An Empirical Investigation into the Antecedents of Trust and Satisfaction in e-Commerce Services: Perspective of Thai Customers

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Abstract *While many previous studies in e-Commerce research have been conducted across developed countries in the West, there has been little work done on e-Commerce in developing countries, especially in Thailand. Even though e-Commerce adoption and e-Commerce success factors have already been investigated in this region, it is hard to find an empirical investigation into the antecedents of trust and satisfaction that are the two essential ingredients for improving customer relationship. Therefore, the purpose of this study is to examine the antecedents affecting trust and satisfaction among internet users in Thailand. Based on the perceptions of 299 respondents, in order to satisfy both potential and repeat customers, a website manager should consider the attributes associated with responsiveness, assurance process, functionality, and intensive shopping as the basis for mandatory services in the website. After the basic needs are responded completely, the manager should turn to draw the attention of customers by providing attractive and intensive design, as well as providing more valuable attributes, such as the advanced search and useful information.*

1. Introduction

Consumers in the digital era can find interesting products or services with just a mouse click. Online shopping can not only generate a convenient environment for shoppers, but it also creates new business opportunities for vendors. With the minimum cost, small and large firms around the world can expand their business operation into the e-Commerce market. While online stores can be established conveniently, it is hard to gain trust from their customers. In general, trust is a dynamic relationship between a trustor and trustee that depends on experience, time, and context [21, 22]. In e-Commerce services, trust is notable not only for establishing the initial relationship, but also for maintaining the long term relationship. The dynamic of trust is caused by a change in perceptions between first time visitors/buyers (potential customers) and revisiting buyers (repurchase customers) [11, 21].

Potential customers who access a website for the first time have little experience within the website. Therefore, they can determine the target website through second-hand knowledge and their partial experience. Lack of prior experience with online vendors can lead potential customers to hesitate to transfer their personal information and money online [11]. According to the previous studies in [6, 11, 18, 29], we have found that there are many factors affecting initial trust among potential customers. These factors can be summarized as follows: vendor reputation, familiarity, information quality, security, privacy, ease of use, and usefulness.

On the other hand, repeat customers who have more shopping experiences than potential ones can perceive the website as more trustworthy, more useful, and easier to use [6, 11]. Following the previous research in [1, 2, 5, 6, 7, 8, 11, 12, and 31], we have found that the provision of better support for service quality and system quality are identified as the two most important factors affecting trust in repeat customers. Thus, online vendors should maintain their websites for revisiting shoppers by providing acceptable service delivery, sufficient privacy protection, adequate security mechanisms, effective usability, and online shopping incentives. In addition, online vendors should not just be concerned about the functional attributes, but also about hedonic attributes (e.g., appealing layout, enjoyment, and exciting activities) that have the ability to delight and satisfy customers [17]. In this way, for the long term relationship, online vendors need to focus on the attributes that can improve both customer trust and satisfaction [9, 17].

Meanwhile, many previous studies on e-Commerce have been widely investigated across developed countries in the West [25], there are few studies on e-Commerce in developing countries, especially in Thailand. From this aspect, the scope of sample size in this study is collected in Thailand. When focus deeply on e-Commerce research in Thailand, we have found

that e-Commerce adoption [16, 19] and e-Commerce critical success factors [14, 15, and 24] are already investigated in this region. Nevertheless, it is hard to find an empirical investigation into the antecedents of trust and satisfaction that are the two essential ingredients for improving customer relationship [12]. To fill this gap, our study is therefore addressed comprehensively in the customer perceptions of trust and satisfaction among the internet users in Thailand.

The remainder of this paper is organized as follows. Section 2 provides theoretical background. Section 3 describes the research methodology. In section 4, experimentation results are demonstrated. Finally, sections 5 and 6 offer the discussions and conclusions of this research.

