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# Consumers Attitudes towards Internet and Brick and Mortar Store Channels Switching Behavior

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**Abstract**
The purpose of this study is to examine the role of consumers' behavioral attitude and intention toward channel switching behavior in regards to Internet and brick and mortar store channels in Malaysia. The survey instrument administered to the Malaysian consumers from regions of Klang Valley and Penang. A total of 497 completed surveys were obtained. Partial least squares (PLS) based structural equation modeling (SEM) technique was used to analyze data. A total of 497 completed surveys were obtained. Findings showed that compatibility and complexity were significant in predicting attitude in regard to switching channel from Internet to brick and mortar store. Relative advantage and compatibility were relevant in predicting attitude in brick and mortar store channel. Attitude also significantly affected channel switching intention regarding to both channels. Our findings reveal that gender and intention significantly affect channel switching behavior.
**Keywords:** Channel Switching Behavior, Attitude, Internet Channel, Brick and Mortar Store Channel, Malaysia.
**JEL Classification Codes:** M30, M31.

**İnternet ve Tuğla-Harç Mağazalarına İlişkin Müşteri Düşünceleri ve Değişen Müşteri Davranışları***

**Öz**
Bu çalışma Malezya'da internette faaliyet gösteren tuğla harç mağazalarına ilişkin müşteri düşüncelerini ve müşterilerin değişen kanal eğilimlerini analiz etmeyi amaçlamaktadır. Çalışmaya ilişkin veriler Klang Vadisi ve Penang Bölgesi'nde 497 kişinin katılımıyla gerçekleştirilen anketlerin neticesinde elde edilmiştir. Çalışmada yapısal bağlamda PLS Modeli ve data analizi bağlamında ise SEM Modeli kullanılmıştır. Yapılan 497 anketin neticesinde, çalışmanın verileri, uygunluk ve zorluk bağlamında internetten tuğla ve harç mağazalara doğru değişen bir eğilim olduğunu göstermiştir. Bulgular benzer şekilde cinsiyet ve niyetin de müşterilerin kanal değiştirmesinde etkin unsurlar olduğunu ortaya koymuştur.
**Anahtar Kelimeler**: Kanal Değiştirme Davranışı, İnternet Kanalı, Tuğla ve Harç Mağaza Kanalları, Malezya.
**JEL Sınıflandırma Kodları:** M30, M31.

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## 1. Introduction

Nowadays, the multi-channel strategy is becoming more significant and crucial for both businesses and consumers (Balasubramanian et al., 2005; Kumar & Venkatesan, 2005). The Internet as a new channel is progressively playing its role in relation to other channels and numbers of Internet users also are increasing rapidly (Balasubramanian et al., 2005). Likewise, the number of Internet users in Malaysia keeps increasing each year. Internet World Stat stated; the number of Internet users in Malaysia was 17,723,000 (60.7%) in 2012. Meanwhile, Internet user increased from 2000 to 2010 is 356.8 percent (http://www.internetworldstat.com). This proved remarkable growing rate of Malaysian Internet users (Haque & Khatibi, 2005). Shopping via Internet in the western countries is very regular to all, but for Malaysia it is very challenging; in Malaysia, online shopping is something new and the transactions are very limited (Haque & Khatibi, 2005). Besides, the growing utilization of Internet by the younger generation in Malaysia offers an emerging opportunity for online retailers (Haque & Khatibi, 2005). If online retailers know the factors influencing young Malaysian consumers' shopping behavior, and the relationship between these factors and type of online shoppers, they can further develop their marketing strategies to convert potential customers into active ones. Thus, with large number of Internet users in Malaysia is required to find out the factors that shape Malaysian online shopping behaviors and develop more study in this area (Haque & Khatibi, 2005). Therefore, Internet as a new retailing channel in Malaysia plays an important role in business activities which needs to be more considered by retailers.

Simultaneous utilization of a variety of channels is gradually more important, which increases requirement for a multiple channels strategy for customers (Albesa, 2007). Albesa (2007) declared that retailers and companies should search for a multiple channels design that offers "channel advantages", due to the fact that each channel provides some degree of difference of benefits, but at the same time offers complications and limitations, for this reason, employing only one channel limits performance in the marketplace to what that channel is proficient of doing predominantly well. Also, multichannel retailing environment offers some benefits for consumers (Albesa, 2007). For instance, there is an opportunity for consumers to choose only one organization to seek for information, buy goods as well as return unwanted products by selecting one of the following channels: Internet, television, catalogs, brick-and-mortar stores, salespersons, and telephone sales (Kumar & Venkatesan, 2005).

Moreover, there are many factors to discuss while analyzing consumer behavior of a population based on their demographics. However, analyzing age and gender of groups are more effective in reaching our goal in demographic approach (Wesley et al., 2006). Yoh et al. (2003) indicated that age and gender are essential

to predict online and store channel behavior of consumers. In the current work, we examined the affect of gender (male and female) on Malaysian consumers channel switching behavior.

In spite of the growing attention which has been paid to multichannel oriented topics, study on multichannel retailing and channel switching behavior is still considered to be at its early stages (Ansari et al., 2008; Kumar & Venkatesan 2005). Although, little study has investigated customer channel migration in terms of multichannel retailing (Verhoef et al., 2005; Pookulangara et al., 2011) and how customers act among different channels in a multichannel environment (Ansari et al., 2008). Also, the studies done by Choi & Park (2006) and Pookulangara et al. (2011) have shown that there is lack of knowledge concerning important predictors in terms of consumers' beliefs, attitudes, and intentions for online as well as traditional stores shopping on the basis of multiple channels and channel switching. Hence, the present study investigates potential elements related to customer channel migration behavior in regard to Internet and brick and mortar store channels.

Despite the potential in Malaysian consumers, there is still lack of understanding towards online shopping (Ansari et al., 2008). This study will investigate factors that influence consumers in Malaysia to choose either online shopping or brick and mortar stores. In line with all the reasons above, the objective of this study was to identify factors that are significant in explaining Malaysian consumers' channel switching behavior. In this study the context is channel-migrating behavior while shopping, utilizing any type of the two channels (i.e., Internet and brick-and-mortar stores) as the retailing instrument. We assumed that individuals' attitudes and beliefs, will lead to an intention to perform a definite behavior (i.e. whether to migrate channels or not).

## 2. Literature Review

Multiple channels' retailing is a kind of strategy that provides the opportunity for customers to utilize more than a single channel, so consumers can easily shop from multiple channels such as Internet, brick and mortar stores, catalog, etc (Stone et al., 2002). Moreover, technology is developing rapidly, with vast change anticipated for the retailing format. In these indecisive periods it has turn out to be obligatory for retailers and marketing executives to find out how customers are responding to these changes and what are their purposes in this regard. Besides, consumers would like to switch their shopping behavior and shop through Internet, and purchase whatever they want efficiently and rapidly. This will cause crucial hazard to the stored based industry and it will be a threat for traditional workers (Morgenson, 1993).

Several scholars have extensively recognized that multichannel customer management is an important issue in the field of customer and marketing studies

(Stone et al., 2002; Balasubramanian et al., 2005). Currently, customers and clients look for product information online but prefer to buy it in store retail (Stone et al., 2002). Furthermore, they may find it easy when it comes to make a search about product information through online channel of A-retailer but do their purchase from B-retailer by offline channel (Verhoef et al., 2005). This would result in a sort of difficulty for the retailer to retain customers due to switching situation. Thus, the concept of buying and switching intention concerning up-to-date consumers has become a major issue to marketers and retailers. Information technology has made people use internet in conducting their transactions rather than traditional way of trading (Fuller et al., 2007). Many retailers have been experiencing an upward trend towards multichannel approaches by using internet-based channels and some other channels such as catalogue, mobile, call centres, and direct marketing.

