The Impact of Customer Satisfaction on Online Purchasing: A Case Study Analysis in Thailand

Taweerat Jiradilok, Settapong Malisuwan, Navneet Madan, and Jesada Sivaraks

Abstract—**E-commerce is gaining importance in Thailand. Shoppers have realized the benefits of online purchasing over purchasing from Brick and Mortars. Numerous researches have focused on descriptive research on customer satisfaction and purchase intentions on online purchasing but little or no knowledge regarding factors that are most influential in motivating online purchase intention in Thailand. This research utilizes a quantitative method to test the conceptual framework of customer satisfaction that leads to online purchase intentions for all online users, experienced online purchasers and inexperienced online purchasers. The results of this research will increase researcher's comprehension on difference in factors that influence online purchase intentions of experience and inexperienced online purchasers.**

Index Terms—**Customer satisfaction, e-commerce, and purchase intentions.**

I. INTRODUCTION

The internet has transcended us from the traditional shopping era into a new and more efficient era called "e-commerce". Globally, shoppers are gaining tremendous benefits from purchasing goods and services from cyberspace. The internet permits the 24/7 and 365 days availability of goods and services with little or no cost. Surplus seeking consumers and retailers are always searching for markets that are more economically efficient hence, online purchasing. NECTEC show that percentage of Thai users shopping online has risen from 47.8% in 2010 to 57.2% in 2011 which is an increase of 9.4% from 2010 but an exponential increase from 2003 [1]. Although there are abundant researches relating to factors that influence customer satisfaction and purchase intention in the context of e-commerce, customer satisfaction factors that are found to influence purchase intention in each research are varied by time and location. Findings of customer satisfaction on online purchasing in Thailand are perhaps limited only to Thailand. It has been realized that most studies focus on the demographic aspects rather research based on systematic

T. Jiradilok is with the College of Management , Mahidol University, Bangkok, Thailand

S. Malisuwan is with the Elected Vice Chairman of National Broadcasting and Telecommunications Commission (NBTC), Bangkok, Thailand (e-mail: settapong.m@nbtc.go.th).

J. Sivaraks is with the Secretary to Vice Chairman of National Broadcasting and Telecommunications Commission (e-mail: jesada.s@nbtc.go.th).

N. Madan is with the Assistant to Vice Chairman in National Broadcasting and Telecommunications Commission, Bangkok, Thailand (e-mail: navneet.m@nbtc.go.th).

conceptual framework and there is little or no knowledge regarding factors that are most influential in motivating online purchase intention in Thailand.

II. LITERATURE REVIEW

A. E -Commerce

E-commerce is the conduct of business via internet which relates to activities of information searching, information sharing, purchasing or exchanging products and services; also maintaining customer relationship without face to face meeting unlike transaction done in traditional way[2]-[3]. Often e-commerce is wrongfully perceived as a way of doing business between web retailers and web end customers but rather e-commerce encompasses an entire range on conducting online business whether it's the interaction between business to business, business to customer, and business to government.

B. Customer Satisfaction

Customer satisfaction is when products and services meet the expectation of the consumers [4]. It is very important that consumers are content with the products and services provided by the particular website as satisfied customers are likely to be loyal and make repetitive purchases which will increase profitability of that particular e-commerce company [5]. In this research, satisfaction which is used in this research will be referred in term of outcome by comparing the prior expectation and the perceived performance for each antecedent factor in order to measure the attitude (satisfaction/pleasing) of the respondents for each of those factors.

C. Purchase Intention

According to the model of "The Unidimensionalist View of Attitude" [6], purchasing intention is the outcome of attitude which refers to the customer's willingness to buy from a particular e-retailer [7]. Even though the actual purchase behavior is considerably interesting for the researchers, the purchasing intention is widely used as the representative of the actual purchase behavior especially in consumer behavior researches [8] because it is normally not practical or impossible to experimentally study the actual purchase behavior [5]. E-commerce Trend in Thailand business to Consumer transaction was equivalent to 1 percent established in Thailand 1999-2003 since it was not well established and only about just 20 percent of internet users have ever bought thing online at the time. However, presently the NECTEC show that percentage of Thai users shopping online has risen from 47.8% in 2010 to 57.2% in 2011 which

is an increase of 9.4% from 2010 but an exponential increase from 2003. Also, the numbers of active customers who have ever traded online were multiplying to 15,510 in 2004 (May); around 340 percent higher than those in 2002 [1]. These reports indicate the growth of B to C e-commerce in the near future; thus, it is interesting to focus the study on B to C commerce. However, the greater numbers of online retailers do not reveal only the bright side but it also brings about the more intense competition. Therefore, it is imperative to study about the factors leading to success of failure of e-retailers.

