Consumer buying behavior towards online shopping stores in Malaysia

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ABSTRACT  
The global nature of communication and shopping has as well redefined, seeing that it is the perfect vehicle for online shopping stores. Online convenient shop is mostly reflected in shorter time and less energy spent, including shipping cost reduction, less crowd and queues than real markets, unlimited time and space, which all increase convenience of shopping. Internet shopping for businesses and consumers are being accepted as an alternative shop mode rather than visiting the stores. However, convincing the consumers to shop online is still a challenging task for web retailers in Malaysia. The growth of Internet technology in Malaysia has enormous potential as it reduces the costs of product and service delivery and extends geographical boundaries in bringing buyers and sellers together. This study is conducted to identify factors influencing consumers towards online shopping in Malaysia. The study focused on nine independent variables namely appearance, quick loading, security, sitemap, validity, promotion, attractiveness, believability, and originality. We applied Five-point Likert Scale to measure the influential factors on intention for online shopping.

KEY WORDS  
online shopping stores, consumers, internet shopping, the internet shop

JEL CODES  
M31, M37

1. Introduction

The internet is a medium that is soaring in polarity in almost every facet of the world and is used for a numerous of causes by persons, governments, universities and businesses. Nowadays, the term Internet is as a business tool for companies and individuals. Internet became a new mediator between companies and their customers. Today, the Internet is a public, cooperative and self sustaining facility accessible to hundreds of millions of individuals worldwide (Janacek & Muchhala, 2004). Nowadays; Internet accepted as a significant effective communications channel challenging with the traditional ones, such as Radio, Magazines, and TV. The Internet shop offers dissimilar ways of online communications with communication differences tools that need a better decision of their effect on customer communications.

Although more and more firms are realizing the importance of leveraging on the Internet to conduct their businesses, corporate leaders are finding it difficult to keep up with fast moving markets and the customer conditions that are the hallmark of the Internet (Teo, 2005). There is
no doubt that in the 21st century Malaysia had entered a new era of globalization. The growth of internet usage is encouraging some changes in the behavior of customer purchasing process and it has become one of the most significant communication channels in the world (Casaló, Flavián & Guinaliu, 2007).

The internet apparent capabilities involve directions for collecting information, purchasing a goods, or representation a service. Internet technology advancement allows for the expansion of online shopping options beyond traditional methods, which may be more time wasting. With a growing number of individuals turning towards the Internet and the world of e-commerce to shop, enterprise, make payments, and carry out online banking, new technological advancements will have to come about to make these transactions secure. The growth of individuals are gravitating towards more exhaustive use of the Internet as technology convenience, information availability, and the capability to interact through the Internet increase and develop. Consumer behavior is the fundamental of doing each business. Moreover, businesses continue to establish an online presence, they are finding that some consumers are still reluctant to switch in that same direction.

1.1. Background of study

Companies also are using the internet to express and communicate the information and actually to present their goods as well as taking feedback of their performance and get better their turnover and also customer’s satisfaction. Some companies in the world have begun to use the Internet to decrease marketing costs, and consequently reducing the prices of their goods and services to keep a competitive market in the future. The study has been assumed that people with the objective of Internet shopping used new version as individuals in all areas, more interest in using the Internet have to buy. On the other hand, the rate of innovation moderating relationship quality that people uses the online shopping and internet. It should be noted that in addition to feature a custom product aspects also be considered. In order to attract customers for the company’s who following e-commerce method for their activities should be advantageous and profitable that must be also presented to the various services. Services and facilities cause the customer’s motivation to purchase (in the present and future). As a result, website content services are provided on the website that should be the customer’s needs and interests intended to create facilities and even provide private sectors. Although more and more firms are realizing the importance of leveraging on the Internet to conduct their businesses, corporate leaders are finding it difficult to keep up with fast moving markets and the customer conditions that are the hallmark of the Internet (Teo, 2005).

The growth of Internet technology in Malaysia has enormous potential as it reduces the costs of product and service delivery and extends geographical boundaries in bringing buyers and sellers together. New advanced business transactions and models for the world economy have offered by the foundation of the Internet. The advent and development of Internet has created new opportunities for marketing professional to create better present marketing practices. It also transcends geographic boundaries, allowing companies to reach prospective customers previously unreachable.

