this research may enable offline retailers, especially local manufacturers, to diversify and offer their products and services through the Internet and not stay in the local traditional "brick and mortar" environment. Finally, online consumers may also benefited through this study. They are becoming "techno-savvy" and collect as much information as possible before making the purchases and thereby, they choose right product at an economical price. They are becoming smarter day by day.

Beside that, Government should also play an active role by giving much priority in terms of increasing the computer literacy rate among Malaysians for the creation of knowledge-driven and IT-savvy society. This measure could be exercised through the provision of short courses, seminars, workshops, and conferences on issues of Internet and computer related technologies. Hence, these public education could help build up Malaysian consumers' confidence to shops online as well as increase the volume of sales in the Electronic Commerce sector.

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APPENDICES

Appendix 1: Internet Users General Demographics

Appendix 2: Internet Users Motivation Factors

Appendix 3: Internet Users Concern Factors

Appendix 1: Internet Users General Demographics

Characteristics of Respondents	Results	
	Frequency	%
<u>Gender</u>		
Male	334	57.7
Female	245	42.3
<u>Age</u>		
< 20	79	13.6
20 - 30	393	67.9
30 - 40	81	14.0
40 - 50	21	3.6
50 - 60	5	0.9
> 60		
<u>Ethnicity</u>		
Malay	356	61.5
Chinese	150	25.9
Indian	55	9.5
Others	18	3.1
<u>Present Occupation</u>		
Student	242	41.8
Professional	204	35.2
Businessman	42	7.6
Government Servant	41	7.1
Others	50	8.6
<u>Highest Education Level</u>		
SPM Holder (or O-Level)	89	15.4
STPM / Diploma (or A-Level)	134	23.1
Certificate	32	5.5
Degree	251	43.4
Postgraduate	63	10.9
Others	10	1.7
<u>Monthly Income (RM)</u>		
< 1,000	215	37.1
1,000 - 3,000	147	25.4
3,000 - 5,000	115	19.9
> 5,000	102	17.6
<u>Working/Studying Place</u>		
Penang	161	27.8
Selangor	241	41.6
K. Lumpur	177	30.6

Appendix 2: Internet Users' Motivation Factors

Variables	Component						
	1	2	3	4	5	6	7
Easy access to wider information	.805						
Faster access to latest news	.780						
The best source to search for information	.668						
Cheaper source of information	.667						
Can customise level of detailed information required	.596						
Can download free software on the Internet	.595						
No restriction in browsing Internet	.587						
Can browse Internet for 24 hours a day, every day	.550						
Broad range of products available on the Internet	.550						
Reduce need for intermediaries	.537						
Shipping cost clearly stated		.814					
Product prices clearly stated		.807					
Special offers clearly stated		.751					
Customer service contact number clearly stated		.732					
Web pages are updated frequently		.626					
More interesting sales promotional activities		.574					
Web pages are loaded faster		.507					
No crowd of people shopping			.798				
No traffic jam			.743				
No hassle of queuing to counter for payment			.733				
Reduced waiting time for searching products			.578				
Convenient ordering process			.503				
More product variety for selection			.501				
Orders are delivered in good quality				.752			
Better product return service				.747			
Orders are delivered on time				.716			
More convenience shopping on the Internet				.598			
Can have friends from foreign countries					.795		
Can practice use of foreign language by communicating with people from other countries					.795		
Allows unrestricted discussion of current issues					.580		
Owning a credit card						.672	
Need lesser movements to find products						.586	
Availability of products on the Internet that cannot be found locally							.500
Total Initial Eigenvalues	13.268	3.186	1.821	1.531	1.375	1.088	1.065
% Rotation Sums of Squared	14.548	13.624	10.546	9.204	6.029	4.051	3.399

Appendix 3: Internet Users' Concern Factors

	Component							
	1	2	3	4	5	6	7	8
My database may be sold to other people	.806							
My personal information may be shared with other businesses without my consent	.786							
Others may intercept my message	.695							
Internet sellers may overcharge my credit card	.692							
Misuse of my personal information by Internet merchants	.688							
Uncomfortable giving my credit card number on the Internet	.635							
Overloaded unwanted messages sent by people	.566							
Product may be delivered to another person	.552							
I don't trust digital signature		.763						
Wrong keyword types bring to negative sites		.689						
Limited credit card company offers online payment		.613						
Virus transmission occur when purchasing online		.605						
I prefer to support local businesses		.593						
No knowledge on digital signature		.558						
Cannot see the real product		.504						
Difficult to judge product quality			.710					
Perishable products cannot be purchased safely			.679					
High tax for overseas order			.637					
No after sales service for product purchased			.573					
Worried of doing business with unreputable firms			.509					
Product return information not clearly stated				.692				
Line congestion				.676				
Web pages are updated rarely				.648				
Unavailability of shipment to buyers from other countries				.603				
Security guarantee not clearly stated				.584				
Cannot find the product desired				.576				
Free promotional gift may not be as valuable as they promise					.552			
Limited method of payment					.547			
Slow connection speed						.665		
Longer time taken to download information						.607		
No credit card							.670	
Longer delivery time involved							.526	
Non-disclosure of complete company information								.812
Non-disclosure of complete product information								.802
Total Initial Eigenvalues	17.112	2.538	1.872	1.402	1.313	1.102	1.089	1.030
% Rotation Sums of Squared	13.195	11.274	9.912	9.006	5.944	4.513	4.319	4.243