

# **PERCEPTUAL DIFFERENCES OF OLDER CUSTOMERS' TO PURCHASE FROM ONLINE: MALAYSIAN PERSPECTIVE**

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## **ABSTRACT**

This paper aims to examine how older customers are differed their perception to purchase any products or services from online in Malaysian multiracial older generation's perspective. A total of 400 (235 males and 165 females) respondents response were collected by using mall intercept survey methods from the Klang Valley area in Malaysia. The statistical result showed that older consumer perception to purchase from online mostly influenced by the ease of use of the site followed by safety concern in their transaction. A major limitation lies in the self-reported nature of the survey used in this study. Future studies should be included with assessments such as observations or other-reported survey of the older customer's behaviors (male and female) separately of the subjects' of specific types of products or services. Given the substantial number of the elderly population in Malaysia this study will help online marketers to focus this segment which was previously unexplored by most of the researchers under Malaysian perspective.

**Keywords:** Older Consumers Attitudes; Perception; Perceived Ease of Use; Internet Safety Perception.

## **1. INTRODUCTION**

Growing fostering of online marketing among Western c societies is moderately beginning to be replicated in Asian countries. Because of rising middle class societies with increasing their spending pattern and national economies are booming, has made Asian consumers increasingly attractive to the online marketers. Even though the internet is prevalent nowadays, one segment has not yet been given full attention by the online marketers in Malaysia. That target market is the elderly market. This is due to marketers linking the online purchase commonly with the youngsters. Chen and Jones (1989) predicted that the numbers of older people will grow rapidly in ASEAN countries within the next few centuries. However; according to Poi et al. (2004) highlighted that enrichment in nutrition and public Health with advances in medicine

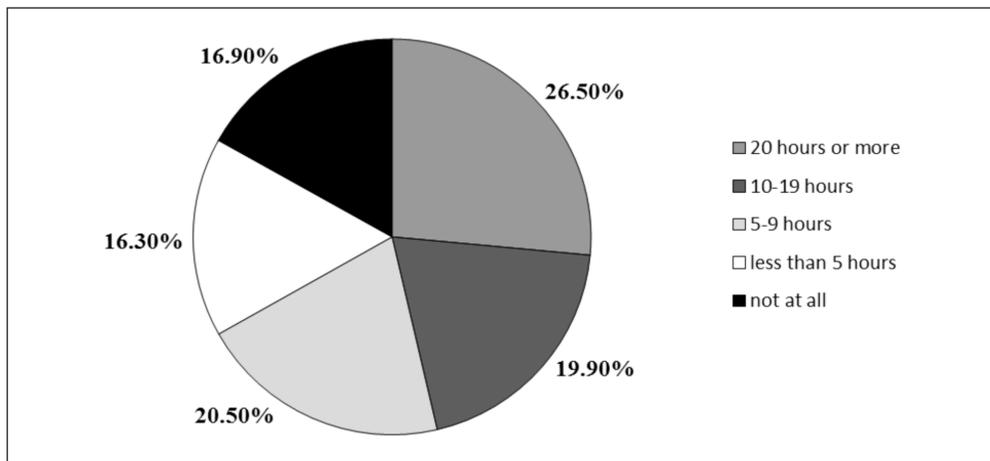
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has an effect on the life expectancy which ultimately affects on the demographic pattern in Malaysia. The number of Malaysians aged 65 years and over increased by an average of 2.5% per annum between 1991 and 2000 (National Census Report: Year 1991 & 2000) and has grown at a similar rate (2.4%) in the past 3 years. According to the report Monthly Statistical Bulletin Malaysia (2003) it is being revealed that out of a total population of 24 million, 1 million (4.5%) are aged over 65 years which seems to be a good segment to target by the online marketers. As a result the substantial number of the elderly population as well as their financial capability and stability, this is a matter worthy of discussing about their purchasing intention of products and services through online.