2. Theoretical Background

Due to the uncertainty of the online environment, buyers may perceive more risk when interacting with online stores than physical stores. Lack of touch and feel in online shopping can also lead to hesitation among buyers. In this situation, buyers have to rely only on trusted websites in order to reduce the risk for their personal information and ineligible vendors [21, 22, 27 28, and 30]. Therefore, trust is a very important mechanism that can encourage buyers to become more confident in their initial interaction and even more important for maintaining the long term relationship [2, 11, 18,and 28]. Recent findings from empirical research also indicated that trust shows the significant effect on satisfaction and purchasing intention [2, 8, 12, and 31]. For the long term relationship, trust also shows significant impact directly on customer loyalty and indirectly through customer satisfaction [9, 12].

According to McKnight et al. [18], trust in e-Commerce can be separated into two stages: 1) trust in an exploratory stage or initial trust in potential customers and 2) trust in a commitment stage or ongoing trust for repeat customers. Recent studies have also shown strong evidences to support that factors involved in the development of initial trust can be classified into three distinctive groups as follows: 1) personal traits, 2) social image, and 3) website quality [6, 11, 18, 21, and 29]. Personal traits are the factors that reflect personal belief and individual experience. Social image refers to public opinion on the website. However, it is complicated to manage both personal traits and social image in practice. These two factors are beyond the control of website operation, and it also takes a long time to establish a good image from public society. For this reason, website managers should develop and maintain consistency for all quality aspects in their internal process. With this sincere expression, visitors will perceive the website as the best destination for delivering high quality products and services. Eventually, the visitors will put their trust and not hesitate to participate with the website. The factors affecting initial trust can be summarized in Table 1.

Table 1. Factors affecting initial trust among potential customers.

Factors	Important Findings in Recent Research
Information Quality	Information available on a website should be accurate, current, relevant, useful, and easy to understand [9, 11, 28]. Information quality shows major impact on initial trust [11].
Security and Privacy	Protection of personal information and security in electronic payment system are also major concerns among potential customers [18, 28, 29].
Ease of Use System	Good navigation and easy-to-use system can create initial trust [6, 7, 29].
Usefulness System	Useful system and effective search function can increase initial trust [6, 7, 29].
Website Reputation	Reputation represents social image on a website. Good reputation is a valuable asset and requires a long term relationship to establish. [2, 7, 18, 29].
Familiarity	Familiarity is an experience based perception to reduce misunderstanding about system and service operations [6]. The more familiarity, the more trust customers will have on the website.
Trust Propensity	Trust propensity is a personal experience which people show faith or belief in humanity. Trust propensity is very important in the phase of initial trust [6, 29].

While potential customers are more concerned with the quality of content and workable transaction process in the website [6, 11, 22, 25, 28, and 29] repeat customers are considered more carefully with the quality of the after-sales services [2, 11, 25, and 28]. Repeat customers become more familiar with the online shopping process. They have more trust in the website operation, and expect to get the best services for their next purchase [6, 7, and 11]. The possibility of repurchase from repeat customers will depend not only on their positive experience with the previous purchase, but also on perceived benefits in the next purchase [4, 17]. As we mentioned in the introduction, over the long run, the website manager should be concerned with the quality attributes that can cultivate both trust and satisfaction. The factors that affect both trust and satisfaction in repeat customers can be summarized in Table 2.

Table 2. Factors affecting trust and satisfaction in repeat customers.

Factors	Important Findings in Recent Research
Information Quality	Information quality has a weaker effect on trust for repeat customers than for potential ones [11].
Security and Privacy	Privacy protection has a higher effect on trust than security protection for repeat customers [7].
Fulfillment and Responsiveness	Fulfillment and responsiveness are the most important factors that affect to trust for repeat customers [2].
Assurance Processes	Assurance mechanisms, such as guarantee and regulation, have a positive effect on trust for repeat customers [7].
Hedonic Attributes	Fun and exciting activities can provide more satisfaction to experience users [5].
Incentive Offers	Exclusive offers from a website can increase perceived value and enjoyment for repeat customers [17].
Reputation and Trust propensity	In most cases, reputation and trust propensity have a weaker effect on trust for repeat customers than for potential ones [6, 7, 11, 29].
Familiarity	Repeat customers have more familiarity with a website than potential customers [6].