D. Prior Literature of Factors That Impact Customer Satisfaction on Online Purchasing

It is imperative to be able to measure customer satisfaction in the context of e-commerce since this will define the success of the vendors [9]. The literature suggests each research is different mainly by the antecedent factors of customer satisfaction since the researchers chose the variables and factors best suit for each circumstance in their perception; thus, the results are varied by time and location. There is no recipe of the antecedent factors used measure satisfaction which will finally leads to purchasing intention.

Christian & France (2005) proves that customers satisfied the most were privacy (Technology factor), Merchandising (Product factor), and convenience (Shopping factor); also followed by trust, delivery, usability, product customization, product quality and security [9]. Surprisingly, security was chosen as the last choice comparing to others. This was assumed that security is perceived as a standard attribute in any websites so other attributes take priority once customers have to choose the site to shop from.

David J. Reibstein (2002) has studied about factors attracting customers to the site and factors being able to retain customers by mainly considering the role of price. However, customers tend to shop at other sites unless the vendors provide them good customer service and on-time delivery. Interestingly, e-shopping site using low prices or price promotions to attract customers do mostly tend to draw price-sensitive customers who are well known as having low loyalty [5].

Factors' motivating the youngsters to shop the commodity product in the cyber-shop examined includes attitudes, demographic, characteristics and purchase decision perceptions [10]. Based on the work of Jarvenpaa and Todd (1996-97) [11]-[12] purchase perceptions or factors influencing online consumer's purchase decision were grouped into four clusters including:

1) Product understanding (Product Perception): Price, Product Quality, and Product variety [13]-[14].
2) Shopping Experience: Attributes of time, Convenience, and Product availability, Effort, Lifestyle Compatibility and Playfulness or enjoyment of shopping process [15]-[19].
3) Customer service: Vendor responsiveness, Assurance, and Reliability [14].
4) Consumer Risk: Economic, Social, Performance, Personal and Privacy risk Jarvenpaa and Todd (1996-97); Park (2001); Simpson & Lakner (1993).

Students with experience were more likely to be influenced by Product perception and the Shopping experience more than Customer service and Consumer risk. This result is consistent with Jarvenpaa & Todd (1996-97) referring that the sellers should focus on product perception and shopping convenience when building the website. Out of other factors, product perception is considered as the most important among students with higher computer skill levels since they are greatly influenced by price and quality of products. On the other hand, convenience factor is consistent with the research of Eyong and Sean (2002), "Designing Effective cyber store user interface". The factors significant in this study are

1) Convenient and dependable shopping - Convenience, Guaranteed delivery, Secure transaction mechanism.
2) Retailer Reliability – Dependable product, Competitive price, Store Policy.
3) Additional Information availability – Information of the online store, Production, Promotion, Other customers' testimonials, frequently asked questions (FAQs) section.
4) Tangibility and variety of merchandise – Proper size of picture of merchandise, a good quality picture of merchandise, a what's new section, Broad product variety.

This is inconsistent with the study by Jarvenpaa & Todd (1996-97) as results stated that Convenient and dependable shopping is the most significant factor to satisfy online customers since the shoppers weight their decision mainly in the process of delivery starting from accurate information of merchandise availability, anticipated delivery date, and confirmation e-mail for specific order. Hence, the online retailers do need to clearly state about the guarantee of on-time delivery and risk-free, hassle-free return in their websites. Also, following what they promise to the customers will notably increase the satisfaction. A clear explanation of specific policies will satisfy customer better and trust the site.

Nonetheless, the finding that experienced students are more influenced by Product perception and the Shopping experience is contrast to the work of Rodgers et al. (2005) who stated that quality of service like system quality and service quality is deemed as a critical factors leading to customer satisfaction among high experienced customer [20]. This divergence might root from the difference in the procedure of categorizing the attributes used in each research.