This paper explores the critical factors influencing older consumer's perception to purchase from online. Online marketing has become a key determinant to make a successful business nowadays. Most of the business enterprises are using the internet as a communication tool and this creates a new means for a competitive strategy (Celuch et al., 2007). The growth will progress continuously for instance total retail online sales in the year 2007 were USD\$136 billion, it has increased 25.6% from the year 2006 (U.S. Department of Commerce, 2007). The terms internet shopping and online marketing are customarily linked to the Y generations but not the elderly such the Baby Boomers generation. On the other hand marketers only target younger consumers by selling products and services that are highly related to technology (Silvers, 1997; Niemala, 2007). However, the baby Boomer segments or elderly target market should not be neglected simply because of their age, usage and knowledge about internet (Eastman & Iyer, 2005). Baby Boomers should be a considerable target market of a company, this is due to that they are one of the group that is growing rapidly in the United States and those who are 85 years old and above is the fastest rising subset of the group (Jones, 2001; Schewe & Noble, 2000, Polyak, 2000, Miller et al., 1998). Furthermore, purchasing power of the older consumers is significant (Oumlil & Williams, 2000, Age Wave, 2000, Eastman et al., 2005). Figure 1 shows the average hours/ week the elderly spent using the internet (Eastman & Iyer, 2004).

**Figure 1:** Average hours/week spent using the Internet



According to McMellon and Schiffman (2000) online activities offered opportunities that could bring advantages for the seniors who face problem in mobility. Furthermore, the internet is one of the important mass media and older consumers are now one of the fastest growing groups of new web users (O'Leary, 2000). Therefore, silver citizens become a vital and rapidly expanding segment in the Internet activities (Trocchia & Janda, 2000). This represents that the aging population has become a group that cannot be ignored (Phang et al., 2006).

However, problems that are faced by the e-commerce website developers is that the elderly have difficulties to operate the computers and browsing the websites. According to Gregor & Newell (2001) and Hanson (2001) which is due to eyesight problem, age factor, their cognitive functions and their motor skills which might get affected when they are navigating a website (Becker, 2004; Gregor & Newell, 2001; Hawthorn, 2000). Traditionally, marketers tend to give up the elderly target market because older consumers are less likely to participate in online activities due to their pessimistic attitude toward the advanced technology and will probably not attempt to learn how to operate the computer (Lenhart, 2000). Research by Lee (1970) and Morrison (1983) stated that ethics and social use of computers has led to unfavorable attitudes towards computers by this age group. Thus, this paper discusses critical factors influencing elderly consumer's perception to purchase online. Based on the previous record Malaysian Government spends \$5 billion on building a Multimedia Super Corridor. In this regard, the use of online as a tool for marketing goods and services have continuously improved by various local and international business enterprises (Armash et. al. 2010). The findings from Armash et. al. (2010); Allred et. al. (2006) revealed that Malaysian consumers' are influenced by trust and trustworthiness, security fears and technological incompetence, privacy of information in the online shopping scenario. Out of the total population in Malaysia the total number of internet users in 2005 was 47%, 50% in year 2006, 53% in year 2007 and 54% in the year 2008. The increasing rate of internet diffusion indicates that a growing opportunity for online businesses in conducting commercial transactions electronically (Lee et. al. 2011).

Relative to the developed countries, the present proportion of older persons is small in the ASEAN countries and other countries of this region. In Malaysia, the 5.9% or 1.2 million older persons 60 years and over in 1995 in Malaysia is projected to increase to about 1.5 million (6.6%) in 2000 and possibly to about 4 million (11.3%) in the year 2020. As for those 65 and over it is estimated there will be 1 million of them by the turn of the century and 2.7 million by 2025. Moreover the proportion of those 65 years and older is growing faster than the general population (Arokiasamy, 1999).

So far Malaysia is an upper middle income country, with a population of 28 million (Department of Statistics Malaysia: 2010). Its ageing population of 60 years and above is rising steadily from 5.7% in 1990 to 6.3% in 2000 and is expected to be 9.8% in 2020 (Mafauzy, 2000). Today, Malaysia is a broad-based and diversified economy. Malaysia is moving towards achieving the targets set in the Ninth Malaysia Plan (9<sup>th</sup> MP), and onwards to realize Vision 2020. At 2008, the population of Malaysia was estimated to be 27,728,700. Malaysia is a multi-ethnic country with a population consisting of Malays, Chinese, Indian and others. The population profile is relatively young, with 8,876,200 (32%) below 15 years old, 17,620,200 (63.5%) in 15-64 age group, and 1,232,300 (4.4 %) aged 65 years and above (WHO, 2010). According Malaysian

Communication and Multimedia Commission (2010) report the rate of internet user's growth in Malaysia has risen 10.3% per annum. The statistics also reported that every household has about 2.51 average users.