It has been proven that consumers possess complex shopping behaviors in such an emerging multichannel environment, (Balasubramanian et al., 2005) and this behavior is influenced by the customers' perception towards traditional and virtual outlets or storefronts (Verhagen & Dolen, 2009). In other words, customers' cross-channel behavior may occur in various steps of buying. To the retailer, it may be a kind of detriment once consumers use another channel (Choi & Park, 2006). This multichannel emergence has been a challenging issue for retailers (Stone et al., 2002). A crucial point here is that the retailer might lose the customer in the process of shopping. Hence, management of multichannel customer has largely become of a great importance to the retailers when it comes to integrating the effects of multichannel. Previous studies have only investigated the benefits and significance of how to create and manage multichannel (Kumar & Venkatesan, 2005; Verhoef et al., 2005), but less researches have addressed the approaches and methods of improving multichannel from customers' perspective (Slack et al., 2008). Therefore, the aim of this study is to realize the circumstances under which customer might switch.

Consumers used to reach all their needs through a single integrated channel based on various stages of their decision making (Balasubramanian et al., 2005). But now, an online approach has recently been a sort of pressure on the retailers and cataloguers to turn into multi-channel entities offering a wide variety of products via different channels to customers. Following this method, the concept of multi-channel consumer behavior and consumer channel switching has been an important discussion made by some of researchers. Even though, today's typical metrics of this issue still cannot tell how susceptible a company's customers change their spending patterns (Verhagen & Dolen, 2009). Thus, it is to be mentioned that the multi-channel marketer's issue is to find out what should be considered as the customer driving factors to make the goal of retention from migration, so we focus on the concept of switching multi-channel consumer

behavior in this study, and then try to investigate what elements affect consumers channel switching behavior.

A consumer may choose one channel but at the middle stage of his/her decision making process changes the channel and uses another one (Verhoef et al., 2005). So, a consumer might migrate to another channel if he/she is not happy with a current channel, which results to channel switching (Albesa, 2007; Balasubramanian et al., 2005). An important issue of interest to both practitioners and academicians is to find out about consumers' channel switching behavior (from online to offline and vice versa) and also recognizing the major drivers which influence such behavior (Choi & Park, 2006). For example, a client may tend to switch to online channels in case his/her intention towards online purchase is better than offline buying intention and vice versa. Necessarily, consumers declare their preferences according to utility maximization when it comes to costs and benefits of the retail structures given to them (Albesa, 2007). It indicates that the utility gained by the clients through online shopping needs to be more than the utility obtained through the traditional format which causes the consumer to switch to an online environment (Verhoef et al., 2005). This study recognizes the main behavioral intention and attitudes determinants that affect consumers' switching tendency from shopping offline to the online one and vice versa.

In addition, earlier studies of consumer behavior showed the effects of gender on consumer behavior. For instance, Jansen et al. (2012) studied the importance of gender in online shopping, advertising and information processing, and determined that both males and females act differently towards these situations. Males and females shop in a different way (Cho & Workman, 2011). Bakewell and Mitchell (2006) illustrated that "teenage boys were more utilitarian, whereas teenage girls are more social/conspicuous conscious". Besides, Othman et al. (2008) and Afizah et al. (2009) demonstrated that Malaysians males are more literate and even male customers with better economic situation care less about ethnocentric, but in contrast females are more ethnocentric and also females are more interested to purchase foreign brands compared to males. Hasan (2010) found gender is an important factor that affects online shopping behavior. The findings of the author's study reveal that "females value the utility of online shopping less than their male counterparts do". Therefore, in this study it was assumed gender will effect on the consumers' channel switching behavior.

### 2.1. Study Variables and Hypothesis Development

The objective of the current study was to predict consumer channel switching behavior with regard to any of the two channels (i.e., Internet and brick and mortar stores). The impact of relative advantage, compatibility and complexity on attitude toward channel switching intention was examined. Also the effect of attitude on channel switching intention; and the impact of gender and channel switching intention on channel switching behavior were studied. The hypotheses

and the relationship between variables via the research model are organized in the following section.

2.1.1. Behavioral Beliefs (relative advantage, compatibility and complexity) toward Channel Switching Intention

Rogers (1993) argued that the attitudinal belief has three innovation characteristics that influence behavioral intentions, which consist of relative advantage, complexity and compatibility. Relative advantage is defined as an innovation factor that significantly affect attitude (Taylor & Todd, 1995). This component presents some benefits to the model such as, image, satisfaction, economic benefits improvement and convenience (Rogers, 1983). Relative advantages should be positively connected to attitude (Taylor & Todd, 1995). The link between perceived relative advantage and attitude has been supported by numerous studies related to IT usage. Morris and Dillon's (1997) study on Netscape usage among students revealed that the attitude toward using the browser was positively influenced by perceived relative advantage (perceived usefulness).

Compatibility is the degree to which the innovation fits with positional adapter's existing values, previous experiences and current needs (Rogers, 1983). Compatibility is likely to be positively connection to adoption. Finally, in a study involving 82 brokerage firms, Lau (2002) found that compatibility had a significant effect on attitude of using online trading. Complexity signifies the degree to which an innovation is perceived to be complicated to understand, learn or operate (Rogers, 1983). In general, the simpler an innovation is to realize and utilize, the more expected it is to be adopted. Complexity (and its corollary, ease of use) has been found to be a significant factor in technology adoption decision (Taylor and Todd, 1995). It should expect channel that is easy to use would encourage individuals to utilize the channel by developing a positive attitude about it. Previous studies indicated that if technology is complicated and complex to use, so the impact of complexity on attitude will be negative (Taylor & Todd, 1995). Lau's (2002) study on online trading revealed the significant influence of perceived ease of use on attitude. A similar result was also revealed in the study by other researchers (e.g., Bhattacherjee, 2000; Taylor & Todd, 1995).

Thus, the effect of relative advantage, compatibility and complexity on attitude has been examined in previous studies (Taylor & Todd, 1995). These three components are related to attitudinal beliefs (Rogers, 1983). Taylor & Todd (1995) illustrated that according to prior empirical study on the correlations among these perceived characteristics it would be likely that relative advantage and compatibility positively associated to attitude. On the other hand, Beiginia et al. (2011) found out that relative advantage and complexity positively effect on attitude. Hence, the following hypotheses are proposed:

H1,2,3a: Relative advantage, compatibility and complexity positively influence on behavioral attitude toward channel-switching from Internet to the brick-and-mortar stores.

H1,2,3b: Relative advantage, compatibility and complexity positively influence on behavioral attitude toward channel-switching from brick-and-mortar stores to the Internet.

2.1.2. Attitude toward Channel Switching Intention

The effect of attitude on consumers' behavior intention has been evaluated by Fishbein and Ajzen (1975). Attitude is posited to be a predictor of intention to perform a behavior (Fishbein & Ajzen, 1975). Many studies have shown a significant influence of attitude toward a given behavior on intention to perform the behavior (Ajzen & Fishbein 1980; Taylor & Todd 1995). Shih & Fang (2004) demonstrated that the more positive the consumers' attitude toward Internet purchasing, the stronger their intention to purchase online. Using a deductive logic, favorable attitude is likely to encourage consumers to switch channels (Pookulangara et al., 2011). According to the argument and findings discussed above, the following hypotheses are proposed:

H4a: Attitude positively affects channel-switching intention from Internet to the brick-and-mortar stores.