Apart from Rodgers *et al.* (2005), Hsuehen (2006) has also explained about their investigation of the relationships among Website quality, Customer Value, and Customer that in defining the sub-attributes of each main factor, Web-customer satisfaction can be classified into two distinctive attributes which are Web information quality (IQ) referred as "the customers' perception in quality of information presented on a website" and Web system quality (SQ) referred as "the customers' perception of website's performance in information retrieval and delivery" [21]-[22]. For customer value side, Quality, Cost-based value, and Performance outcomes are included (Oliver, 1999). The survey results revealed that both Website quality and customer value have positive effect to customer satisfaction.

In the work of Rodgers, et. al. (2005), based on the vastly cited works of DeLone and McLean (1992) and Pitt *et al.* (1995), there exists the distinctive separation of the

antecedent factors into Information quality, System quality, and Service quality [20]. Information quality represents the aspect of quality of information provided on webpage such as timeliness, currency and entertainment of the information. System quality represents to the engineering performance such as Access and Interactivity. Service quality, often cited by many researchers, represents quality of service provided by the vendors such as Tangibility, Reliability, Responsibility, Assurance, and Empathy.

In Rodgers *et al.* (2005) work, the objective was to test "the moderating effect online experience on antecedents to online satisfaction and on relationship between on-line satisfaction and loyalty" by asking 836 respondents; both high and low online experiences[20]. The antecedent factors of online satisfaction were divided into 3 main factors as following:

1) Information Quality-Informativeness and Entertainment
2) System Quality - Interactivity and Access
3) Service Quality-Tangibility, Reliability, Responsiveness, Assurance and Empathy

The research of Rodgers *et al.* (2005) will be used in this study; however, there should be some changes in antecedent factors of Information Quality and System Quality [21]-[23] have further tested the work of DeLone & McLean (1992) and Spreng et al. (1996) about Website Quality composted of Web information quality and Web System quality in affecting customer satisfaction through nine key constructs with the model of Expectation Disconfirmation Effect on web-customer satisfaction (EDEWS). The results from model analysis showed that the proposed metrics has relatively high degree of validity and reliability. Also, the items used in measuring in the work of Rodgers, et. al., (2005) is not clear in some important points such as reliability, usefulness, ease of reading [24] in Information Quality and download speed [25]-[28], ease of navigation [28]-[30] in System Quality.

In addition, numerous researchers also link between customer satisfaction and Product dimension [10], [13]-[14], [31] also Panakul (2001) and Chulathummakul et al. (2000) found that Product quality is counted as the first priority in stimulating online purchase in Thai people, Product Perception [10] which comprises of Variety and Price, then this dimension is added into this study. It should be noted that Quality of product which is highly referred in numerous literatures is excluded in this study since the research is designed to measure customer's perception before taking the real purchase; thus, it is not applicable for the research to measure customer's perception about quality of product that has not been purchased.

To sum up, the antecedents used in this work will mainly be based on the three works. Firstly, the variables of Product perception will be based on the work of Thomas & Harry, 2004. Secondly, the variables of Service Quality will be based on the work of Rodgers *et al.* (2005). Lastly, the variables of Website Quality will be based on the work of HsueHen (2006). In order to particularly discover the influence of each antecedent factor, the research model is designed to study the influence of each attribute separately. Experience in purchasing is included in this study as a dummy since it is believed that this attribute may have an

influence on purchasing intention which will finally lead to different result between respondents with experience in purchasing and respondents with no experience in purchasing as found in the works of Thomas & Harry (2004) and Rodgers et al. (2005) [10], [20].