In Malaysia, internet usage has become a part of life with 87 percent of Generation X (The generation born from the early 1960s to the early 1980s) use online for various activities such as online shopping, online buying and others. Moreover, 30-44 years old made online purchases (37.1%) compared to 18-29 (24.1%), 45-59 (26.3%) and 60 years and above (12.6%). Mean that, Generation X is the most domain users for online purchasing. They are considered as a group of more upper income (RM100, 000) households made on-line purchases (27.8%) compared to 16.1% of households below RM25, 000 (Raman and Annamalai, 2010; MCMC, 2010). Until recently in Malaysian perspective researchers have ignored the older consumers in the marketplace. In fact businesses, governmental agencies and researchers are strongly agreed that older consumers comprise a significant segment which is generally substantial, identified and accessible by the makers (Yoon et. al. 2009). While research on age and online shopping usage is growing though but research on the antecedents to online shopping participation by older adults remains fairly limited (Klobas & Clyde, 2000). According Leppel and McCloskey (2011) older consumers showed greater concern about security issues and more frustration in their pursuit of product information during their purchase activity in online. Results from their research also reflect that respondents aged 50 to 69 made online purchases more often and were more likely to be big spenders than those 70 and older and those 18 to 25 (Leppel & McCloskey, 2011). Madlberger (2006) found the impact of the perceived security of online shopping on attitude towards shopping online to be slightly stronger for the males.

As discussed above, marketers tend to give up or ignore the elderly when they want to target their market. Therefore marketers should attempt to target and grab the opportunity to serve the elderly market consequently gaining a competitive advantage in the online marketing industry in Malaysia by understanding their perception which ultimately influences them to purchase goods and services from online.

## **2. LITERATURE REVIEW**

The literature review discusses several different factors focusing on the writings and information that is found in the previous researches. First, the experiences of elderly use of internet are discussed followed by the literature on the perceived use of internet, internet safety perception and attitude issues.

### ***2.1. The Experience Of Elderly Use Of The Internet***

In the previous research showed that many elderly have had only limited opportunities to experience IT that is because they do not have a personal computer and internet service that belong to them (Hough & Kobylanski, 2009). According to Fox (2001), there are 13 percent of senior citizens in the whole of the U.S. population but only 6 percent of them are U.S. Internet population. Furthermore, he also found that even with 15 percent of the American elderly browsing the Internet, there are 56 percent of older consumers in America do not use

computers, and the users using the internet are male, enjoying relatively high pension income and are highly educated (Fox, 2001). However, for those “low tech elderly”, the majority of them are female, average age of 73, who avoid the internet and choosing to communicate with people by using laser technologies such as telephones, television, and newspapers (Horriagan, 2003).

According to research that was conducted by Eastman et al (2006), around 67 percent of the older consumers used the internet to keep in touch with their friends and family and approximately 37 percent of elderly respondents used the internet to keep updated with the current news and events. Previously Pastore (2001), expected that approximately 25 percent of retired households (those households with at least one user that is 50 years or older and retired) are online. In the previous study that was carried out by The Pew Internet & American Life Project, it was found groups that remain unconnected to the internet include, Hispanics, African Americans, the elderly, rural citizens, the poor, and those who are low educated (Hoag, 2003). The estimation in literature shows a dramatic difference in the past few years, therefore, it is very difficult to estimate the exact number of how many of the elderly are using the internet (Eastman et al., 2005).

## **2.2. Perceived Ease Of Use**

In earlier research that was carried out, it was established that perceived ease of use is one of the critical factors influencing user acceptance level and usage behavior of information technologies (Raptis & Dick, 2007). According to Venkatesh et al., (2003), stated that “future research should focus on identifying constructs that can add to the predication of intention and behavior over and above what is already known and understood.” In addition, through the introduction of the Technology Acceptance Model (TAM), stated that the ease of use of a website is necessary for initial acceptance from the users which is a key essential for adoption and use it continuously (Davis et.al. 1989).