H4b: Attitude positively affects channel-switching intention from brick-and-mortar stores to the Internet.

2.1.3. Gender toward Channel Switching Behavior

Previous studies pertaining to the online shopping have confirmed the effect of gender differences on Internet usage (Akhter, 2003; Janda, 2008; Van Slyke et al., 2002). Female buyers are more risk averse in online shopping compare to their male fellows (Schumacher & Morahan-Martin, 2001). Dittmar et al. (2004) write that male's behavior towards traditional and online shopping are similar whereas females like to touch and feel products therefore they enjoy traditional shopping more than online shopping. Cho & Workman (2011) indicated that females like to evaluate the products physically while males are not very much sensitive regarding the physical interaction with the product. These authors concluded that fewer women shop online because of a lack of social interaction. Therefore, the numbers of females whom do online shopping are much less than males. Van Slyke et al. (2002) wrote males are more willing to shop online than females. Hasan (2010) reported that women like to shop in a physical store than shopping in a virtual one.

Haque & Khatibi (2005), Salehi et al. (2011) indicate that majority of Malaysian especially young people were using Internet for non-shopping activities such as searching for information, entertainment, playing games and communication with others. Salehi et al. (2011) concluded that to convince and attract Malaysian consumers to use Internet as their channel retailing instead of traditional channels is still a challenging task for web retailers in Malaysia. There are some barriers which have contributed to the unwillingness of Malaysian people to shop online; like more females being afraid of their personal information to be stolen by others, so, they prefer offline store or switch from online to store channel (Haque & Khatibi, 2005). Afizah et al. (2009) reported that males can get along and accept online shopping in compared to females in Malaysia because males use Internet more frequently and are more risk takers to shop online. It was expected that male and female participants would differently intend to choose/switch channels in regard to Internet and brick and mortar store channels. It was also expected that female consumers have higher intention to use brick and mortar store channels; and/or switch from Internet channel to brick and mortar stores. In contrast, male consumers are more likely to select online channel; thus the last hypothesis was developed as following:

H5a: Gender will influence channel-switching behavior from Internet to the brick-and-mortar stores

H5b. Gender will influence channel-switching behavior from brick-and-mortar stores to Internet

2.1.4. Channel Switching Intention affects Channel Switching Behavior

Predicting an actual behavior is important because it allows them to develop communication strategies that will directly affect the behavior. A relationship between intention and actual behavior has been found with respect to various types of behaviors. Shih & Fang (2004) also found that consumers' intention to use Internet banking was positively related to actual usage of Internet banking. In general, a behavior can be predicted by intention to perform the behavior with considerable precision (Ajzen 1988).

Taylor & Todd (1995) demonstrated that the greater attitude will lead to stronger individual's intention to execute a behavior. Offering an enough amount of actual control over the behavior, consumers are more likely to perform their intentions when the opportunity increases (Ajzen & Fishbein 1980). Intention is hence supposed to be the instant predecessor of behavior (Fishbein & Ajzen, 1975). Thus, with strong influence of attitude on consumer channel switching intention it leads higher influence of intention on consumer behavior whether to select online channel, offline channel or switch from one channel to another one (Choi & Park, 2006; Pookulangara et al., 2011; Verhoef et al., 2005). Therefore, it is expected that the stronger consumers' intention to switch channel, the more frequently they will actually switch channel.

H6a: Channel switching intention positively affects channel-switching behavior from Internet to the brick-and-mortar stores.

H6b: Channel switching intention positively affects channel-switching behavior from the brick-and-mortar stores to Internet.

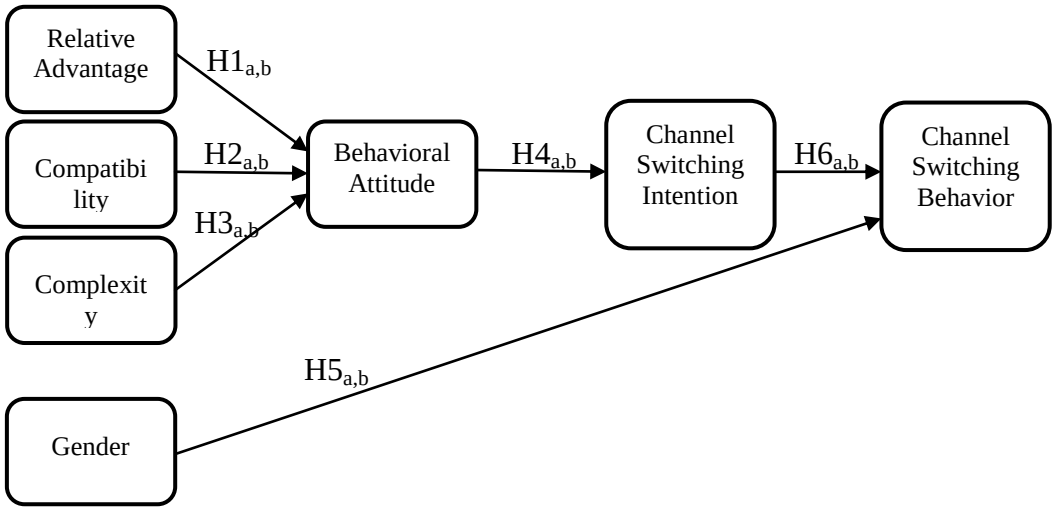


**Figure: 1 Research Framework**
a: Internet switching to brick-and-mortar stores
b: Brick-and-mortar stores switching to Internet
**Source:** Adapted from Taylor & Todd (1995), Pookulangara et al. (2011)

The theoretical framework and hypotheses is based on Figure 1 which shows the consumers' channel migration behavior from one of the following channels: Internet and brick and mortar stores. The influence of relative advantage, compatibility, and complexity on attitude; attitude on intention; gender and channel switching intention on channel switching behavior depicted in Figure 1.

## 3. Method

### 3.1. Data collection approach

A survey questionnaire was constructed to collect the necessary data to answer the research questions as being framed on related affective factors of consumers' channel switching behavior. The study was based on simple random sampling, with the survey instrument administered to the Malaysian consumers from regions of Klang Valley and Penang. Klang Valley and Penang are most populated regions in Malaysia and as one of the main channels in this study is Internet, the population based in Klang Valley and Penang, Malaysia is chosen for sampling (Raman & Annamalai, 2011). The chosen sampling population from Klang Valley and Penang has basic understanding and experience on the internet and online

purchasing respectively and they are actively involving with online transactions (Raman & Annamalai, 2011). Questionnaire was distributed to 615 respondents in Malaysia and 497 sets were returned which made up 81% of overall responses. This is a valid percentage as the response rate is sufficient and ready to be measured. Also, of the participants' surveyed, about 118 (19%) of responses were deemed unusable due to the failure of the respondents to complete major portions of the survey questionnaire. The respondents had to meet the criteria of shopping online and/or brick and mortar store prior to participating in the survey.