In summary, potential and repeat customers have different perspectives on the website operation. Online vendors should understand a dynamic of transition between initial and ongoing trust from the customers' point of view. The vendors can create initial trust by establishing the stability of an online environment for business transaction. Additionally, the vendors should retain the customers by delivering excellent services, protecting their personal information, and offering intensive value.

3. Research Methodology

3.1. Sampling

Even though undergraduate students in universities represent only a portion of the online shopper population, they have been used as subjects for several empirical studies [7, 8, 9] recognizing that students can be applied as surrogates for online shoppers. Therefore, university students in Thailand were used as the subject of our survey. We used convenience sampling to collect questionnaires from 400 university students who had used the internet for searching or shopping. After the survey was completed, a series of statistical analysis was conducted to classify the structure of online and offline features and clarify the role of both features on trust and satisfaction.

In addition, Tih et al. [26] performed independent sample t-test to test for perceptual differences toward online retailing services between students and non-students (employees). They found that there are no significant differences between the mean of students and employees. Therefore, collecting only one group of online participants (students or employees) can provide an adequate explanation for e-Commerce research.

3.2 Item and Scales

Most items using in our instrument were adapted from prior research as mentioned in section 2. The details of each factor involved in the model can be summarized in Table 1 and 2. The pilot test was conducted among 10 graduate students in information technology to check the readability of content. Then, the pretest survey was conducted on June 2012 with 98 responses. After discarding incomplete or otherwise unusable questionnaires, there were 64 usable responses that represent for a net response rate of 65.3%. After performing dimension reduction by using principle component analysis (PCA), we then decided to drop twenty-one inappropriate items, including the items associated with customization and social presence. As a result, forty-nine items were remained in order to conduct the main survey. A final version of the instrument was then distributed to 400 undergraduate students from three universities in Thailand (two in the central and one in the north). Respondents were asked to identify their familiar website to assess service quality for both online and offline features.

Table 3. Demographic profile of the respondents (*n* = 299).

Measures	Items	Frequency (Percentage)
Gender	Male Female	130 (44.7%) 161 (55.3%)
Age	Under 20 20-25 26-30 Over 30	70 (23.8%) 204 (69.4%) 9 (3.1%) 11 (3.7%)
Educational level	Undergraduate student Graduate student	282 (94.6%) 16 (5.4%)
Internet experience *(in years)*	Less than 1 1-2 3-5 More than 5	29 (9.7%) 27 (9.0%) 61 (20.4%) 182 (60.9%)
Online purchase experience	Have purchased Have not purchased	161 (53.8%) 138 (46.2%)
Interesting items *(allow multiple selections)*	Tangible products Digital products Electronic devices Travel services Fashion products	83 (27.8%) 52 (17.4%) 59 (19.7%) 69 (23.1%) 160 (53.5%)
Sources of shopping	Only domestic websites Only international websites Domestic / international websites Start from domestic websites	176 (60.9%) 12 (4.2%) 42 (14.5%) 59 (20.4%)
Most preferred payment method	Credit card Debit card e-Banking Counter service Cash on delivery Direct bank transfer Others (e.g., PayPal, ATM)	40 (13.4%) 10 (3.3%) 27 (9.0%) 29 (9.7%) 147 (49.2%) 31 (10.4%) 15 (5.0%)

4. Research Results

4.1. Demographic Profile

As of August 2012, a total of 400 responses were received. The participants were asked to identify a familiar website and evaluated its service quality. After eliminating incomplete and inappropriate responses, a total of 299 usable responses (represent 74.8%) were included in the sample of validation and reliability testing. Of which 53.8% had purchased experience in shopping online. Table 3 shows the demographic profile of the respondents. More than half of the respondents were female (55.3%), while 44.7% were male. The majority of respondents were undergraduate students (94.6%), followed by graduate students (5.4%). By age group, people under the age of 25 gained the largest share (93.2%). Around 80% of them had been using the internet for three years or more. The majority of the respondents selected fashion products (53.5%) as their most preferred products, followed by tangible products, such as books and CDs, (27.8%), travel services (23.1%), electronic devices, such as cell phones, (19.7%), and digital products, such as e-books, (17.4%).