On the other hand, older consumers in the biological and psychological perspectives should be a main concern for those marketers when they design a website that is suitable for the elderly. A common issue that is faced by the development of a website is that those older consumers encounter troubles in using computers and navigating the websites, this is because the elderly are old, their eyesight, motor- skills and cognitive functions are not as vigilant compared to the youngsters (Becker, 2004; Gregor & Newell, 2001; Hawthorn, 2000). Moreover, according to the National and Eye Institute (2002), diseases that relate to the eye can cause in vision impairment also including total blindness. The possible loss of vision from the diseases that are related of the eyes could affect a user’s ability to utilize computer interfaces, that is, an important requirement for the successful use of e-commerce websites (Jacko et al., 2003). For the motor skills coordination such as navigating a site or pointing the cursor to a desired target in the web page by using a computer is another trouble that is faced by the elderly (Rogers & Fisk, 2002).

According to Reisenwitz et.al. (2007), most websites are not designed for older consumers. To attract older consumers, sites need to be designed in a more accessible way for those elderly

just starting to learn how to operate computers and for those suffering from age related, eyesight, memory and movement problems (Saranow, 2004). Web sites should not continue to be “elderly hostile” which uses small font size word, hyperlinks and multiple overlapping windows and layers of difficult to search information (Pepper, 2002). These kinds of website will lead those elderly to an online phobia and thinks that computers are very hard to operate (Joseph & Stone, 2005). Lu et al., (2005), stated that, the perceived ease of use of the internet application has indirect impacts on the attitude toward the intention to use the application by its usefulness.

### **2.3. Internet Safety Perception**

Apart from perceived ease of use, degrees of peoples’ trust causes the elderly to feel comfortable to make internet based purchases (Chen & Dubinsky, 2003; Luo, 2002, Mitchell & Vassos, 1997). A website that is lack of trust from the consumers becomes one of the reasons that make consumers refuse to shop online (McKnight & Chervany, 2001). It is a very common phenomenon that older consumers think that purchasing over the internet as risky, because the elderly might think that they lack experience and understanding with the way on how to navigate the internet technology (Reisenwitz et al., 2007). According to Eastman and Iyer (2004), they suggested that if the elderly felt that the internet is safe and easy to use, they would be more willing to accept and use the internet.

According to research conducted by Gefen and Straub (2005) the findings show that trusting the website and the seller is important and the technological aspects of the website influenced the initial decision to purchase and return to the website again in the future. Elderly use the internet almost similar like the youngsters, older consumers search for information about health, hobbies, special interests, banking transactions and email. Generally, elderly are more difficult to trust the internet to perform tasks involving financial, social sensitive activities such as online banking and health related issues.

In another research conducted by Liu et al., (2004) stated that many online users are found to be very concerned about privacy issues exposure. This is because all their personal information was collected. The AARP (American Association of Retired Persons) stated that 93 percent of the respondents think that any personal information they provide during online financial transaction should be kept as private and confidential information and without their permission, the information should not be shared with any third party (Eastman et al., 2005). In addition, a few of researches demonstrated that elderly are more anxious and less confident in using the internet and such adverse emotion will affect their decisions with respect to internet adoption (Al- Gahtani & King, 1999).

Elderly particularly do not want to use and avoid the Internet to purchase products and services maybe because of misperceptions (for example, thinking that the internet is difficult to use). Furthermore, privacy and security is another major concern of the elderly. Thus, if marketers are able to revamp the website from being complicated to user friendly, safe and with significant advantages (such as keeping connected with friends and family and learning new knowledge), the elderly would be more willing to utilize the Internet (Eastman et al., 2004).