According to Nielsen Global online survey “Internet shopping Habits Globally” (2007) more than half of the internets user has made at least one purchase online. In the middle of internet user’s statistics, 99 % of South Korean with internet access has highest percentage of internet shopping, tracked by the UK (97 percent), Germany (97%), Japan (97%) with the U.S. eight, at 94 percent. The process of purchasing services or product through internet refers Online shopping

1 http://my.nielsen.com/site/20080414.shtml
behavior that this process includes five steps. Consumer recognizes their need for particular goods or services that refer to internet and seek for need-related information in this process. Moreover, goods purchasing without leaving their place is one of the great interest to many consumers and another advantage of online shopping for customer is ability of using internet tools for searching the goods or services price, then comparison with other competitors.

As a result, they can enable to choose the lowest available price. Regarding to studies, online shopping has been came out quite recently as a border for transactions between consumers and firms. Internet shopping is changing the methods that customers buy goods, services, and quickly developed into a global fact and phenomenon. There is a difference among the number of consumers who visit a website and the number of real purchases being made.

1.2. Problem statement

In contrast, one of the great concerned is trust and security. For instance, recent statistics shown that in Malay people approximately is about 30% did not commit with the online shopping, while one of significant factors in electronic commerce is trust. In order to increase online shopping in Malaysia, understanding consumer online shopping behavior and factors influencing this behavior when shopping online should be given priority. Researches indicate that majority of Malaysian (76%) specially young people were using internet for non-shopping activities such as seeking for information, entertainment, playing games and communication with others. There are some barriers which have contributed to the unwillingness of Malaysian people because they afraid that their personal information will be stolen by others. Despite the potential in Malaysian people, there is still lack of understanding towards online shopping in Malaysia.

1.3. Objectives of study

This research conducted to find factors influencing on consumers towards online shopping in Malaysia. Some factors such as quality website and internet marketing companies persuade consumer choice of buying online. Moreover, the study is also finding out to examine the perceptions of adopters and also those who are reluctant of online shopping in respect of demographic profile, consumers’ expectations of online stores, as well as, its exacting advantages and problems. It is worth mentioning that Internet users are adopters who have purchased online, while it is more likely that a group of people have never purchased online. In the first portion, the literature review regarding consumers’ online buying behavior and the elements that encouraging or discourage online shopping is presented.

2. Literature Review

As Internet usage is increasing, so is online shopping particularly in those countries whose marketing infrastructures are well developed. Customers can shop at anytime and have access to products not available in their geographic region. Moreover, they are now able to access the Internet, not only from their personal computers, but also from advanced electronic devices such as Palm Pilots and mobile phones. The growth of Internet technology in Malaysia has enormous potential as it reduces the costs of product and service delivery and extends geographical boundaries in bringing buyers and sellers together. Also, due to an increase in high-speed Internet access connections, lower connection costs, and increasing consumer competence, e-commerce activity will continue to grow as the availability and ease with which the Internet provides consumers the ability to handle needed tasks increasingly develops. However, not all consumers are turning to the Internet for shopping. While the number of Internet users who have made a
purchase at one time is more than half in the United States, this does not explain the disparity between the number of visits websites recorded and the number of actual purchases made online.

In order to identify the differences between consumers who prefer online shopping and those who prefer offline shopping, this study examines how consumers perceive online shopping and which factors are perceived differently between consumers who prefer online shopping and consumers who prefer offline (physical store) shopping. The findings from this study will allow online businesses to be better informed of what draws consumers or prohibits them from coming to their best websites. The better understand awareness of online shoppers, the higher the chance which they can create a center of attention and keep consumers.

2.1. Internet Privacy and it Security issues in online Shopping

A study of risk perceptions also indicates that consumers are concerned with unwanted outcomes and uncertainty of their purchases after purchasing a product online. Consumers, therefore, are less likely to make purchases online if they perceive a higher risk. The perception of risk associated with a company and their online presence can also be affected by previous encounters and also affect their decisions to complete purchases without sensory perceptions available in traditional brick-and-mortar stores. Consumers’ previous experiences with online purchases, or lack thereof, can be a significant influence of levels of risk perception by consumers and their purchasing decisions. Negative experiences increase levels of risk perception with online purchasing and hamper not only a business’s likelihood of retaining customers but can make it more difficult for other online businesses to gain initial customers.

