A Study on Factors Affecting Consumers' Attitude Towards Online Shopping and Online Shopping Intention in Bangkok, Thailand

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Abstract　The purpose of this study is to explore the factors that affect consumers' attitude towards online shopping and online shopping intention in Bangkok. Multiple Linear Regression, Pearson Product Moment Correlation Coefficient, One-Way ANOVA and Independent sample T-test were used to test the hypotheses. The researcher found that there are only three factors for explaining attitude towards online shopping, which are perceived ease of use, perceived usefulness and trust; and there is no difference in consumers' attitude towards online shopping based on gender, age and education level; however, there is a relationship between attitude toward online shopping and online shopping intention.
Key words　Online shopping; Attitude; Intention; Perceive ease of use; Personal awareness of security; Perceived usefulness; Perceived risk; Trust

1 Introduction

In Globalization era of industries, companies from one country link with companies and consumers across the boundary. The exchange of information about the product and services are much quicker in today's business entities than ever before. In the present time, Internet has become most basic but important of part of most of the activity conducted during daily process. Internet has made it so flexible and convenient for companies to approach consumers and vice versa around the clock 24*7.

Electronic commerce has become one of the essential characteristics in the Internet era. According to UCLA Center for Communication Policy (2001), online shopping has become the third most popular Internet activity, immediately following e-mail using, instant messaging and web browsing. The incredible growth of Internet shows that there exists a huge market where e-commerce can play an important role. To make e-commerce activities become more prominent companies need to understand various factors that drive consumers go online. Moreover, it is relevant to study about how these factors lead to attitude formation on each individual and in turn lead to affect online shopping intention.

Thailand was early accomplice in bringing the Internet to Asia, and it has a enthralling, but little-known, networking history. Thailand has started energetically embrace Internet in its many forms across the marketplace. Over the last five years, admittedly starting from a very low base, the estimated number of Internet users in Thailand has increased six fold. Figure 1 shows incredible growth of Internet usage in Thailand from year 2000 to 2007 comparing to the increase of the population. As many researchers indicated, more internet usage and more potential purchase online. Therefore, according to the significant growth of Internet usage in Thailand, e-commerce is starting play an important role in the social and business life.

YEAR	Users	Population	% Pen.	GDP p.c.*	Usage Source
2000	2,300,000	61,528,000	3,7%	US$ N/A	ITU
2007	8,465,800	67,249,456	12.6%	US$ 2,750	ITU

Source: United Nations Department of Economic and Social Affairs.　　(Note: Per Capita GDP in US dollars)
Figure 1　Internet Usage and Population Statistics in Thailand

2 Related Theories

Attitude is a learned predisposition to behave in a consistently favorable or unfavorable way with respect to a given object (Schiffman and Kanuk, 2006), (Eagly and Chaiken 1993) also defined that attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. Tri-Component Attitude model is used in this study to examine the Thai male consumer's attitude towards facial whitening products. According to the Tri-component attitude model developed by (Fishbein 1975), attitude consists of three major components: a cognitive component, an affective component, and a conative component (Figure 2).

(Hewette 2002) stated that purchase intention is the buyer's forecast of which product he or she will buy. It includes not only the buyer's predisposition toward a product, but also a forecast of

inhibitors. Karjaluoto, (Mattila and Pento 2002) also have mentioned in their study (Figure 3), there are positive relationship between trust in online store, perceived ease of use, perceived usefulness and attitude towards online purchasing, and a negative between perceived risk and attitude towards online purchasing, moreover, there is a relationship between attitude towards online purchasing and online purchase intension.
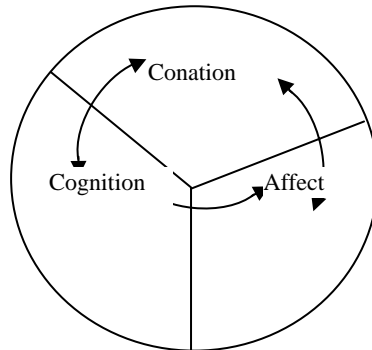

Figure 2   A Simple Representation of the Tri-component Attitude Model
Source: Schiffman and Kanuk (2007). Consumer Behavior, 9th edition. Pearson Education International, Inc., p.235
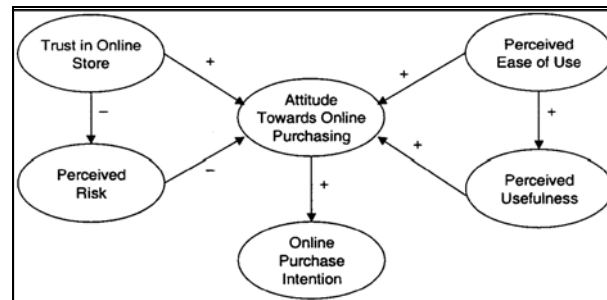

Figure 3   Understanding Online Purchase Intention
Source: Karjaluoto, Mattila and Pento (2002). Factors underlying attitude formation towards online banking in Finland. International Journal of Bank Marketing, 20/6, pp.261-272.