Questionnaire was distributed using mall intercept at selected retail outlets located at one of the regions in Klang Valley and Penang. Researcher distributed questionnaire personally to the respondents in different retail outlets included supermarkets, small retail stores, departmental stores, specialty stores, hypermarkets, malls and also libraries. It seems that places cover target population of this study and help to find different people in different fields. The survey instrument was pre-tested for content validity and adjustments were made prior to main data collection. The survey instrument was pre-tested with consumers (N = 30). It was assumed that these consumers had used at least one channel (i.e., brick and mortar store and/or the Internet) in last six months. These consumers were comprised of professors and senior lecturers at the University of Malaysia (UM) and Universiti Putra Malaysia (UPM). Based on feedback from the pilot study group, minor adjustments were made to the instrument scale. This feedback was implemented into the instrument and content validity claim was established accordingly. Items were revised to ensure readability and a logical flow of questions.

Whilst, objective of the current research is to confirm the hypothesized relationships between the model's variables, therefore, in this study, the research model was tested by using partial least squares (PLS) based SEM technique, as suggested by other researchers who have studied based on the behavioral models (Chang, 1998; Ryu et al., 2003). SmartPLS 2.0 software was used to analyze data (Ringle et al., 2005).

### 3.2. Measures

To assess relative advantage, compatibility and complexity, items were adapted from Taylor & Todd (1995) and Beiginia et al. (2011). Ten items were developed to examine the impact of relative advantage, compatibility and complexity on attitude. To measure attitude, 3 items were adapted from previous study (Pookulangara et al., 2011) and 3 items to measure channel switching intention (Verhoef, 2007; Pookulangara et al., 2011). All of these items were measured on a 7-point Likert scale, with 1 (extremely disagree or low) to 7 (extremely agree or high). Finally, items to measure channel migrating behavior items were adapted from Ajzen (2006) and Pookulangara et al. (2011). Two items were developed to

measure channel migrating behavior and consumers have 5 options to select (from never to more than 15 times).

3.3. Respondents Profile

With refer to Table 1, a remarkable percentage of the respondents (57.9%) are less than 34 years old. Also, majority of the respondents are females. 283 of respondents are female (56.9%) and 214 are male, which contributes to 43.1% of the total respondents participated in this study. 51.1% of the respondents are Malay, followed by 28.6% Chinese and 20.3% Indian. Table 1 further indicates that 57.7% of the practitioner posse bachelor's degree, 33.8% posse master's degree and 8.5% posse doctoral degree.

**Table 1: Respondents' Profile**

| Variable | Frequency (N = 497) | Percentage |
|---|---|---|
| **Age** | | |
| 18-24 | 172 | 34.6 |
| 25-34 | 116 | 23.3 |
| 35-44 | 74 | 14.9 |
| 45-54 | 68 | 13.7 |
| 55-64 | 48 | 9.7 |
| 65+ | 19 | 3.8 |
| **Gender** | | |
| Male | 214 | 43.1 |
| Female | 283 | 56.9 |
| **Race** | | |
| Malay | 254 | 51.1 |
| Chinese | 142 | 28.6 |
| Indian | 101 | 20.3 |
| **Education Level** | | |
| Bachelor's Degree | 287 | 57.7 |
| Master's Degree | 168 | 33.8 |
| Doctoral Degree | 42 | 8.5 |

3.4. Other external variables

Table 2 shows differences between male and female variables among online and offline channel users. In terms of gender, searched and purchased online consumers presented a greater percent of male (78.8 and 53.2 percent respectively), whereas consumers searched and purchased in brick and mortar store presented a greater percent of female (95.9 and 91.5 percent respectively). This confirmed that more females tend to shop offline compared to males (Dittmar et al., 2004; Schumacher & Morahan-Martin, 2001).

**Table 2: Descriptive Statistics of the Respondents**

| Variables | Searched for information (percent) Internet | Purchased products/services (percent) Internet | Searched for information (percent) Store | Purchased products/services (percent) Store |
|---|---|---|---|---|
| Male | 78.8 | 53.2 | 88.4 | 83.7 |
| Female | 63.8 | 37.8 | 95.9 | 91.5 |

3.5. Common method bias

In the single survey method of data collection, common method bias might occur especially in collecting data from the target population (MacKenzie & Podsakoff, 2012; Podsakoff, et al., 2003). Two statistical methods were conducted in the data analysis stage. Initially, a Harmon's one-factor test (Podsakoff et al., 2003), where the data were entered in unrotated exploratory factor analysis was executed. This test was used to check if a single factor emerges or a single factor accounts for the majority of the variance. In our test, 45 factors emerged, the largest of which accounted for 29 percent of the variance; the finding shows that common methods bias is not an issue in this study. Since there were constraints in the previous test (Kemery & Dunlap, 1986), we had to try the marker variable approach as well (Lindell & Whitney, 2001; Podsakoff et al., 2003). Therefore, we applied extended PLS algorithm Lohmöller's (1989) and examined several marker variables to assess the loadings on every item in the PLS path model, in addition to each item's loading on its theoretical construct. A comparison of the estimated path model interactions with and without each of the additional marker variables confirms no remarkable differences, and all theorized paths retain their level of statistical importance. Hence, neither the traditional single-factor test nor the marker variable approach suggests a threat of common method bias.

## 4. Data analysis and Results

The Partial Least Square (PLS)-based Structural Equation Modeling (SEM) technique was used to test research hypotheses as well as research model. The results of the data analyses are organized into the following sections: measurement model; structural model.

4.1. Measurement Model

The PLS technique is capable of calculating key output such as factor loadings, Cronbach's alpha, composite reliabilities (CR) average variance explained (AVE) and discriminant validity to establish the validity and reliability (Fornell & Cha, 1994; Ringle et al., 2005). We ran a confirmatory factory analysis in SmartPLS

2.0 and assessed reliability and convergent validity for the reflective constructs. In order to examine the construct validity, first, the standardized estimated loading should be ideally higher than 0.7 (Hair et al., 1998). Validity and reliability are evaluated by computing cross loadings, AVE, CR and Cronbach's alpha (Bagozzi & Yi, 1988). The general acceptable cut-off values are 0.50 for AVE and 0.70 for both CR and Cronbach's alpha (Fornell & Larcker, 1981; Hair et al., 1998). Thus, based on CR and AVE data reduction techniques were applied to several of the variables (i.e., attitudinal beliefs) in order to convert the individual variable items into manageable a smaller number of dimensions. Furthermore, discriminant validity was assessed according to Fornell & Larcker (1981) criterion.

4.1.1. Internet

All measurement variables with loadings under 0.70 were removed. This included the removal of first item of complexity. After excluding this item, factors were computed again. In addition, Cronbach's Alphas were well above the acceptable level ranging from 0.71 to 0.94 for relative advantage, compatibility and complexity, attitude with 0.93, channel switching intention with 0.94 and channel switching behavior 0.84. And also CR was 0.97, 0.98, 0.87, 0.96, 0.96 and 0.93 for relative advantage, compatibility, complexity; attitude, intention and channel switching behavior respectively (see Table 3). So based on Cronbach's Alpha and CR all these latent variables regarding Internet channel had reliability (higher than 0.7). Also, average variance extracted (AVE) was 0.88, 0.94, 0.78, 0.87, 0.89 and 0.86 for relative advantage, compatibility, complexity, attitude, channel switching intention and channel switching behavior respectively. These measurements are well above the 0.50 recommended level (Fornell & Larcker, 1981). These results indicate that the constructs associated with outer measurement models exhibited satisfactory convergent validity.