2.2. Product Value

It sometimes called product understanding (product perception) (Dillon&Reif, 2004), consists of price, product quality, and variety. These are the most salient product perceptions mentioned in the e-market literature. Price is the monetary payout of the customers and is the cost of purchasing; it is important since pricing strategy can be easily implemented over the internet. Thus, perceived quality of product can be describe as the judgment about the overall excellence or superiority of the service or goods with admiration to its proposed reason relative to alternatives (Boisvert & Burton, 2009). Since the perceived product quality is a pivotal reason to buy (Aaker, 1991), price is the cost paid by the customers, and variety gives the customers more alternatives to choose the products and hence motivate the customers to visit the website; these three factors were empirically justified as important factors for internet shopping (Rust, Zeithaml & Lemon, 2000). Hence, we have the following hypothesis:

Hypothesis 1: Product perception affects purchase intention.

2.3. Experience shopping

They deemed shopping experience could be classified into two categories. The first one is the experience from the salesperson’s encounter, and such interpersonal factors include salesperson’s efforts, interpersonal engagement, problem resolution, interpersonal distance, and sale personnel’s time commitment; the other is non-interpersonal factors which include unanticipated acquisition and value or vice versa. Additionally, Kerin, Jain, and Howard (1992) considered shopping experience as the store atmosphere, customer-related services and a set of policies. Since the two definitions of shopping experience are quite similar and complementary to each other, by combining the two definitions, shopping experience will be defined as “the set of all services and policies related to the store-atmosphere and customers, including interpersonal interaction, sales staff’s efforts and commitment and relevant policies provided to please or

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attract customers.” The shopping experience in the cyber world is quite different from conventional stores.

Effort, lifestyle compatibility, playfulness have been mentioned (Winn & Beck, 2002). Effort is the amount of time and energy spent in locating merchandise and making purchase decisions. Lifestyle compatibility considers the consumers “life style and shopping habits”. Playfulness refers to feelings of fun in website navigation when purchasing. Social interaction means the interaction with people when shopping on the web, such as joining discussion groups, soliciting user experiences etc.

Hypothesis 2: The shopping experience affects purchase intention.

2.4. Service Quality

We may call service in question as “supporting service” which accompanies the main product/service and facilitates the purchasing process. The concept of service quality whether the quality meets or exceeds the consumer’s expectation; therefore, the consumer’s perception of service quality is the perceived gap after comparing the consumer’s expectations of service and the actual feeling of the service (Sultan & Simpson Jr., 2000). While the consumer’s expectation of service quality is often affected by the influence of four sources: past experience, word-of-mouth communication, personal needs and external communication, service quality is a subjective attitudinal response showing the consumer’s overall superiority assessment of the service itself. A “direct measurement of consumers’ service quality called SERVPERF was proposed by (Jain & Gupta, 2004) and was shown to have better predictive ability, convergent validity, and discriminant validity than SERVQUAL.

For online shopping, e-service quality was measured by different researchers. According to (Park & Gretzel, 2007), Parasuraman, Zeithaml, and Malhotra (2005) suggested efficiency, system availability, fulfillment, and privacy as the major factors to be considered. Therefore, the following hypothesis is suggested:

Hypothesis 3: Service quality affects purchase intention.

3. Research Methodology

3.1. Study design

This study is based on hypothesis testing regarding the fact that data were collected only once to answer to research questions through questionnaire in Malaysia, concerning the fact of customer perceptions toward online shopping.

3.2. Main objective

- To understand correlation between website quality and online shopping behavior.
- To understand correlation between advertising and online shopping behavior.
3.3. Sources and Data Collection

A prearranged survey was used to gather the primary data research to respond the questions of survey. Therefore, the survey questions consist two specific sections in addition to demographic part and each of them contains questions to reflect different parts of the study. The Budget constraints in terms of time and cost and difficulty to access to the potential respondents in Malaysia lead us to use the convenience sampling method. Therefore, some specific places inside were chosen for distributing the questionnaires. For instance some places like SURIA KLCC, CAPSQUARE, and PAVILLION were chosen for separating questionnaire. The survey was conducted generally via face-to-face interview and also hands over the questionnaire.