3 Conceptual Framework

Independent Variables   Intervening Variables   Dependent Variables
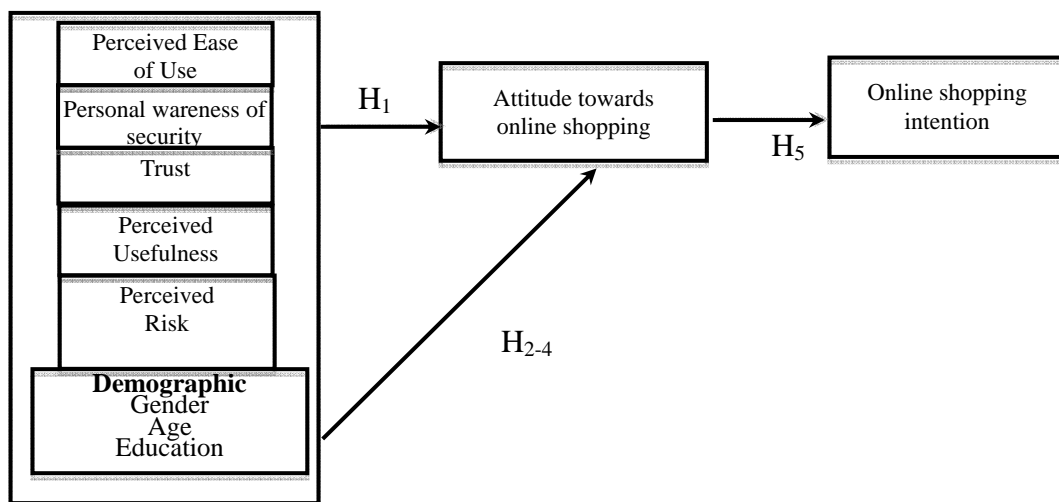

Figure 4   Conceptual Framework

Researcher developed the conceptual framework based on literature review and previous studies. The conceptual framework defines the relationship between independent variables and dependent variables. This study focuses on independent variables that are Perceived Ease of use, Personal awareness of security, Perceived Usefulness, Perceived risk, trust and demographic factors. Conceptual framework shows intervening variable as attitude towards online shopping and dependent variable as Intention towards online shopping.

The conceptual framework has been modified based on three studies done by Chin, Lin and Tang (2005), Lu, Hsu and Hsu (2005) and Hassanein and Head (2004) whose study focusing on Online purchase intention and attitude. Researcher combines the variables from these studies to develop modified conceptual framework, which would be studied and analyzed. Moreover, researcher included demographic variables into conceptual framework that are gender, age and education because demographic factors show different impact on customer attitude and online shopping intention.

4 Research Hypothesis and Research Methodology

Based on the Conceptual Framework, it is necessary to construct hypotheses to test the relationship between dependent variables and independent variables to see the validity of the assumptions. The researcher constructs five hypotheses to test the relationship between dependent variables and independent variables.

Table 1 Statistical Methods Used for Each Hypothesis

Hypothesis	Analysis Method
H_{1o}: Perceive ease of use, personal awareness of security, perceived usefulness, perceived risk and trust has no significant impact on attitude towards online shopping.	Multiple Linear Regression
H_{2o}: There is no difference in attitude towards online shopping when segmented by gender	Independent t-Test
H_{3o}: There is no difference in attitude towards online shopping when segmented by age	Analysis of Variance (ANOVA)
H_{4o}: There is no difference in attitude towards online shopping when segmented by education	Analysis of Variance (ANOVA)
H_{5o}: There is no relationship between attitude towards online shopping and online shopping intention	Pearson correlation

Descriptive research design is applied in this research. Researcher conducted the survey method by using questionnaire in order to getting a feedback from respondent with efficient way, the non – probability procedure is used to select respondents. Questionnaire to gather primary data from 385 respondents recruited on a voluntary manner among the people who work in the companies located on Silom, Sukumvit and Sathon road, claimed as the strategic business areas (Shan, 2005) and has access to Internet. Multiple Linear Regression, Pearson Product Moment Correlation Coefficient, One-Way ANOVA and Independent sample T-test was used to test the hypotheses.