4.1.2. Brick and Mortar Stores

Based on factor loading analysis one indicator of complexity was revealed (items less than 0.7) and software was run again to compute better reliability for each construct. Thus, all factor loaded were standardized (see Table 3). Cronbach's Alpha was 0.94, 0.97, 0.79, 0.97, 0.90, 0.88 and CR was 0.96, 0.98, 0.87, 0.98, 0.93 and 0.94 for relative advantage, compatibility, complexity, attitude, channel switching intention and channel switching behavior respectively. These results approved reliability of these three constructs. High score of AVE shows the convergent validity for relative advantage, compatibility, complexity, attitude, channel switching intention and channel switching behavior (AVE were in the range from 0.86, 0.94, 0.77, 0.94, 0.83 and 0.89 respectively) (Table 3).

## Table 3: Factor Analysis and Reliability

| Measurement Variables | Internet | | | | Brick-and-Mortar Stores | | | |
|---|---|---|---|---|---|---|---|---|
| | Factor Loading | α | CR | AVE | Factor Loading | α | CR | AVE |
| **Relative Advantage** | | 0.95 | 0.97 | 0.88 | | 0.94 | 0.96 | 0.86 |
| It is important to me to choose a channel that has more advantages than disadvantages. | 0.944 | | | | 0.878 | | | |
| It is important to me to choose a channel that will offer me any new benefits. | 0.946 | | | | 0.939 | | | |
| I choose a channel that makes it easier for me to do my shopping activities. | 0.929 | | | | 0.948 | | | |
| I choose a channel that allows me to manage my shopping activities more efficiently. | 0.933 | | | | 0.934 | | | |
| **Compatibility** | | 0.97 | 0.98 | 0.94 | | 0.97 | 0.98 | 0.94 |
| I use a channel that is compatible with my lifestyle. | 0.969 | | | | 0.966 | | | |
| I use a channel that fits well with my lifestyle. | 0.973 | | | | 0.980 | | | |
| I use a channel that is compatible with the way I like to do shopping activities. | 0.966 | | | | 0.963 | | | |
| **Complexity** | | 0.71 | 0.87 | 0.78 | | 0.79 | 0.87 | 0.77 |
| I use a channel that is difficult to learn. | 0.438 | | | | 0.993 | | | |
| I use a channel that is easy to operate. | 0.893 | | | | 0.331 | | | |
| I use a channel that is frustrating to learn. | 0.868 | | | | 0.742 | | | |
| **Attitude** | | 0.93 | 0.96 | 0.88 | | 0.97 | 0.98 | 0.94 |
| I think changing from A1,2 to B1,2 is good | 0.944 | | | | 0.966 | | | |
| Changing from A1,2 to B1,2 is wise | 0.962 | | | | 0.981 | | | |
| Using B1,2 instead of A1,2 is good | 0.914 | | | | 0.967 | | | |
| **Channel Switching Intention** | | 0.94 | 0.96 | 0.89 | | 0.90 | 0.93 | 0.83 |
| intend to change to Channel B1,2 from 'Channel A1,2' while shopping | 0.942 | | | | 0.923 | | | |
| plan to change to 'Channel B1,2' from 'Channel A1,2' for all my shopping | 0.957 | | | | 0.915 | | | |
| Given the chance, I predict I will change to 'Channel B1,2' from 'Channel A1,2' in the future | 0.934 | | | | 0.890 | | | |
| **Channel Switching Behavior** | | 0.84 | 0.93 | 0.86 | | 0.88 | 0.94 | 0.89 |
| How many times in the course of last six months have you changed from 'Channel A1,2 to Channel B1,2' while searching for information? | 0.926 | | | | 0.944 | | | |
| How many times in the course of last six months have you changed from 'Channel A1,2 to Channel B1,2' while purchasing? | 0.930 | | | | 0.945 | | | |

Where channel A1: Internet, channel A2: brick-and-mortar stores, channel B1: brick-and-mortar stores and B2: Internet

Moreover, Table 4 and Table 5 present the correlation scores among all constructs and the square root of the AVE of all constructs. The square root of the AVE is consistently greater than the corresponding correlations, thus suggesting the evidence for discriminant validity of all constructs (Fornell & Larcker, 1981). The off-diagonal values matrix are the correlations between the latent constructs.

**Table 4: Discriminant Validity of the Constructs – Internet**

| | Attitude | CSB | Complexity | Compatibility | CSI | Relative Advantage |
|---|---|---|---|---|---|---|
| Attitude | **0.94**[a] | 0 | 0 | 0 | 0 | 0 |
| CSB | 0.40 | **0.93** | **0** | 0 | 0 | 0 |
| Complexity | 0.64 | 0.39 | **0.88** | 0 | 0 | 0 |
| Compatibility | 0.68 | 0.43 | 0.62 | **0.97** | 0 | 0 |
| CSI | 0.66 | 0.48 | 0.54 | 0.62 | **0.94** | 0 |
| Relative Advantage | 0.64 | 0.40 | 0.59 | 0.90 | 0.60 | **0.94** |

[a] The diagonals represent the square root of AVE and the off-diagonals represent the correlation.

Note: CSB = Channel switching behavior; CSI = Channel switching intention.

**Table 5: Discriminant Validity of the Constructs-Brick-and-Mortar Stores**

| | Attitude | CSB | Complexity | Compatibility | CSI | Relative Advantage |
|---|---|---|---|---|---|---|
| Attitude | **0.97**[a] | 0 | 0 | 0 | 0 | 0 |
| CSB | 0.52 | **0.94** | **0** | 0 | 0 | 0 |
| Complexity | 0.74 | 0.41 | **0.97** | 0 | 0 | 0 |
| Compatibility | -0.20 | 0.15 | -0.28 | **0.88** | 0 | 0 |
| CSI | 0.60 | 0.43 | 0.59 | -0.01 | **0.91** | 0 |
| Relative Advantage | 0.75 | 0.40 | 0.87 | -0.29 | 0.54 | **0.93** |

[a] The diagonals represent the square root of AVE and the off-diagonals represent the correlation.

Note: CSB = Channel switching behavior; CSI = Channel switching intention.

4.2. Structural Model

PLS can evaluate theoretical hypotheses as well as indicate the existence of relationships for further testing (Chin et al., 2003). PLS can be used in estimating latent structural models that are indirectly observed by multiple indicators for theory testing and development as well as offering predictive applications (Anderson & Gerbing, 1998). The focus of the assessments of structural paths in PLS is on the inner model and the significance of the paths can be measured by bootstrapping critical ratios. Critical t-values for a two-tailed test are 1.65 (significance level = 10 percent), 1.96 (significance level = 5 percent), and 2.58 (significance level = 1 percent) (Hair et al. 2011).

In the structured model of this study, all constructs had reflective items, as depicted in Figures 2 and Figure 3. The significance of reflective outer-measurement model via bootstrapped t-values of item loadings was assessed. The bootstrapping method of sampling was used to estimate the precision of the reflective outer-measurement models. Bootstrap t-values were computed on the basis of 500 bootstrapping runs. The model parameters as depicted in the Figure 2 and Figure 3 were estimated using PLS with the focus here on the inner results as they relate directly to hypotheses. Thus, an examination for each exogenous and endogenous construct of the model was undertaken via path weight coefficients, standard error, $R^2$ and bootstrap critical ratios (t-values).

The primary evaluation criteria for the structural model are the $R^2$ measures and the level and significance of the path coefficients. Because the goal of the prediction-oriented PLS‑SEM approach is to explain the endogenous latent variables' variance, the key target constructs' level of $R^2$ should be high. The judgment of what $R^2$ level is high depends, however, on the specific research discipline (Hair et al., 2011). Whereas $R^2$ results of 0.20 are considered high in disciplines such as consumer behavior (Hair et al., 2011).