#### **2.4. Attitude Issues**

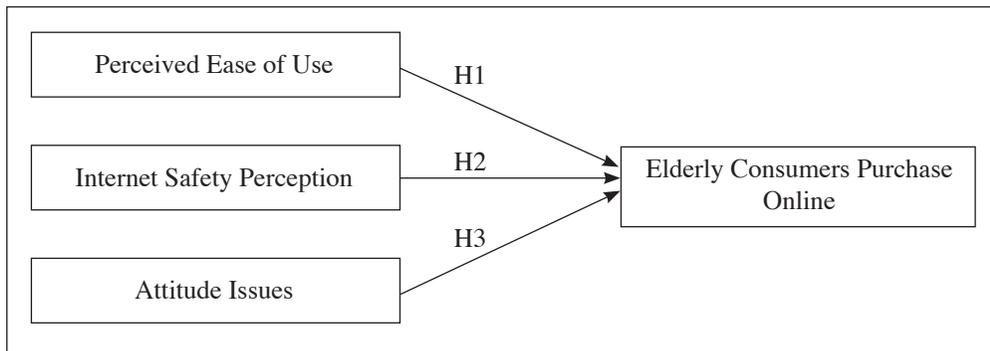
In the previous research that has been conducted to find out the relationship between attitudes towards computer technology. There is a negative attitude towards computer, ethical and social uses of computers are concerned (Lee, 1970; Morrison, 1983). According to Trocchia and Janda (2000), the reasons why some elderly refused to use the Internet is because of a technology schema (past experiences with technology), perception of reality (elderly prefer to touch and feel the physical product before they decide to purchase the product and purchase online were less favorable to encourage elderly to use the Internet) and resistance to change (those are not comfortable with change are more less likely to utilize the Internet).

Moreover, another researcher (Modahl, 2000) stated that older consumer is less likely to utilize Internet due to their adverse attitude toward technology and most of the older consumers do not try to learn using the Internet on their own. These negative attitudes may impede their adoption of the internet, of those not online: 54 percent thinks that the internet is not safe, 51 percent believe that they do not feel that they are missing something, 39% think that the cost of using the internet is too high and expensive, and 36 percent express concern about the online world is too confusing and complicated. In addition, elderly group has now been over 50 years old and they were brought up by television, newspaper and radio (Szmigin & Carrigan, 2000). A lot of elderly retired before the prevalent use of the Internet in the workplace (Eastman et al., 2004). In the research conducted by Reisenwitz et al., (2007), the result shows that the elderly, who yearn for the “good old days”, refuse the changes the internet has brought to the current world.

However, Guynn (2002) recommends that if the elderly are able to overcome these attitude issues, they tend to utilize the internet even more. Woudhusyen (1994) says that, elderly just simply do not feel that it is necessary to utilize computers to go online also perform purchases. Researchers argued that, rather than depending on the advertising or word – of – mouth, direct contact with the older consumer is a more effective way to persuade them to sue new innovation technology (Ryu, Kim & Lee, 2009). Therefore, to successfully influence the elderly perception to purchase online, these attitude issues must be addressed before there is mass acceptance of the internet by the older consumers and marketers need to identify which elderly do not have these attitudinal obstacles (Eastman et al., 2005).

### **3. CONCEPTUAL FRAMEWORK**

Based on the literature review, this study proposes a conceptual framework of exploring critical factors influencing older consumers to choose online purchase. This framework emphasizes on the following independent and dependent variable. The independent variables are: perceived ease of use, internet safety perception and attitude issues. The independent variables relate to the critical factors that influence elderly consumers to choose to purchase online. The schematic diagram is presented below:

**Figure 2:** Proposed Conceptual Framework of the study

#### Hypothesis for this Proposed Study

- H1:* Perceived ease of use has a major influence on the impact on elderly Consumers Purchase intention towards online.
- H2:* Internet Safety Perception has a major influence on the impact on elderly Consumers Purchase intention towards online.
- H3:* Attitudes issues have a major influence on the impact on elderly Consumers Purchase intention towards online.

## 4. METHODOLOGY

This research was employed hermeneutic phenomenology (quantitative research methodology) which were followed by a brief discussion of sample size, sampling technique, data collection and statistical analysis.