5 Finding

5.1 Summary of descriptive statistics

The data analysis is divided into two sections. The first section consists of descriptive statistics that were used to study the demographic characteristics and the mean and standard deviation of each variable. The second section consists of hypotheses testing.

5.2 Summary of hypothesis testing

There are total five hypotheses tested in this research. Multiple Regression, Independent Sample T-test and Analysis of Variance (ANOVA) are used to test the relationship between independent variables and intervening variable that is attitude towards online shopping. Furthermore, Pearson Product Moment Correlation Coefficient is used to test the relationship between consumer's attitude towards online shopping and consumer's online shopping intention. The result of each hypothesis test is shown as Table 4 shows:

Table 2   The Analysis of Demographic Factors by Using Frequency and Percentage

Demographic		Frequency	Percentage
Gender	Male	142	36.7%
	Female	243	63.3%
Age	18 years or less	8	2.0%
	19 - 29 years	246	64.0%
	30 - 39 years	97	25.3%
	40 - 49 years	26	6.7%
	50 years and above	8	2.0%
Education Level	High school or below	8	2.0%
	Bachelor Degree	195	50.7%
	Master Degree	174	45.3%
	Doctoral Degree	8	2.0%

Table 3   Mean Score Rating and Standard Deviation of All the Variables

Descripitve Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mean of Percieved Ease of Use	385	1.25	5.00	4.1250	0.72454
Mean of Personal Awareness of Security	385	1.00	5.00	2.3400	0.71494
Mean of Perceived Usefulness	385	1.50	5.00	3.3567	0.72950
Mean of Perceived Risk	385	2.00	5.00	3.8400	0.67199
Mean of Trust	385	1.00	4.00	2.7467	0.61145
Mean of Attitude towards Online Shopping	385	1.00	5.00	3.2233	0.80380
Mean of Online Shopping Intention	385	1.00	5.00	2.6333	0.92080
Valid N (listwise)	385				

Table 4   Summary of Results from the Hypotheses Testing

Hypothesis	Analysis Method	Significance	Results
H_{1o}:Perceive ease of use, personal awareness of security, perceived usefulness, perceived risk and trust have no significant impact on attitude towards online shopping.	Multiple Linear Regression	.000*	Rejected
H_{2o}:There is no difference in attitude towards online shopping when segmented by gender	Independent t-Test	.066*	Failed to Reject
H_{3o}:There is no difference in attitude towards online shopping when segmented by age	Analysis of Variance (ANOVA)	.091*	Failed to Reject
H_{4o}:There is no difference in attitude towards online shopping when segmented by education	Analysis of Variance (ANOVA)	.058*	Failed to Reject
H_{5o}:There is no relationship between attitude towards online shopping and online shopping intention	Pearson correlation	.000**	Rejected

Note: **. Correlation is significant at the 0.01 level (2-tailed)
    *. Correlation is significant at the 0.05 level (2-tailed)

Table 5   Coefficient of Multiple Linear Regression Model for Attitude towards Online Shopping

Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.445	.562		.792	.430	-.665	1.555		
meanPEU	.187	.079	.168	2.363	.019	.030	.343	.871	1.148
meanPAS	.050	.089	.044	.558	.578	-.127	.227	.697	1.436
meanPRU	.199	.089	.181	2.245	.026	.024	.375	.678	1.474
meanPRR	-.053	.091	-.045	-.584	.560	-.233	.127	.759	1.317
meanTRU	.520	.116	.395	4.474	.000	.290	.749	.565	1.769

a. Dependent Variable: meanATT

Table 5 represents the coefficients of multiple regression models for attitude towards online shopping. Some clue regarding the relative importance of each variable in this model is provided by t statistic. The evaluating of Individual Regression coefficient as following:

H$_{o1}$:β_1 from the table 5, t value of perceived ease of use is equal to 2.363 and the significant value is .019, which is less than .05, therefore Ho1: β_1 is rejected;

H$_{o1}$:β_2 from the table 5, t value of personal awareness of security is equal to .558 and the significant value is .578, which is greater than .05, therefore Ho1: β_2 is fail to reject. Hence, β_2 will be removed from the model;

H$_{o1}$:β_3 from the table 5, t value of perceived usefulness is equal to 2.245 and the significant value is .026, which is less than .05, therefore Ho1: β_3 is rejected;

H$_{o1}$:β_4 from the table 5, t value of personal awareness of security is equal to -.584 and the significant value is .560, which is greater than .05, therefore Ho1: β_4 is fail to reject. Hence, β_4 will be removed from the model.

H$_{o1}$:β_5 form the table 5, t value of perceived usefulness is equal to 4.474 and the significant value is .000, which is less than .05, therefore Ho1: β_5 is rejected.