III. METHODOLOGY

A. Conceptual Framework and Hypothesis

This study aims to investigate the relationship of the antecedent factors in online shopping context between experienced online buyers and non-experienced online buyers with variables shown in Fig. 1.
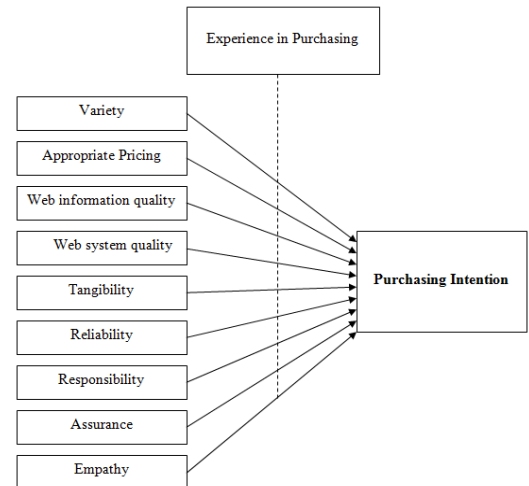

Fig. 1. Conceptual model

B. Hypothesis

1) Satisfaction toward Variety has a positive relationship with Purchasing Intention.
2) Satisfaction toward Appropriate Pricing has a positive relationship with Purchasing Intention.
3) Satisfaction toward Website information quality has a positive relationship with Purchasing Intention.
4) Satisfaction toward Website system quality has a positive relationship with Purchasing Intention.
5) Satisfaction toward Tangibility has a positive relationship with Purchasing Intention.
6) Satisfaction toward Reliability has a positive relationship with Purchasing Intention.
7) Satisfaction toward Responsibility has a positive relationship Purchasing Intention.
8) Satisfaction toward Assurance has a positive relationship with Purchasing Intention.
9) Satisfaction toward Empathy has a positive relationship with Purchasing Intention

C. Population and Sampling

The target populations of this research are Thai internet users who can be both shoppers who have at least 1 time experience in purchasing online and Thai internet users who have never purchased online. The total number of samples used in this research is 400 which is equally divided into two groups; the respondents with experience in purchasing online and the respondents with no experience in purchasing online.

D. Research Instrument

Survey questionnaire is used as an instrument to find numerous aspects of respondents' perception in this research.. Besides from physical distribution in convenient sampling technique, the survey will be sent through e-mail because this can directly reach to the target group.

E. Reliability and Validity

The most popular test of reliability used by numerous researches is Cronbach's coefficient alpha (Cronbach's alpha) which will test the consistency of respondent's answers to all the items in the measurement. Cronbach alpha of all variables exceed 0.7 which makes it acceptable, in fact since they range for 0.7 to 0.9 they are acceptable to excellent measures.

IV. RESULTS

A. Descriptive Statistics

Overall perception of factors influencing purchasing intention in all nine sections, (Variety, Appropriate Pricing, Website Information Quality, Website System Quality, Tangibility, Reliability, Responsibility, Assurance and Empathy) the respondents were quite neutral with these factors which leading to their intention to purchase. Tangibility is the only factor that the respondents satisfied in high level.

B. Inferential Statistics

First, the distribution of all variables is examined. Histogram is employed to check the normal distribution as shown in Fig. 2.
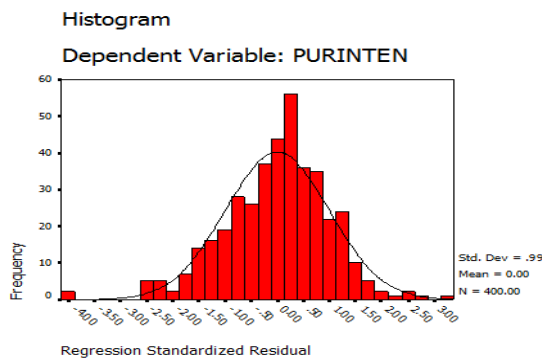

Fig. 2. Normal distribution

From all VIF is less than 5, the critical value suggested by Studenmund (1992) as an indication of a problem with multicollinearity. The highest VIF is 2.934, of Assurance; while the lowest VIF is 1.272, of Tangibility. In conclusion, this table shows no correlation among each variable or there is no multicollinearity problem.

From Table I, Durbin-Watson is equal to 1.8 20, it is within the recommended range of 1.5-2.5. Therefore, there is no violation of autocorrelation problem.