With the collected data from the survey consumer channel switching behavior in regards to two channels (Internet and brick and mortar stores). All the dimensions are included in the final data analysis, except for one of the dimension for Internet channel (first item of complexity). Also one dimension for brick and mortar stores (second item of complexity) was removed because of factor loadings less than 0.7. After these low items were extracted, factors were analyzed again and sufficient supports of reliability and validity of the measurement scales were achieved. As the measurement assessment supported the validity and reliability of measured items, a series of hypothesis tests proposed in the model are followed using PLS techniques.

4.2.1. Hypothesis Testing: Internet

Hypotheses will be tested in the following discussion for consumer channel switching intention from Internet to brick and mortar store. Relative Advantage, compatibility and complexity were the exogenous (independent) latent constructs that were utilized to predict attitude as endogenous (dependent) latent construct toward channel-switching intention in Internet channel. The results in Table 6 and Figure 2 indicate that compatibility and complexity have a positive and strong relationship with attitude ($\beta$ = 0.37 and 0.36 and t-values = 4.90 and 7.77 respectively) ($p < 0.01$) and supporting H2a and H3a. Somewhat unexpectedly, relative advantage does not influence attitude because path coefficient and t-value are not significant, so the findings do not support H1a (relative advantage on attitude), but H2a and H3a (compatibility and complexity) will significantly

predict attitude towards switching channel from the Internet to brick-and-mortar stores.

Attitude was the exogenous constructs for the endogenous construct channel-switching intention. The results show that attitude (t-value = 4.43 and $\beta = 0.22$) positively and significantly affected consumer channels switching intention. The path coefficient between this variable and channel switching intention was significant at 0.01. Therefore, H4a (attitude) positively affected channel-switching intention from Internet to the brick-and-mortar stores. In addition, the results confirm that gender (0.21, $p < .01$) was a significant predictor for channel switching behavior, so, H5a is supported. Last but not least, channel-switching intention was the exogenous construct for the endogenous construct channel-switching behavior. Channel-switching intention with t-value of 5.19 and path coefficient of 0.30 ($p < 0.01$) significantly affected channel-switching behavior. Hence, H6a was supported (Table 6 and Figure 2).

**Table 6: Results of Hypotheses Testing-Internet**

| Predicted variables | Predictor variables | Hypothesis | Path weight | Standard Error | t-values | |
|---|---|---|---|---|---|---|
| Attitude | Relative Advantage | H1a | 0.09 | 0.06 | 1.40 | Not Supported |
| | Compatibility | H2a | 0.37*** | 0.08 | 4.90 | Supported |
| | Complexity | H3a | 0.36*** | 0.05 | 7.77 | Supported |
| Channel Switching Intention | Attitude | H4a | 0.22*** | 0.05 | 4.43 | Supported |
| Channel Switching Behavior | Gender | H5a | 0.21*** | 0.07 | 2.93 | Supported |
| Channel Switching Behavior | Channel Switching Intention | H6a | 0.30*** | 0.06 | 5.19 | Supported |

* Significant at $p < 0.1$
** Significant at $p < 0.05$
*** Significant at $p < 0.01$

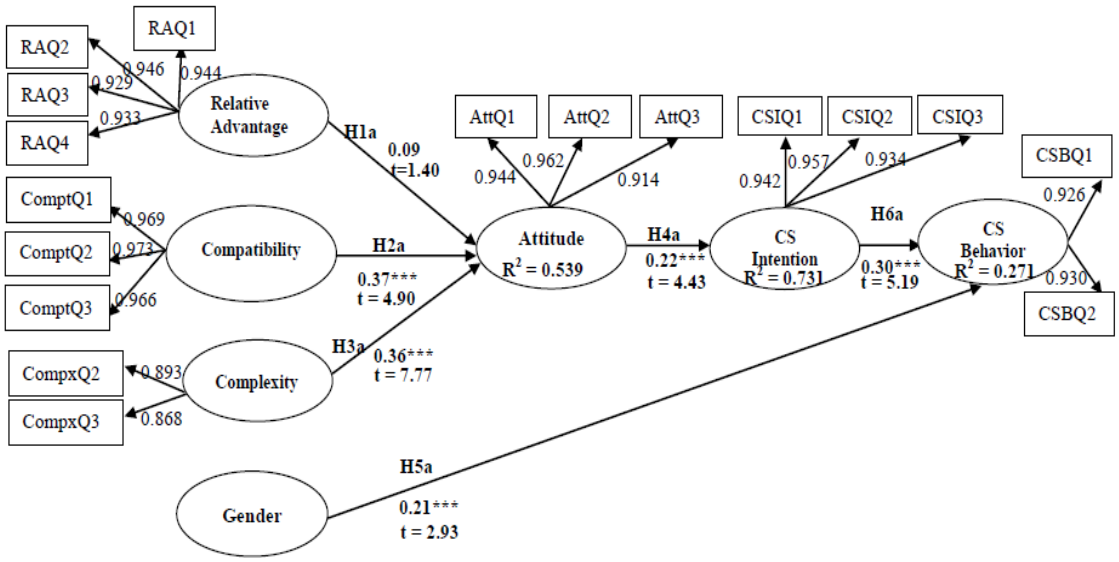


**Figure 2: Research Model for Channel-Switching Behavior – Internet**

Note: * p < 0.1; ** p < 0.05; *** p < 0.01

4.2.2. Hypothesis Testing: Brick-and-Mortar-Stores

Relative Advantage, compatibility and complexity were the exogenous (independent) latent constructs that were used to examine whether they influence attitude as endogenous (dependent) latent construct toward channel-switching intention in brick and mortar stores channel. The findings indicated that relative advantage and compatibility with β=0.44 and 0.36 and t-values = 5.70 and 4.45 respectively significantly affected attitude toward channel switching intention from brick and mortar stores to Internet. On the other hand, complexity did not affect attitude with insignificant path coefficient (β = 0.03 and t-values = 1.37) (see Table 7). Thus, H1b (relative advantage) and H2b (compatibility) positively affected behavioral attitude toward channel-switching from brick-and-mortar stores to the Internet.

In this study exogenous constructs for channel switching intention as endogenous construct is attitude. The results revealed that attitude (t-values = 4.57 and β = 0.33) positively and significantly affected channel switching intention. Hence, H4b (attitude) positively and strongly affected channel-switching intention from brick-and-mortar stores to Internet. Furthermore, the findings reveal that gender (0.25 p < 0.01) significantly affects channel switching behavior, thus, H5b was supported. Channel switching intention was an exogenous construct that directly affected consumer channel switching behavior. Results also supported H6b with β = 0.21 and t-values = 4.61. Thus, Channel switching intention positively and strongly influenced channel-switching behavior from brick-and-mortar stores to Internet channel (Table 7 and Figure 3).