The respondents expressed their concern about risk-taking associated with online transaction. In this case,

they preferred to choose an offline payment method like cash on delivery (49.2%) rather than an internet payment system like credit card (13.4%). The vast majority of respondents (81.3%) also preferred to start their connection with domestic websites before connecting to international websites. This seems like a great opportunity for local businesses to protect their own regional customers from international traders.

4.2. Results of Validity and Reliability

To access validity of the instrument, we performed PCA with VARIMAX rotation. Components with eigen values greater than 1 and factor loadings exceeded the cut-off point of 0.5 were considered. Reliability of the instrument was measured by using cronbach's alpha coefficient.

The result of component extraction for potential customers is provided in Table 4. In the case of non-shopping experience, eight principal components were extracted. Thirteen items were dropped due to low factor loadings or high cross loadings. As a result, the thirty-six items remained and could be described as follows: 1) seven items in responsiveness and assurance, 2) five items for satisfaction, 3) four items for trust, 4) five items for information quality, 5) five items for functionality, 6) four items for security and privacy, 7) four items for intensive shopping, and 8) two items for web design. Under the reliability analysis, all components earned cronbach's alpha above 0.7 that can represent an adequate level of reliability.

Table 4. Results of principle component analysis for potential customers ($n = 138$).

Measurement Items	Components							
	1	2	3	4	5	6	7	8
Contain accurate information				0.567				
Contain up-to-date information				0.781				
Provide information in easy to understand format				0.597				
Provide information relevant to customer needs				0.577				
Provide useful information				0.505				
Contain protection system for personal data theft						0.587		
Convey a sense of good security						0.724		
Contain strong security system						0.738		
Contain reliable policy to manage personal data						0.526		
Provide easy to use searching system					0.606			
Display high speed interaction					0.650			
Be available at all times (availability)					0.572			
Contain searching results relevant to customer needs					0.523			
Contain a system able to compare prices					0.643			
Create a sense of professional design								0.608
Contain attractive design rather than other sites								0.645
Provide special discount for some products or services							0.670	
Provide special discount to persuade customers							0.717	
Give special discount that is worthwhile							0.712	
Give special discount that customers can worthily purchase							0.649	
Respond for all found mistakes	0.604							
Provide a channel that customers can contact conveniently	0.577							
Provide staff to promptly receive customer claims	0.756							
Provide staff that can contact conveniently	0.542							
Provide FAQs that customers may not call to staff at all times	0.705							
Contain reliable guarantee for products or services	0.569							
Provide money back guarantee when buyers are not satisfied	0.785							
Have ability to take care of customers			0.707					
Be able to trust			0.756					
Be able to run business honestly			0.727					
Always pay attention on customers			0.583					
Be satisfied with products or services on the website		0.593						
Be satisfied with experience on the website		0.654						
Be satisfied with internal operations of the website		0.645						
Overall satisfied with the website		0.757						
Be pleased to purchase from the website		0.620						
Eigen value	5.341	4.305	4.210	4.184	4.042	3.687	3.447	2.205
% of variance	10.900	8.786	8.592	8.538	8.249	7.524	7.034	4.500
Cummulative % of variance	10.900	19.686	28.278	36.816	45.066	52.590	59.624	64.124
Cronbach's Alpha of relevant factor	0.899	0.897	0.884	0.843	0.849	0.820	0.857	0.792