TABLE I: R SQUARE

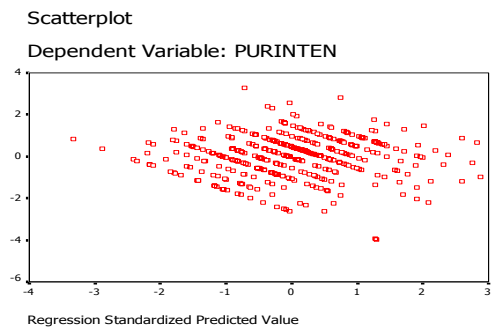| Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.723(a)	.523	.512	.64443	1.820

Fig. 3. Scatterplot

Illustrated in Fig. 3, the variance of this scatterplot found to be acceptable, since the residuals appear to fall randomly around a mean of zero as shown above. Thus, there is no violation of heteroscedasticity in the equation. This study is expected to further separately test two groups of respondents which are respondents with experience in purchasing and respondents with no experience in purchasing if it is found that experience have an effect on Purchasing Intention

C. Multiple Regression

Multiple regression analysis is employed in this study. All variables hypothesized are entered in the single step. The enter method enables to include all variables in the proposed model.

1) H0: Variety, Appropriate Pricing, Website Information Quality, Website System Quality, Tangibility, Reliability, Responsibility, Assurance, Empathy, and Experience in Purchasing will have no significant positive effect on purchasing intention

2) H1: Variety, Appropriate Pricing, Website Information Quality, Website System Quality, Tangibility, Reliability, Responsibility, Assurance, Empathy, and Experience in Purchasing will have significant positive effect on user intention.

1) Model 1

TABLE II: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.676	10	18.668	47.555	.000(a)
	Residual	152.7	389	0.393		
	Total	339.377	399			

Shown in Table II, F-value of 47.555 is significant at 0.05 levels indicating that there exists at least one independent variable affect to dependent variable. Hence, this research rejects the Ho and accepts H1 that Variety, Appropriate Pricing, Website Information Quality, Website System Quality, Tangibility, Reliability, Responsibility, Assurance, Empathy, and Experience in Purchasing will have significant positive effect on Purchasing Intention.

The finding of the enter method shows that the variables of Appropriate Pricing, Website Information Quality, Responsibility, Assurance, Empathy, and Experience in Purchasing are found to be statistically significant at 0.05 level. Moreover, the finding indicates that Experience in Purchasing has an effect on Purchasing Intention. From the

value of Beta of Standardized Coefficients, it can be concluded that among six variables that have influence upon purchasing intention, Assurance has the greatest influence with beta of 0.229 followed by Empathy (0.219), Experience in Purchasing (0.175), Responsibility (0.150), Website Information Quality (0.125), and Appropriate Pricing (0.118).

Therefore, Model 1:

Purchase Intention = 0.118 (Appropriate Pricing) +0.125 (Website Information Quality) + 0.150 (Responsibility) + 0.229 (Assurance) + 0.219 (Empathy) + 0.175 (Experience in Purchasing)

2) Model 2

This research further tests the multiple regression with the enter method by selecting only the respondents who have ever purchased online. Thus, the dummy variable is excluded from this test. The results are as follows.

Shown in Table III, F-statistics, it indicates that the model is statistically significant at the 0.05. Thus, the result still confirms to accept H1 that there exists at least one independent variable affect to dependent variable.

TABLE III: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.689	9	7.854	22.098	.000(a)
	Residual	67.531	190	0.355		
	Total	138.22	199			

The finding of the enter method indicates that the variables of Appropriate Pricing, Website Information Quality, Assurance, and Empathy are found to be statistically significant at 0.05 level whereas the variables of Variety, Website System Quality, Tangibility, Reliability, and Responsibility are not significant in the equation.

Hence the model,

Model 2:

Purchase Intention = 0.153 (Price) + 0.168 (Website Information Quality) + 0.252 (Assurance) + 0.218 (Empathy)

3) Model 3

The model for inexperienced users that conduct online purchasing is the following. Shown in TABLE IV, F-statistics, it indicates that the model is statistically significant at the 0.05. Thus, the result still confirms to accept H1 that there exists at least one independent variable affect to dependent variable.