### 4.1. Subjects

The primary data collection method was included in this study by using survey questionnaires. In addition self- structured questionnaire was developed to collect the required primary data from the respondents with age group 40 and above from the Klang Valley area in Malaysia. Structured questionnaires were systematically distributed utilizing a convenient sampling method in various shopping malls. Chang and Samuel (2004); Bucy (2000); Eastman and Iyer (2004) in their research of internet shoppers considered different age brackets in fact Chang and Samuel (2004) used three age brackets: under 24, 24 to 44, and 45 or over. They found that frequent shoppers were more likely to be in the middle age bracket and that shoppers who spend large amounts per online transaction tended to be in the oldest bracket. They also concluded that although internet users tend to be younger, internet shoppers tend to be older. There is no set agreement regarding the age at which a person is considered "**OLD**". In the consumer domain, an older person has been most commonly defined as someone over 65

years old (when one traditionally retired), although more recently, those over 60, and even those over 50 have begun to be considered senior consumers. The classification of age-based approach divides the heterogeneous older market into more homogeneous subgroups which reflects a potential for the marketers (50 to 59 -youngest olds, 60 to 74- younger olds, 75 to 84- older olds, and 85 and over- oldest olds) (Davidson, 2005). In that regard a total of 400 (235 males and 165 females) respondents with age group 40 and above from the Klang Valley area in Malaysia were included in the present study. The mean age was 42.75 years old with a standard deviation of 2.71 years. Among the participants, 74.6 percent (n =299) of them were still employed and only 25.4 per cent (n = 101) of them was retired or going to be retired by next three years.

#### **4.2. Measures**

The principal component analysis was comprised with 400 respondents in this study. For this intention total of 450 instruments were distributed to the potential respondents for this study. A 5-point Likert scale were used ranging from “Strongly Disagree” to “Strongly Agree”. Perceived ease of use was measured using eight items. The reliability of this subscale was 0.85.

Eight items were developed to examine participants’ perception toward safety and security concern when they make transaction on online. The reliability of this subscale was 0.82. Furthermore eight items were also developed to examine each participant’s degree of perceived attitudes toward purchasing products and services from online and reliability of this subscale was 0.87 and lastly four items were developed to examine the participants’ degree of purchase intention towards online and reliability of this subscale was 0.82.

#### **4.3. Data Analysis Procedure**

The first stage of the data analysis was used means, standard deviations and percentages of the respondent’s frequency and their demographic profile. The second stage of the data analysis conducted with exploratory factor analysis (EFA) to identify the factor structure for measuring the elder consumer’s purchase intention from online with checking the validity and the reliability of the scale. The decision to consider a factor as significant is identified by a factor loading greater than 0.5 and an eigenvalue equal to or greater than 1. However Cronbach’s alpha coefficient was used to test the reliability of the scale. A third and final part of the data analysis was employed by multiple regression analysis to test hypothesis.

## **5. DATA ANALYSIS**

### **5.1. Descriptive Analysis**

Out of total respondents 60% of the respondents were male while 40% were female. It can be assumed that males are more active in those places and spend their time to visit shopping mall and educational institution. The distribution of respondents showed that most of the respondents were from age group of 40-50. The largest portion of the respondents worked in private organization (50%); followed by public organization (40%) and (10%) are not working.

Furthermore, 40% of respondents inform that they have received frequent information of advertisements from various companies when they login in their social network blog. A total of 450 questionnaires were distributed but only 400 were fully completed by the respondents. Among the respondents majority of the respondents were Malay (50%) followed by Chinese (30%) and 20% belongs to Indian. Therefore, this study was used multiracial respondents. In this sample 80% of the respondents were married while 20% of the respondents were single. Based on the analysis, 70% of the respondents have children between 1-3, 20% of the respondents have children between 3-5 individual and 10% of the respondents have more than five children and above.

Interitem Consistency Reliability is a test of consistency of the respondent's answers to all the items in a measure. The most popular test of interitem consistency reliability is the Cronbach's coefficient alpha, which is used for multi point-scaled items. From the table 1, the Cronbach's Alpha was .891, which means that our measuring is very consistent.