In terms of component extraction for repeat customers as described in Table 5, there were forty-two items remained after seven were dropped according to low factor loadings or high cross loadings. As a result, seven components were extracted. Component 1 is related to security and privacy, component 2 related to functionality, component 3 to web design and intensive shopping,

component 4 to satisfaction, component 5 to responsiveness and assurance, component 6 to trust, and lastly component 7 to information quality. All components earned cronbach's alpha above 0.8. It is indicated that internal consistency could be obtained. The results in Table 4 and 5 indicate that there are different perceptions of website operation between inexperienced and experienced customers. Ability to perform web design and intensive shopping were regarded as different constructs for inexperienced customers. In contrast, experienced customers identified web design and intensive shopping as the same construct. The items related to functionality, web design, security, and privacy were remained for experienced customers rather than the inexperienced ones. This can be caused by deeper familiarity within the website provided deeper levels of interpretation [18, 21]. Therefore, the items for inexperienced customers should focus on the factors influencing initial trust, whereas the items for repeat customers should emphasize on the factors causing ongoing trust and satisfaction [5, 20, 25].

Table 5. Results of principle component analysis for repeat customers ($n = 161$).

Measurement Items	Components						
	1	2	3	4	5	6	7
Contain accurate information							0.571
Contain up-to-date information							0.633
Provide information in easy to understand format							0.753
Provide information relevant to customer needs							0.559
Prevent virus or other harmful programs	0.605						
Good collaboration with financial institutes	0.555						
Contain protection system for personal data theft	0.771						
Convey a sense of good security	0.766						
Contain strong security system	0.800						
Contain reliable policy to manage personal data	0.799						
Identify the reasons for gathering customer data	0.677						
Permit customers to ask for details of their personal data	0.637						
Do not disclose personal data without permission	0.626						
Provide easy to use searching system		0.704					
Display high speed interaction		0.586					
Be available at all times (availability)		0.686					
Contain high speed searching system		0.648					
Contain navigation system able to link to other positions		0.656					
Contain searching results relevant to customer needs		0.747					
Contain a system able to compare prices		0.566					
Create a sense of professional design			0.591				
Contain outstanding design rather than other sites			0.582				
Contain attractive design			0.647				
Contain attractive multimedia			0.637				
Contain proper multimedia			0.625				
Provide special discount for some products or services			0.668				
Provide special discount to persuade customers			0.591				
Provide a channel that customers can contact conveniently					0.591		
Provide staff to promptly receive customer claims					0.582		
Provide staff that can contact conveniently					0.647		
Provide FAQs that customers may not call to staff at all times					0.637		
Contain reliable guarantee for products or services					0.625		
Provide money back guarantee when buyers are not satisfied					0.668		
Have ability to take care of customers						0.564	
Be able to run business honestly						0.603	
Be able to operate as promised						0.617	
Always pay attention on customers						0.596	
Be satisfied with products or services on the website				0.680			
Be satisfied with experience on the website				0.777			
Be satisfied with internal operations of the website				0.710			
Overall satisfied with the website				0.613			
Be pleased to purchase from the website				0.650			
Eigen value	**6.831**	**4.810**	**4.549**	**4.534**	**3.849**	**3.320**	**3.083**
% of variance	**13.941**	**9.816**	**9.283**	**9.252**	**7.855**	**6.775**	**6.292**
Cummulative % of variance	**13.941**	**23.757**	**33.040**	**42.292**	**50.147**	**56.922**	**63.214**
Cronbach's Alpha of relevant factor	**0.920**	**0.892**	**0.902**	**0.919**	**0.855**	**0.887**	**0.804**

4.3. Factors Affecting Trust and Satisfaction

4.3.1. Factors Affecting Trust of Potential Customers

Results of the regression analysis from potential customers indicate that intensive shopping is the most important factor for boosting initial trust. Besides, the other minor factors include 1) security and privacy, 2) functionality, and 3) responsiveness and assurance, respectively. We were surprised to find that information quality has no significant effect on initial trust. This finding is in contrast to the result of the empirical study carried out by Kim et al. [11]. A possible explanation for this aspect may be that information quality is not yet sound to prescribe as the generalized activation of initial trust, providing high quality information can convey a better sense of preventing customers from distrust [20, 25].