Using t statistic, it is found that all only 3 coefficients were included in the regression model. Therefore, multiple regression model for attitude towards online shopping is illustrated by

$$Y = 0.445 + 0.187 \ X_1 + 0.199 \ X_3 + 0.520 \ X_5$$

Where: Y = value of attitude towards online shopping; X_1 = Value of perceived ease of use; X_3 = Value of perceived usefulness; X_5 = Value of trust.

6 Conclusion

The result of the multiple regression analysis, there are only three out of five factors included in the equation for explaining attitude towards online shopping, which are perceived ease of use, perceived usefulness and trust. The excluded factors are personal awareness of security and perceived risk. It can be represented that mostly concerning factors are ease of use and usefulness that lead to attitude formation towards online shopping. As per the study done by Chin, Lin and Tang (2005), which reported that consumer attitude toward using online applications is influence by perceived ease of use. So it could be concluded that if the customers think that online application would be easy for them then it would lead to positive attitude formation. Moreover, as per Lu, Hsu and Hsu (2005) and Hassanein and Head (2004) study shows the result that perceived usefulness have an impact on attitude towards online shopping. The results of finding shows that perceive usefulness impact attitude towards online shopping. Which means that respondents choose Internet as the buying channel, which could be explained by the positive attitude toward online shopping based on the effect of perceived usefulness of Internet? Finding from this study and the past study from Hassanein and Head (2004) clearly suggest that trust is one of the most important factors in forming positive consumer attitude towards online shopping.

The result of the second hypothesis indicates that there is no effect on formation of attitude towards online shopping based on gender as well as hypothesis third and fourth indicates that there is no difference in consumers' attitude towards online shopping based on age level and education level. The reason for this could be explained as in Bangkok the majority of female population is working and moreover, females are equally educated as males and also have exposure to Internet.

Finally, according to the fifth hypothesis it indicates that there is a relationship between attitude toward online shopping and online shopping intention. As per the results from this research, there exists a positive relationship between attitude towards Internet buying that lead to their decision-making and purchasing behavior. In this context, people who hold more positive attitudes towards online shopping have high intention or probability to make purchase online of high online shopping intention.

7 Recommendations

It is important to know the attitude and intention of the Thai people living in Bangkok in order to increase the sale volume via online medium. Therefore, several recommendations can be made for companies and venders who are willing to sell their products online through websites. By making Thai people have trust and make them feel usefulness and ease of use while making purchase over Internet then it directly increase the attitude towards online shopping and online shopping intention.

From this research, the attitude towards online shopping has strong positive relationship with online shopping intention. This means that more positive attitude towards online shopping will translate to higher online shopping intention. Therefore, companies and venders should try to increase the positive attitude of the consumers in order to increase their purchase intention, which will further lead to increase of sales of products via Internet or specifically website.

The cause of the low rating of attitude towards online shopping products can be attributed to lack of trust in making purchase over Internet. Then, company should use high security system that could make more secure transactions through websites. This way customer will tent to develop faith and trust in the company website for making online purchase. Furthermore, to gain customer trust company need to increase brand reputation, as the company's reputation is associated with the services company provide. Moreover, in case of online shopping, websites selling products or various companies should provide the warrantee to its customers. Company should introduce money back offer on the products, which is customers can return the goods and get money back when they are not satisfy with the products or service they received. It shows that the company cares for customers and this will increase customer's trust towards the company.

Study finding shows that for Thai people another factor of concern which attitude towards online shopping is perceived ease of use. As per the study by Chiu, Lin and Tang (2004) shows that online stores are perceived as more user-friendly and will facilitate online store visits and online purchase intentions more than other online stores that are seen as difficult to shop in. So companies should make their website or online transaction medium more interactive by using user friendly client. This way companies and website venders can efficiently demonstrate the ease of use of their websites which in turn will positively affect attitude of Thai people towards online shopping and increased online shopping intentions. Moreover, customization of the homepages could be another way for companies to create positive impact on its consumers and finally leading to positive attitude towards online shopping.

Perceived usefulness is another factor which affect in the attitude formation of consumers using online medium for shopping. Chu and Lu (2007) suggested that perceived usefulness and perceived playfulness are significant for potential purchasers. So companies or website vendors should try to raise the usefulness perception of customers. This could be done by providing functional benefit by establishing alliances with other similar companies or related product companies this way customer can get increased information. This will make customer feel usefulness of visiting the company's website which will drive positive attitude and will lead to online shopping intention. Traditionally, shopping people when make purchase like to compare the products within the same price range, within same quality and also within the same product offered by different companies. Keeping this strategy in mind company's websites can provide a function where customers can compare the products in traditional manner.

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