**Table 1:** Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.886	.889	22

## 5.2. Factor Analysis

All 20 items on the questionnaire were factor analyzed using principal component extraction with an orthogonal (Varimax) rotation. The number of factors was unconstrained. For the sake of convergent validity, 0.50 was used as a factor loading cutoff point. From the table 2 this research rotated three times to get the significant variables under three factors. From the Table 2, it has revealed that Kaiser-Meyer-Olkin (KMO) Measures of sampling Adequacy in our study is 0.782. This is a good result as it exceeds 0.5 Bartlett's Test of Sphericity is 0.000, meaning that factors that form the variable is adequate. The result showed that the total variance explained by the three factors was 42.070%. The values of the following Table 3 indicated the affiliation of the items to a factor. The findings of this study indicated that each of the three dimensions (easy to use; safety ; attitude issue ) was homogeneously loaded to the different factors.

**Table 2:** KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.782
Bartlett's Test of Sphericity	Approx. Chi-Square	360.640
	df	90
	Sig.	.000

**Table 3:** Outcome of Three factor analysis

Item's Name	Components		
	Ease of Use	Safety Perception	Attitudes Issue
Accepted New Technology	.710		
Familiar with Current trend	.685		
Understanding the steps of Subscribe	.682		
In Native Language	.646		
Trust for online purchase		.628	
Technological capabilities		.623	
Perceive to be secure		.718	
Good experience		.727	
Encouraged by others			.698
Socially accepted			.630
Awareness among similar age group			.600

*Notes:* Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. (a) Rotation converged in 6 iterations.

*Degree Of Relationship:*

Multiple regression analysis had also been used in this stage for the purpose of hypothesis testing. For the purpose, this research has applied the model of multiple regressions with three independent variables as described below:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon_n$$

where;  $\beta_0$  = Y intercept (a constant, the value of Y when all X values are zero)

$\beta$  = The regression coefficient associated with each X

$\beta_1$  = Slope of Y with variable X1 holding X2, X3 constant.

$\beta_2$  = Slope of Y with variable X2 holding X1, X3 constant.

$\beta_3$  = Slope of Y with variable X3 holding X1, X2 constant.

X = Independent variable

X1 = Independent variable 1 (ease of use)

X2 = Independent variable 2 (safety perception)

X3 = Independent variable 3 (attitudes issue)

And based on the computed results of multiple regressions Model, we could derive:

$$Y = \text{Dependent variable (elder consumers perception purchase from online)}$$

The output of the factor analysis then described in the following section is produced using the options in the linear regression statistic dialog box. The model summary of Table: 4 notices that how much of the variance in the dependent variable (older consumer’s perception) is explained

by the model (which includes the variables of easy of use; safety perception; attitude issue). In this research, the value of R square is .352. Expressed as a percentage, this means that the proposed model explains 36.1% of the variance in older consumer perception to purchase from online. However, to assess the statistical significance of the result, it is necessary to look the ANOVA Table 5. This tests the null hypothesis that multiple R in the population equals 0. The model in this research reaches statistical significance (sig. = .000; this really means  $p < .0005$ ). Ignoring any negative signs out the front in the data analysis it was observed that the largest beta coefficient is .697, which is for internet advertising. This means that this variable makes the significant or unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled for. The beta values for ease of use (.358); safety issue (.25) followed by attitude issue (.199). The equation from the SPSS output gives us the estimates of b- values and these values indicate the individual contribution of each predictor of the model. After replacing the b values into the equation this research reached in the equation.

$$(Y) \text{ Older Consumers Perception} = b_0 + (.35) (X_1 = \text{easy of Use}) + .25 (X_2 = \text{safety issue}) + .199 (X_3 = \text{attitude issue}).$$

So if we put our values into the equation it will be;

$$\text{Older Consumers Perception (Y)} = -.890 + .35 X_1 + .25 X_2 + .19 X_3$$

A larger value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable- a big absolute t value and small p value suggest that a predictor variable is having a large impact on the criterion variable. If the correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the tolerance value (1 divided by tolerance). VIF values above 10 would be a concern here, indicating multicollinearity. In this research the tolerance value for all the independent variables is within .864 to .886 which is not even less than .10 therefore, we have not violated the multicollinearity assumption. This is also supported by the VIF values which are less than 10.