**Table 7: Results of Hypotheses Testing-Brick and Mortar Stores**

| Predicted variables | Predictor variables | Hypothesis | Path weight | Standard Error | t-values | |
|---|---|---|---|---|---|---|
| Attitude | Relative Advantage | H1b | 0.44*** | 0.08 | 5.70 | Supported |
| | Compatibility | H2b | 0.36*** | 0.08 | 4.45 | Supported |
| | Complexity | H3b | 0.03 | 0.02 | 1.37 | Not Supported |
| Channel Switching Intention | Attitude | H4b | 0.33*** | 0.07 | 4.57 | Supported |
| Channel Switching Behavior | Gender | H5b | 0.25*** | 0.07 | 3.66 | Supported |
| Channel Switching Behavior | Channel Switching Intention | H6b | 0.21*** | 0.05 | 4.61 | Supported |

* Significant at p < 0.1
** Significant at p < 0.05
*** Significant at p < 0.01

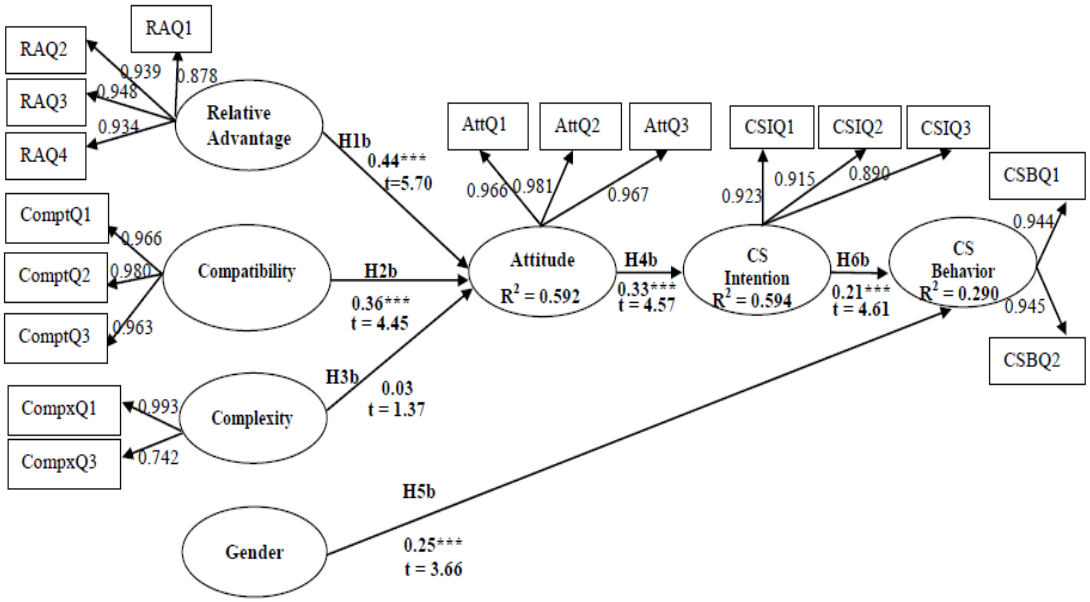


**Figure 3: Research Model for Channel-Switching Behavior-Brick and Mortar Store**

Note: * p < 0.1; ** p < 0.05; *** p < 0.01

Last but not least, the interpretation of the value of $R^2$ is discipline specific (Hair et al., 2011). The explanatory power ($R^2$) of the predictor constructs range from 27.1 percent to 73.1 percent (for Internet channel) and 29 percent to 59.4 percent (regarding brick and mortar store channel) (Table 8). Examination of the change

in $R^2$ can help to verify whether a predictor latent variable (LV) has a substantial and considerable influence on a particular predicted LV. Furthermore, blindfolding procedure applied to attain predictive relevance ($Q^2$). For SEM models, $Q^2$ values larger than zero for a specific reflective endogenous latent variable show the path model's predictive relevance for a particular construct (Hair et al., 2011). A blindfolding procedure yielded positive $Q^2$ values for all endogenous constructs confirming predictive relevance for our research model (see Table 8).

**Table 8: Results of $R^2$ and $Q^2$**

| Endogenous Constructs | Internet $R^2$ | Brick-and-Mortar Stores | Internet $Q^2$ | Brick-and-Mortar Stores |
|---|---|---|---|---|
| Attitude | 0.539 | 0.592 | 0.47 | 0.56 |
| Channel Switching Intention | 0.731 | 0.594 | 0.64 | 0.48 |
| Channel Switching Behavior | 0.271 | 0.290 | 0.23 | 0.26 |

## 5. Discussion and Implications

The present study provides evidence of consumer channel switching behavior. Based on the data analyses and findings, it can be notified that exogenous variables in both channels (Internet and brick and mortar stores) have differences as well as similarities while predicating channel switching behavior. In the current study relative advantage, compatibility and complexity are three exogenous constructs which differently predicted attitude toward channel switching intention in both channels (Internet and brick and mortar stores). The significant effect of relative advantage on attitude toward channel switching intention from brick and mortar store to Internet is not surprising given the fact that the extrinsic benefits of using Internet channels are numerous for those consumers who prefer online shopping. Some of the benefits are faster and convenient execution of online transactions, lower economic cost (reduced commuting, time saving) convenient online access to product information and others (Chen et al., 2002). The results of this study imply that individuals form positive attitude towards channel switching intention from stores to use Internet because of these benefits. The significant effect of attitude on intention found in this study and also in other studies (Pookulangara et al., 2011, Ajzen & Fishbein, 1985) implies that before individuals start using Internet channel, a positive attitude towards the technology needs to be formed. The benefits, such as convenient and economic gains, time saving can be highlighted as positive features of Internet channel (Zettelmeyer et al., 2006). Retailers and marketers in Malaysia should continue publicizing these

benefits so that customers and potential customers will develop positive attitude towards Internet channel.

The linkage between compatibility and attitude has also been found in other studies (e.g., Taylor & Todd, 1995; Rogers, 1983). This finding suggests that a positive attitude towards channel switching intention in Internet and brick and mortar stores channels can be developed by highlighting the compatibility of the technology as well as traditional stores with individual existing values and needs. Communicating, working, and entertaining online and stores shopping reflect the current and future lifestyle. Some of consumers prefer online shopping due to this fact that they are accessed to more and faster product information through Internet channel (Morton et al., 2001). On the other hand, some of consumers change channel from Internet to store because they are more comfortable with store (Hasan, 2010) and the traditional channel is more compatible with most of Malaysian consumers' lifestyle. Also, some of consumers use both Internet and brick and mortar stores channels to decrease cost of shopping (e.g., consumers search for information through online and purchase in a store) (Dholakia et al, 2005).

As already mentioned complexity significantly predicted attitude toward channel switching intention from Internet to brick and mortar stores, but did not affect attitude toward channel switching intention from store to Internet channel. It shows that Internet channel is still not very easy to use for most of Malaysian consumers and they preferred to switch channel from Internet to stores due to complexity of the Internet channel. As a result, consumers change channel from Internet to stores because brick-and-mortar store is more compatible with their life style and easier to use. The findings imply that retailers and marketers need to make Internet channel easy to use, otherwise, consumers prefer to use store channel (switching channel from Internet to store).

One interesting aspect of this finding is the great effect of relative advantage as compared to complexity on attitude toward channel switching intention from brick and mortar stores to Internet. This suggests the importance of perceived relative advantage (usefulness) over complexity in influencing individual attitude to change channel from stores to Internet channel. We believe, to enhance a positive attitude toward Internet channel, a greater emphasize should go in making the technology useful. However, this does not imply that we should abandon the efforts to make Internet channel easy to use. It indicates a higher need to promote the usefulness (relative advantages) of the online shopping and Internet channel over its complexity.