TABLE IV: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.734	9	9.193	21.089	.000(a)
	Residual	82.822	190	0.436		
	Total	165.556	199			

It can be concluded that among four variables that have influence upon purchasing intention, Empathy has the greatest influence with beta of 0.256 followed by Assurance

(0.197), Responsibility (0.185), and Reliability (0.153). The value of the coefficient of determination (Adjust R2) at the 0.476 indicates that the model can explain about 47.6% of the variation in user intention to purchase online. The value of Standard error of the estimate (SEE) at the 0.30 indicates that, on average, the model generates a small amount of prediction error. The F-test indicates that the model is statistically significant at the 0.05 level.

The Model 3 for inexperienced users purchasing is the following

Purchasing Intention = 0.161 (Reliability) + 0.185 (Responsibility) + 0.197 (Assurance) + 0.256 Empathy

V. DISCUSSION

The results are summarized in Table V, indicating that experience in purchasing has significant influence on purchasing intention, the research has been further tested the difference of result between two group of respondent by comparing the results of respondents with experience in purchasing online and the results of respondents with no experience in purchasing online. The findings reveal that those who have ever purchased online mainly depend on assurance, empathy, appropriate pricing, and website information quality while those who have never purchased online consider empathy, assurance, responsibility, and reliability.

Comparing to the inexperienced, the respondents with experience in purchasing hold the same perception in terms of assurance and empathy as the most important variables in their buying consideration. Conversely, the experienced do tend to less concern about reliability and responsibility which represent service and confidence in receiving what has been promised; instead, website information quality and appropriate pricing have gained their interests. This finding is consistent with the study of Thomas & Harry (2004) [10] revealing that the respondents with experience in purchasing were more likely to be influenced by price. Similarly, Bhatnagar *et al.* (2000) stated that those who have ever purchased online were less concerned with customer service such as responsibility and reliability [16]; also, consumer risk issues such as form of payment, credit card security, and confidentiality. Based the respondent's suggestion, the author recognize that these differences root from the reasons that the respondents who have already made the transaction are more familiar with purchasing online so their suspect in security is lessened.

In addition, the respondents who have never purchased online mainly pay their attention to the sense of security and service (reliability, responsibility, assurance, empathy) while appropriate pricing has no influence in the consideration since the issue of price is not as vital as issue of security. Some of respondents suggested that it is not worth to pay less but being cheated from doing transaction with the unknown websites. Interestingly, empathy has the highest weight for the inexperienced followed by assurance whereas the experienced chose assurance as the most influential attribute. This incidence comes from the reasons that empathy represents the sincerity of the vendors to provide the requested assistance and to serve the customers as privileged

guests. Consequently, it is believed that this behavior will lead to the reduction of a wall between the sellers and buyers. Once the buyers become more closed and know the details of the sellers enough, it is possible that the suspect in their mind will be lessened and it is easier to make a purchasing decision.

TABLE V: HYPOTHESIS TESTING

Hypothesis	With or Without Experience of Online Purchase	Prior Experience for Online Purchase	No Prior Experience of Online Purchasing
"H1: Satisfaction toward Variety has a positive relationship with Purchasing Intention."	Rejected	Rejected	Rejected
"H2: Satisfaction toward Appropriate Pricing has a positive relationship with Purchasing Intention."	Positive, Accepted	Positive, Accepted	Rejected
"H3: Satisfaction toward Website information quality has a positive relationship with Purchasing Intention."	Positive, Accepted	Positive, Accepted	Rejected
"H4: Satisfaction toward Website system quality has a positive relationship with Purchasing Intention."	Rejected	Rejected	Rejected
"H5: Satisfaction toward Tangibility has a positive relationship with Purchasing Intention."	Rejected	Rejected	Rejected
"H6: Satisfaction toward Reliability has a positive relationship with Purchasing Intention." is rejected since Reliability is not significant in the equation.	Rejected	Rejected	Positive, Accepted
"H7: Satisfaction toward Responsibility has a positive relationship Purchasing Intention."	Positive, Accepted	Rejected	Positive, Accepted
"H8: Satisfaction toward Assurance has a positive relationship with Purchasing Intention."	Positive, Accepted	Positive, Accepted	Positive, Accepted
"H9: Satisfaction toward Empathy has a positive relationship with Purchasing Intention."	Positive, Accepted	Positive, Accepted	Positive, Accepted

VI. CONCLUSION

Although e-commerce has increased a large amount benefits such as creating superior value for customers beyond geographic barriers and generating the unprecedented business growth [2] e-commerce has not been realized by many people. It can be said that the internet users may frequently visit the shopping sites but many of them do not perform the actual transaction with the sites. Thus, it is imperative to discover the core variables that influence the intention to perform the actual purchase in the perception of e-customers.