**Table 4:** Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.585(a)	.361	.341	.74976

*Notes:* (a) Predictors: (Constant), easy of use; safety issue and attitude issue. Be Dependent Variable: Older consumer's perception

**Table 5:** ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.939	3	12.313	17.052	.000(a)
	Residual	67.878	94	.722		
	<b>Total</b>	<b>104.816</b>	<b>97</b>			

*Notes:* (a) Predictors: (Constant), easy of use; safety issue and attitude issue; (b) Dependent Variable: Older consumers perception

**Table 6:** Coefficient matrix

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Co linearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.890	.600		-1.585	.141		
Ease of Use	.567	.154	.358	4.005	.000	.867	1.156
Safety Issue	.381	.148	.251	2.822	.004	.869	1.154
Attitude Issue	.263	.122	.199	2.254	.003	.887	1.127

*Notes:* (a) Predictors: (Constant), easy of use; safety issue and attitude issue. Be Dependent Variable: Older consumer's perception.

### 5.3. Test Of Hypothesis

For the significance test of each variable, from the table 6 this study checked the value in the column marked sig. It is proposed that if the sig value is less than .05 the variable is significant at the 95 % confidence level and have a unique contribution to the prediction of the dependent variable. If greater than .05 than this study conclude that the variable is not significantly unique to the prediction of our dependent variables and we will accept our hypothesis. From this study this research reflected that this research accepts the H1; H2 and H3. But among the three factor easy of use play the most influential role in the older respondents' perception to purchase from online followed by safety concern and attitude issues.

## 6. CONCLUSIONS

In view of the dearth of Asian older consumer research on online purchase, this paper examines their perceptual differences in online purchasing behavior among Malaysian multiracial older consumers. The findings imply that the common approach of marketing is not enough to attract those segments rather others appeals is also important to drive older customers to make an online purchase. This research highlighted that the key to successful online marketing among older customers in Malaysia lies in the ease of use of the site itself followed by secure transaction are very important.

This paper also attempts to examine critical factors influencing the elderly to choose to purchase from online. A theoretical framework was formulated for statistical investigation of the diagnosed the problem. It was noted that among the three factors that are discussed above have a significant relationship with online purchase amongst with the elderly. Factor such as perceived ease of use of a particular website play a major important role perceived by the elderly which should be mindful by the website developers. Elderly consumers have poor eyesight, slow in action and weak memory, thus, website developers should take account of these factors if they wish to target these older consumers.

Secondly, the security and the safety transaction on online payment play a significant role on a particular website perceived by the older consumers and sometimes even though they have intention but because of security and safety concern they frequently avoid purchasing products and services from online as well. That is why online marketers must concern about the risks that the elderly may feel with the online transaction. That is why they should focus on how a positive experience in the past can encourage the elderly to purchase online.

Thirdly older consumers tend to be resistant to change and the use of the internet to purchase online because of their certain attitude issue. Marketers need to be creative when targeting and approaching toward this target market. To reach those segments the information about the benefits and advantages to use online purchase must be transmitted to them.

## **7. MANAGERIAL IMPLICATIONS**

The study shows that older customers in Malaysia display quite a promising market opportunity for online marketing. Multinational as well local marketers are advised to consider older consumers as one of their potential targeted markets for the following reasons: They have purchasing power; They have influenced power on their children subordinates' and grandchildren' purchase decision; Though their anticipated lifespan is shorter but their word of mouth can play an important role to spread about the brand itself to other consumers who are thinking to purchase from online. And as a whole all these imply a potentially great value-return in the long-run for the online marketer.

## **8. LIMITATIONS AND FURTHER RESEARCH**

As another exploratory study, the methods that apply in the present study has limits on the generalizability of the results which ultimately confer for further research. First, older customers are different in many ways in terms of gender; income; financial stability and living area. The researchers should be cautious in generalizing the findings of the current study to other age groups until these findings are replicated. Future research should examine the potential impact of subjects' social status, income and living area. The researcher is also advised to effectively measure the critical factors that have been identified in the proposed model with more samples and then developed a more comprehensive conceptual framework. Further research also needs to be considered to gather more information regarding the service quality and customers' satisfaction dimensions in the context of the Malaysian online market scenario.

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