Attitude was an important predictor for both channels Internet and brick and mortar stores. Prior studies also supported that attitude significantly and positively impacted on consumers' intention (Ajzen, 1991; Shih & Fang, 2004; Taylor & Todd, 1995). Malaysian consumers changed channels from Internet to brick and

mortar stores and vice versa while they expressed that a channel is not under their favor. The results of the study confirmed the role of attitude toward consumers' channel switching intention to both channels. This result is in line with previous findings of the role of attitude toward online and offline consumers' shopping behavior and consumers' channel switching behavior (Pookulangara et al., 2011, Abdul-Muhmin, 2011). As discussed earlier relative advantage, compatibility and complexity differently affected attitude in Internet and brick and mortar stores channels. Retailers and marketers need to pay attention on these factors as well as on attitude itself to find out how consumers' behavioral attitude is influenced by these factors and how attitude affects consumers' channel switching intention whether to switch channel from Internet to brick and mortar stores and vice versa.

The other suggestion is to find affective solutions to attract male and female customers to buy online which is really essential for online sellers. Generally, female customers do not have much experience in online shopping (Janda, 2008); they are more likely to switch channel from Internet to store and have more online risks toward online shopping (Schumacher & Morahan-Martin, 2001); so they may be more likely than males to refer to recommendations during the online decision-making process. In contrast, more male consumers purchase online and also switch channel from store to Internet channel. Thus, in order to offer an appropriate channel to the buyer building a demographic-based recommendation system which uses data like gender is important for online marketers. Furthermore, online sellers can benefit by building communities for the buyers to motivate them and to share their reviews about the goods directly. Such way would be important for female consumers because they like to socialize more and express their feelings (Dittmar et al., 2004). Also, they like to hear others opinions comparing to males (Dittmar et al., 2004). As already being noted, more females intend to switch online channel and they are not also interested in online shopping due to risk issue (Schumacher & Morahan-Martin, 2001), so it may be particularly important to realize that one of the best ways to reduce the perceptions of risk that women associate with a given site may be to take actions that both reduce the risks of buying from that site and give women an incentive for sharing their positive experiences with their friends (Garbarino & Strahilevitz, 2004) as well as other mechanisms to enhance female consumers' comfort level in terms of risk issues (Chang & Chin, 2004).

Channel switching intention directly impacts on actual behavior (Pookulangara et al., 2011; Choin & Park, 2006). Behavioral intentions are motivational factors that capture how hard people are willing to try to perform a behavior (Ajzen 1991; Pavlou & Fygenson, 2006). According to the results of this investigation channel switching intention significantly affected channel switching behavior in both Internet and brick and mortar stores channels. Therefore, it can be inferred that Malaysian consumers' channel switching behavior was influenced by more favourable attitude and intention. This finding is in line with previous researches.

Previous researches indicated that more significant impact of attitude will lead to stronger consumers' intention to perform behavior (Ajzen & Fishbein 1980; Ajzen 1991, 1996; Pookulangara et al., 2011).

### 5.1. Implications and Recommendations

The findings of this research have numerous implications both from a theoretical and practical standpoint. This study provides a framework that helps researchers understand the drivers of consumers' channel switching behavior regarding Internet and brick and mortar store channels. In this research, the belief (i.e., attitude) decomposed into multi-dimensional constructs (Taylor & Todd, 1995). With the exceptions of two attitudinal beliefs (relative advantage in Internet channel and complexity in brick and mortar store channel) and all other antecedents were supported. The results of this study provide significant antecedents that can be used in the context of consumers' channel switching behavior to understand the specific factors that influence individual intention whether to switch channel or not.

At the same time, behavioral switching intention is also affected by exogenous factor (e.g., attitude) incorporated in the framework. Attitude of the framework significantly affected consumers' switching intention and intention significantly predicted channel switching behavior in the both Internet and brick and mortar stores channels. Therefore, an attempt could be made to filter out the relatively less significant factors and/or determine relevant situational differences and set up a new conceptual framework. The successful validation of these constructs on channel switching intention demonstrates that the research model is well founded. Also, from the viewpoint of consumers' channels switching behavior in Malaysia, this study contributes positively in research utilizing a well-grounded theory.

#### 5.1.1. Practical Implications

The decomposition of attitude suggests three antecedents of attitudes: relative advantage, compatibility and complexity (Taylor & Todd, 1995). To build positive attitude towards Internet channel, retailers and marketers need to publicize the benefits and advantages associated with the online shopping such as faster and higher availability of product information, lower economic cost, and others (Zettelmeyer et al., 2006). Results of this study showed that 83.7% (males) and 91.5% (females) purchased their product from brick and mortar stores in last one year, so it confirmed that store channel is well suited with Malaysian consumers' lifestyle. But on the other hand only 53.2% (males) and 37.8% (females) of Malaysian consumer purchased their products/services through online in last one year. Therefore, Internet channel also needs to be highlighted as compatible with an individual's existing values and needs. Findings of this investigation revealed that Malaysian consumers switched Internet channel to brick and mortar stores because they perceived that online shopping is complex

and not easy to use. Doing financial transactions online can be linked to the current and future lifestyle where communication, work and entertainment are done online (Ansari et al., 2008). To promote this positive attitude requires retailers and even government to make the technology easy to use (Paynter & Lim, 2001). Familiar interface design may be one step towards this objective.

## 6. Limitations and Future Research

As with any study, there are limitations to this research. First, in the current investigation attitude was measured by three components (relative advantage, compatibility and complexity). As previous researchers contend that in respect to multichannel consumer behavior and channel switching behavior attitude can be measured by other dimensions, such as hedonic and utilitarian behavioral belief scale (Watchravesringkan et al., 2010; Pookulangara et al., 2011). As such, future research should incorporate a hedonic and utilitarian constructs into a broader model regarding analyzing the impact of attitude on channel switching intention.

Second, in this research Malaysian consumers' channel switching behavior was evaluated only in two channels (i.e., Internet and brick and mortar stores channels). Technology is in constant progress, new devices like tablets are available to browse for products and mobile apps to shop online are becoming popular among consumers, as technology changes and mobile online sales increase consumers' shopping habits are also changing (Beiginia et al., 2011). Younger generations have great technology assimilation and are growing with an online culture, therefore understanding mobile-commerce and its potential is fundamental. Catalog is the other suggested channel that can be examined (Pookulangara et al., 2011). Therefore, it is recommended that future researchers study Malaysian consumers' channels switching behavior by examining each of individual channels (catalog, mobile phone, tablet, and brick and mortar stores). Also, future studies are suggested to examine less pair similar channels (e.g., catalog and brick and mortar stores; brick and mortar stores and Internet by applying new online shopping devices like mobile phone as well as tablets).

Third, in this study questionnaire was collected from Malaysian consumers in two regions of the country (Klang Valley & Penang), and this could lead to differences in the parameters under study. Also, as one of the main channels in this study is Internet, so students are more familiar with the Internet and computer usage as compared to other groups (Sulaiman et al., 2008). Thus, it is suggested that future researchers examine Malaysian consumers' channel switching behavior by using students as respondents for each region separately.

Finally, in an attempt to understand consumers' channel switching behavior at a general level, consumers were not directed to respond in relation to a specific product. Consumers often are presented with a product decision prior to channel selection/switching, which presents a limitation to the work. Many consumers

select a retail channel first, with a purchase decision ultimately resulting; research focusing on the product/channel decision- making process would significantly enhance understanding of this critical issue (Mathwick et al., 2002). For example, it can be argued that the nature of the product could determine channel selection as well as channel switching behavior. Products that consumers feel need to be seen, touched, tasted, tried on, and etc prior to purchase are likely to be purchased through different channels than products that are electronically conveyable or have limited distribution (Mathwick et al., 2002). As such, future research should explore consumers' channel switching behavior as it relates to specific purchases and products.

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