4.3.2. Factors Affecting Satisfaction for Potential Customers

According to the results of regression analysis in Table 6, functionality is the most important factor affecting customer satisfaction, and the other minor factors are 1) responsiveness and assurance and 2) intensive shopping, respectively. Interestingly, we found that attractive design does not influence initial trust or satisfaction. Based on the findings from a drawn sample of this study, in order to persuade potential customers during the initial phase of customer engagement, the website should focus on transparent process, intensive shopping, effective operation, and efficient backend support, while developing modern and attractive design should be considered as the second priority.

4.3.3. Factors Affecting Trust of Repeat Customers

The findings of factors predicting trust for repeat customers in this study are consistent with other studies in [2, 6, 12, 25, and 31]. Responsiveness, assurance, and functionality are identified as the important predictors of ongoing trust [2, 31], while security and privacy show lower relative strength compared to the results from potential group [1, 4, 12, and 29]. Even though web design does not affect the initial trust among potential customers, two components of the combined web design and intensive shopping are found to affect ongoing trust for repeat customers. Taken together, the above findings indicate that repeat customers have placed more trust toward their familiar website than potential ones [6]. Therefore, in addition to initial trust attributes, repeat customers will need to have new experience with other attributes that can create value in their shopping (e.g., attractive design, multimedia capability, and advanced search function) [5, 25].

4.3.4. Factors Affecting Satisfaction for Repeat Customers

Based on the results of regression analysis in Table 7, for repeat customers, the important factors that show statistically significant results with p-value<0.01 have a positive impact on customer satisfaction closely similar to the results of predicting factors for ongoing trust, except for the difference in beta value.

Table 6. Results of regression analysis on factors affecting trust and satisfaction in potential customers ($n = 138$).

Independent Variables	Initial Trust			Satisfaction		
	Beta	T-value	Sig. level	Beta	T-value	Sig. level
Information quality	0.066	0.723	0.471	0.032	0.386	0.700
Security and privacy	0.192*	2.294	0.023	-0.051	-0.661	0.510
Functionality	0.183*	2.036	0.044	0.371**	4.495	0.000
Web design	0.074	0.918	0.361	0.136	1.832	0.069
Intensive shopping	0.218**	2.719	0.007	0.187*	2.539	0.012
Responsiveness and assurance	0.180*	2.040	0.043	0.261**	3.219	0.002
F-value	**26.038****			**34.873****		
R²/adjusted R²	**0.544/0.523**			**0.615/0.597**		

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

Table 7. Results of regression analysis on factors affecting trust and satisfaction in repeat customers ($n = 161$).

Independent Variables	Ongoing Trust			Satisfaction		
	Beta	T-value	Sig. level	Beta	T-value	Sig. level
Information quality	-0.013	-0.176	0.861	0.147*	2.006	0.047
Security and privacy	0.178*	2.460	0.015	0.012	0.169	0.866
Functionality	0.217**	2.821	0.005	0.258**	3.326	0.001
Web design and intensive shopping	0.312**	4.376	0.000	0.190**	2.649	0.009
Responsiveness and assurance	0.223**	3.078	0.002	0.306**	4.194	0.000
F-value	**41.837****			**40.505****		
R²/adjusted R²	**0.574/0.561**			**0.566/0.552**		

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

The component of responsiveness and assurance is the most important factor affecting customer satisfaction, followed by 1) functionality, 2) design and intensive shopping, and 3) information quality, respectively. Another interesting result is that even though information quality does not affect trust for both potential and repeat customers, it affects satisfaction in repeat customers. This can be indicated that the customers who are familiar with the online shopping process would increasingly pay attention to useful information provided by the website.