Before we chosen face to face interview we sent the questionnaire through email to more than 75 people but unfortunately only 15 people replied in one week. Then we switch our data collecting method and we refer to personal interview. Therefore, the survey responses provided us with the valuable inputs to this study for better understanding the online shopping practices in Malaysia. Total 75 questionnaires were distributed; while each of answers submitted was monitored correctly for mistake, unfinished and/or omitted responses. Though, 10% of the questions in the analysis survey that had been left unanswered or wrongly answered were subtracted from functional data analysis. Having done the appropriate screening process, returned questionnaires were considered as unusable and the rest 60 responses were used which were measured as total and valid for last analysis and hypothesis testing.

3.4. Measures

We used questionnaire as an instrument to obtain required data for analysis of the hypothesis we developed. In this study we used 1- LIKERT scale and 1-5 Likert scale anchored from “strongly disagree” (1) to “strongly agree” (5) to measure relation between website quality and online shopping behavior and also correlation between advertising and online purchasing.

3.5. Hypothesis development

From the discussion of the theoretical framework, two hypotheses were prepared to assessment the relationship between each of the two independent variables and dependent variable. The two hypotheses which this study has been conducted on it are:

H1: High quality website positively associated with the online shopping

H2: Advertisement positively associated with the intention to online shopping.

Below are analyses of demographic data: 1-gender, 2-age, 3-marital status, 4-monthly income, 5-occupation, 6-educational background, 7-internet using duration, 8-online visiting website.

As it obvious in this pie 46.67% of respondent were female and 53.33% were male.

4. Results and Discussion

4.1. Factor Analysis

The following table at the beginning provides some descriptive analysis regarding to demographic information. Following the conducting the factor analysis on all the items that measures ordinal variable, 9 variables extracted, each one representing a unique concept or in other word a specific perception of the respondents. Following table illustrate the mean for each item and corresponding standard of deviation. The first 5 items measure quality effectiveness of websites and the last 4 items measures advertising effectiveness toward using online shopping.
But because our scale for our main question is base of the Likert scale we have to use the factor analysis. In this project factor analysis was employed to explore the underlying factors associated with 9 items by using Principal Component Analysis (PCA). Generally, KMO is used to assess which variables need to drop from the model due to multi Collinearity. The value of KMO varies from 0 to 1, and KMO overall should be .60 or higher to perform factor analysis. If not then it is necessary to drop the variables with lowest anti image value until KMO overall rise above .60. Result for the Bartlett’s Test of Sphericity and the KMO reveal that both were highly significant and concluded that this variable was suitable for the factor analysis.

It can be seen the KMO is more than 0.6 is acceptable and it’s in mediocre range, it means no need for drop any variables, besides P-value is less than 0.001, means we can proceed with factor analysis.

Besides, the correlation of the items are between 0.3 to 0.9 which means all the items correlation is acceptable, in this case there is no duplication, and all have a association. Moreover, we grouped the questions regarding to every hypothesis and again make a correlation between them and dependent factor, it can be seen although there is a good correlation between website quality and advertising and website quality and intention to online shopping, but poor correlation between advertising and dependent factor is transparent. Factor analysis was carried out on the effective factor on online shipping to group together the variables that are highly correlated. The factor analysis process involves two stages:

1. Factor withdrawal to make a preliminary decision on the number of factors fundamental asset of calculated variables of interest.
2. Factor rotation for easy interpretability of factor withdrawal result and for making final decision about the underlying factors. The underlying structure of 9 items was analyzed using principal component analysis followed by varimax rotation because we have an independent variable. The factor analyses exposed two dimensions underlying effectual factor on online shopping for Malaysian customers.
3. They are: (F1), High Quality websites (F2), Advertising. The total variance explained by factors is indicated in Table, which suggests that the two factors account for 74% of the total variance. Factor 1, which accounted for about 61% of total variance. In fact, each of above component represents a factor that explains the total variances in all the 8 original items as listed above. As shown in the Table 2, the Eigen values for just the two components are above the value 1, thus they are to be considered significant. It can be seen in the Table 2, each of these components explains 61.376 %, 12.810%, of the total variance respectively, among the all 9 items.