The study reveals that people mostly value assurance and empathy as the most influential dimensions. This finding is applicable for both types of internet users that are users with experience in purchasing and users with no experience in purchasing. Thus, the shop vendors should rely heavily on these two dimensions to certain customer's trust in the shopping sites that they will surely receive what the vendors have promised and be treated as the privileged guests. The other attributes like appropriate pricing, responsibility, website information quality, and reliability should also be added into the websites since people consider these variables to support their decision. The experienced customers will value appropriate pricing and website information qualityafter assurance and empathy while the inexperienced will depend on responsibility and reliability instead. As a result, it is suggested that the shop vendors should include all of these variables; assurance, empathy, responsibility, website information quality, and reliability, into websites; however, the vendors can use diverse tactics to draw different groups of customers by focusing on each attribute valued by the target customers. For example, the sellers may greatly focus on appropriate pricing to attract and retain customers who have ever purchased from this site.

Interestingly, the results show that variety, website system quality, and tangibility have no influence on purchasing intention in customer's decision even though the respondents were quite satisfied with these dimensions. Nevertheless, this does not mean that the vendor could ignore the non-significant attributes since; as mentioned above, there have been many studies referred to the usefulness of these attributes. For instances, the beauty of design can attract customers to the sites whereas website quality system can generate customers convenience while traveling in the sites. Also, variety of products can assist customers from searching the desired merchandises in many websites. Moreover, refraining from provide good quality of these dimensions may lead to customer's dissatisfaction and make them turn to other sites. This means that the vendor should provide not only what the others give to the customers but also should emphasize on the variables that customer's value in their purchasing consideration.

REFERENCES

[1] NECTEC. National Electronics and Computer Technology Center [Online].
[2] R. L. Keeney, "The value of Internet commerce to the customer," in *Management Science*, vol. 45, pp. 533-542, 1999.
[3] E. Turban and D. King, *Introduction to e-commerce: Prentice Hall*, 2003.
[4] P. Kotler, M. H. Cunningham, and R. E. Turner, *Marketing Management*, Pearson Education Canada, 2001.
[5] D. J. Reibstein, "What attracts customers to online stores, and what keeps them coming back?" *Journal of the academy of Marketing Science*, vol. 30, pp. 465-473, 2002.

[6] R. J. Lutz, *Contemporary Perspectives in Consumer Research*, Ken Pub. Co. 1981.

[7] K. M. Kimery and M. McCord, "Third party assurances: mapping the road to trust in eretailing," *Journal of Information Technology Theory and Application (JITTA)*, vol. 4, pp. 7, 2002.

[8] E. F. McQuarrie, *Customer Visits: Building a Better Market Focus* M. E. Sharpe Incorporated, 2008.

[9] L. C. Schaupp and F. B danger, "A conjoint analysis of online consumer satisfaction," *Journal of Electronic Commerce Research*, vol. 6, pp. 95-111, 2005.

[10] T. Dillon and H. Reif, "Factors Influencing Consumers€™ Factors Influencing Consumers E-Commerce Commodity Purchases Commerce Commodity Purchases," *Information Technology, Learning, and Performance Journal*, vol. 22, pp. 1, 2004.

[11] R. E. Goldsmith, E. Bridges, and J. Freiden, "Characterizing online buyers: who goes with the flow?" *Quarterly Journal of Electronic Commerce*, vol. 2, pp. 189-198, 2001.

[12] A. Vellido, P. J. Lisboa, and K. Meehan, "Quantitative characterization and prediction of on-line purchasing behavior: A latent variable approach," *International Journal of Electronic Commerce*, pp. 83-104, 2000.

[13] S. J. Arnold, J. Handelman, and D. J. Tigert, "Organizational legitimacy and retail store patronage," *Journal of Business Research*, vol. 35, pp. 229-239, 1996.

[14] J. Baker, M. Levy, and D. Grewal, "An experimental approach to making retail store environmental decisions," *Journal of retailing*, 1992.