Therefore, a website manager should consider the attributes associated with responsiveness, assurance process, functionality, and intensive shopping as the basis for mandatory services in the website. After the basic needs of serving customers are responded completely, the manager should turn to draw the attention of customers by providing attractive and intensive design, as well as providing more valuable attributes, such as the advanced search and useful information [5, 12, 25].

5. Discussions

This research study is conducted for examining the antecedents that affect trust and satisfaction among internet users in Thailand. Based on the perceptions of 299 respondents, in order to satisfy both potential and repeat customers, a website manager should consider the website attributes associated with responsiveness, assurance process, functionality, and intensive shopping as the basis for mandatory services in the website. After the basic needs are responded completely, the manager should turn to draw the attention of customers by providing attractive and intensive design, as well as providing more valuable attributes, such as the advanced search and useful information.

Furthermore, our findings differ from the previous studies in some aspects. Firstly, we were surprised to find that information quality has no significant effect on initial trust. This finding is in contrast to the result of the empirical study carried out by Kim et al. [11]. A possible explanation for this aspect may be that information quality is not yet sound to prescribe as the generalized activation of initial trust.
Secondly, the study by Liu et al. [17] found that appealing layout alone has a significant effect on satisfaction in experienced buyers, while our findings indicate that the combination component, namely as "web design and intensive shopping" shows a significant effect on trust and satisfaction among repeat customers. After doing more investigation, we found that the factors involving the beautiful and attractive website affect to trust in a higher individualism country like Spain, but not affect to trust in the lower individualism country as Japan. The customers in Japan still believe that the reputation of website is

important and affects to trust, while the customers in Spain have different views. The collected data from customers in Spain revealed that website reputation does not affect to trust [23]. In the study done by Chiu et al. [3] also found that the utilitarian benefits which are factors concerning website usage affect to the repurchase intention rather than hedonic benefits, which are factors concerning the pleasure and entertainment for the customers in Taiwan, which is considered as the high collectivism country.

Moreover, Kim et al. [13] also identified that social, cognitive, and functional cues play the important role in creating good responses to the online retailers for Korean consumers, higher than emotional or entertainment cues. On the other hand, the emotional claims of US consumers seem to lead to good responses with the online retailers.

When considering the cross-culture circumstances provided in the recent studies, it is found that the consumers in Asian countries pay more attention to the factors related the utilitarian benefits or the usefulness from the website operation rather than the hedonic benefits or the benefits in terms of pleasure and joyful from the websites. Therefore, the utilitarian quality has played important roles as the basis for mandatory services in driving the success of e-Commerce for Thailand as well as they has in Japan, Korea, and Taiwan.

6. Conclusions

The main purpose of this research is to examine the antecedents of trust and satisfaction, which are identified as the two essential ingredients for improving customer relationship. The results of this research reveal that intensive shopping, security, privacy, responsiveness, assurance process, and functionality are the important factors for boosting initial trust, while functionality, intensive shopping, responsiveness, and assurance process are also identified as the important factors affecting customer satisfaction among potential customers. For repeat customers, responsiveness, assurance process, functionality, web design, intensive shopping, security, and privacy are identified as the important factors affecting the ongoing trust. While, functionality, responsiveness, assurance process, web design, intensive shopping, and information quality show a significant effect on customer satisfaction.

Therefore, in order to persuade the Thai customers during the initial engagement, a website manager should focus on transparent process, intensive shopping, effective operation, and efficient backend support, while developing modern and attractive design should be considered as the second priority. In addition to initial trust attributes, repeat customers will need to have new experience with other attributes that can create value in their shopping (e.g., attractive

design, multimedia capability, and advanced search function for relevant information).

As in most studies, there are some limitations to this study. Firstly, this study collected data from 299 university students in Thailand, a future data collection should be further investigated for ensuring the generalization of the results and external validity in the measurement items. Secondly, affecting from cultural and social sensitivity are not included in the scope of this study, further investigation should be performed.

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