There is a dramatic steep slope from component 1 to component 2, hence most of the variance is explained by factor 1 alone and small portion by component 2 and then again there is a steep slope to component 3. Whereas, the slop of the diagram change gently from component 4 to component 9 which again indicate that most of variance is explained by the first 2 components and subsequent factor do not contribute much in explained variance. Now, we founded that we have a two factor, so the question now is each item is regarding to which factor, for this we look at the component matrix table 1.
Table 1. Factor Loading. Rotated Component Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>.704</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick Loading</td>
<td>.653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>.829</td>
<td>0.801</td>
<td></td>
</tr>
<tr>
<td>Sitemap</td>
<td>.596</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validity</td>
<td>.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td></td>
<td>.774</td>
<td></td>
</tr>
<tr>
<td>Attractiveness</td>
<td></td>
<td>.514</td>
<td></td>
</tr>
<tr>
<td>Believability</td>
<td>.798</td>
<td>0.721</td>
<td></td>
</tr>
<tr>
<td>Originality</td>
<td>.750</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the Cronbach’s alpha value for components is well above value of 0.721 which indicates good level of internal consistency. Seemingly, component 1 represents five first variances in the five first items in the questionnaire and it is designated as Security effectiveness. Moreover, the other components are designated as Believability effectiveness.

4.2. Hypothesis testing

Due to measuring the concept based on a five points Likert Scale which gives ordinal data, this study has been manipulated the Factor Scores to analyze hypotheses.

**H1**: High quality (Secure) website positively associated with the online shopping.

Based on the Pearson correlation test, the r value between Security (high quality) and intention to buy is 0.418, which is more than 0.3, so there is a significant association between high quality (Secure) website and intention for online shopping. And p-value is less than 0.05, therefore the H1 is accepted.

**H2**: Advertisement (believability of ads) positively associated with the intention to online shopping.

The Pearson Correlation test applied to test the significance and direction of relationship. Results are illustrated in following table 2.

Table 2. The Pearson correlation test

<table>
<thead>
<tr>
<th></th>
<th>Believability</th>
<th>Intention to online shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Believability</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.073</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
</tr>
<tr>
<td>Intention to online shopping</td>
<td>Pearson Correlation</td>
<td>.073</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.579</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
</tr>
</tbody>
</table>

Having considered above table, The Pearson Correlation Coefficient value equals to 0.073 which is lower than 0.3 indicating there is any neither positive nor negative association between Advertisement (believability of ads) and intention to online shopping. Thus, the hypothesis H2 is rejected.

ANOVA Test: (Optional)
All we are looking for through conducting this test is whether selected factors can be a good predictor for modeling an online shopping behavior or not, so we apply the ANOVA test (table 3). Usually it should be done at the beginning of project.

**Table 3. Anova Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>7.815</td>
<td>9</td>
<td>.868</td>
<td>.604</td>
</tr>
<tr>
<td>Residual</td>
<td>71.835</td>
<td>50</td>
<td>1.437</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>79.650</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Originality, Attractiveness, Believability, Promotion, Validity, Security, Appearance, Sitemap, Quick Loading.
b. Dependent Variable: Online shopping behavior.
The P-value from the ANOVA table is less than 0.001, which means that at least one of the variables can be used to model the online shopping behavior. The R-Square value is 0.781, which means 78.1% of the variation can be explained by these factors, the Durbin-Watson statistic of 1.549 is not far from 2 and it’s correct.

**5. Conclusions**

To sum it up, the findings of the study indicated that the first five factors influence consumers towards online shopping and security is the factor that contributes most towards online shopping. Our study revealed the last four factors (promotion, attractiveness, believability, and originality) don’t significantly influence online shopping intention. These indicate that advertisement doesn’t have an important effect on online shopping. The results showed that security and validity of website were widely approved by online consumers.

**References**

5. Janacek, R., & Muchhala, M. (2004). Method of transferring data from a sender to a recipient during which a unique account for the recipient is automatically created if the account does not previously exist: Google Patents.