[15] J. B. Baty and R. M. Lee, "InterShop: enhancing the vendor/customer dialectic in electronic shopping,"*Journal of Management Information Systems*, pp. 9-31, 1995.

[16] A. Bhatnagar, S. Misra, and H. R. Rao, "On risk, convenience, and Internet shopping behavior," *Communications of the ACM*, vol. 43, pp. 98-105, 2000.

[17] D. L. Hoffman and T. P. Novak, "Marketing in hypermedia computer-mediated environments: conceptual foundations," *The Journal of Marketing*, pp. 50-68, 1996.

[18] C. Liu, K. P. Arnett, L. M. Capella, and R. D. Taylor, "Key dimensions of web design quality as related to consumer response," *Journal of Computer Information Systems*, vol. 42, pp. 70-82, 2001.

[19] R. A. Peterson, G. Albaum, and N. M. Ridgway, "Consumers who buy from direct sales companies," *Journal of Retailing*, vol. 65, pp. 273-286, 1989.

[20] W. Rodgers, S. Negash, and K. Suk, "The moderating effect of on - line experience on the antecedents and consequences of on - line satisfaction," *Psychology and Marketing*, vol. 22, pp. 313-331, 2005.

[21] Hsuehen, "An empirical study of web site quality, customer value, and customer satisfaction based on e-shop," *The Business Review*, vol. 5, pp. 190-193, 2006.

[22] V. McKinney and K. Yoon, "Mariam Zahedi, the Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach," *Information Systems Research*, vol. 13, pp. 296-315, September 1, 2002.

[23] W. H. DeLone and E. R. McLean, "Information systems success: the quest for the dependent variable," *Information systems research*, vol. 3, pp. 60-95, 1992.

[24] K. A. Saeed, Y. Hwang, and M. Y. Yi, "Toward an integrative framework for online consumer behavior research: a meta-analysis approach," *Journal of Organizational and End User Computing (JOEUC)*, vol. 15, pp. 1-26, 2003.

[25] B. D. Weinberg, "Don't keep your Internet customers waiting too long at the (virtual) front door," *Journal of Interactive Marketing*, vol. 14, pp. 30-39, 2000.

[26] S.-J. Chen and T.-Z. Chang, "A descriptive model of online shopping process: some empirical results," *International Journal of Service Industry Management*, vol. 14, pp. 556-569, 2003.

[27] T. Wattanasupachoke and A. Tanlamai, "E-commerce Model of Virtual Enterprises in Thailand," *Business Review*, Cambridge, vol. 4, pp. 296-303, 2005.

[28] N. Tamimi, R. Sebastianelli, and M. Rajan, "What do online customers value?" *Quality Progress*, vol. 38, pp. 35, 2005.

[29] K. Kim and E. B. Kim, "Suggestions to enhance the cyber store customers satisfaction," *Journal of American Academy of Business*, vol. 9, pp. 233-240, 2006.

[30] J. E. Collier and C. C. Bienstock, "How do customers judge quality in an e-tailer," *MIT Sloan Management Review*, vol. 48, pp. 35-40, 2006.

[31] S. L. Jarvenpaa and P. A. Todd, "Consumer reactions to electronic shopping on the World Wide Web," *International Journal of Electronic Commerce*, pp. 59-88, 1996.

Settapong Malisuwan was born on 24th March 1966 in Bangkok, Thailand. He received his PhD in electrical engineering (telecommunications), specializing in mobile communication systems from Florida Atlantic University (State University System of Florida), Boca Raton in 2000. He received an MSc in electrical engineering in mobile communications system, from George Washington University in 1996, an MSc in electrical engineering in telecommunication engineering from Georgia Institute of Technology in 1992 and a BSc in electrical engineering from the Chulachomklao Royal Military Academy, Nakhon-Nayok, Thailand in 1990. He served in the Royal Thai Armed Forces for more than 25 years and is currently the Vice Chairman of National Broadcasting and Telecommunications, Bangkok, Thailand. His research interests are in efficient spectrum management and Telecommunications policy and management in Thailand. Col. Dr. Settapong Malisuwan Settapong Malisuwan is currently the Elected Vice Chairman and Board Member in the National Broadcasting and Telecommunications Commission, Thailand