

# A Model of Loyalty in Online Shopping in Thailand

by

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## Abstract

The purposes of this article were 1) to study factors effecting to consumer Trust in purchasing products via websites 2) to study factors effecting to consumer satisfaction in purchasing products via websites 3) to study factors effecting to consumer loyalty in purchasing products via websites. The sample group was consisted of 400 consumers who used to book or purchase products and services via websites. The sample group was not specified by region, administrative district, and gender. The research used online questionnaire for collecting data. After the researcher modified the model, it is found that the result of Goodness of fit index is well fitted to empirical data. All six harmony indices that passed the criteria are  $\chi^2 = 542.659$ ,  $\chi^2/d.f. = 2.608$ , RMSEA = 0.063, CFI = 0.918, TLI = 0.900, SRMR = 0.056. The result found that product characteristics, website quality, and perceived value are important factors influencing e-trust and e-satisfaction. The values perceived is the only one factor affecting e-loyalty. The research result can be used to identify the modern market strategy for improving selling products and services via websites.

**Keywords:** Online Shopping, Product Characteristics, Website Quality, Values Perceived, Information Social

## 1. Introduction

During the past few years, e-commerce had made tremendous benefits to both sellers and consumers. The growth of e-commerce is extremely special. Currently, using internet for selling products or services is more comfortable (Schneider, 2007; Sebastianelli et al., 2008). The e-commerce has changed business activities which has become an important transaction channel for sellers and consumers (EMarketter, 2007). The internet has various benefits for consumers such as acquiring information easily, in-depth search, products comparison, readiness, convenience, service evaluation of various shops, and so on (Bagdoniene & Zemblyte, 2009). Therefore, it is not surprised that e-commerce transaction has grown more and more because low cost makes high profit. Also, the internet acts as an effective information channel so it facilitates the transaction communication to new consumers (Griffith et al., 2006; Maghrabi et al., 2011) More recognizing of customer roles in

creating and delivering services are the force for enhancing customer-centered organization so the digital technology plays an important role in organization (Setia et al., 2013) Thus, consumers can seek information and choose products as they need conveniently. The website quality helps consumers to select products by themselves as well as payment method, delivery system and others make customers satisfied and loyal in purchasing products via websites (Dharmesti & Nugroho, 2013).

However, Keisidou et al. (2011) state that purchasing products via websites is one of the most popular activities on the internet but the reasons why consumers buy products via websites are not clearly yet. Changchuto (2011) says that Thailand's online business grows more slowly than other countries due to online business operator's lack of understanding in business operation. The consumers also lack of trust, e-confidence, and insufficiency of experience in purchasing goods via websites which is consistent with Economic Intelligence Center, Siam Commercial Bank who states that if customers find problems at the first time of their purchasing products via websites, most of them will not return their purchasing in the future.

From the reasons mentioned above, the researcher is interested in studying the purchasing products and services via websites which the intention to study of "The development of loyalty model effecting consumers in purchasing products via websites". The objectives are to study factors influenced consumers loyalty in purchasing products on websites and to develop loyalty model effecting purchasing products on websites. The findings will be beneficial to the management of both public and private sectors by using them as guidelines in enhancing and determining modern marketing strategies for further improving products and services.

## 2. Theoretical Background

The Technology Acceptant Model (TAM) was proposed by Davis (1989), who describes the accepted technology by pointing out that behavioral intention determines the technology. Later, Wang et al. (2008) say that behavioral intention is determined by person's attitude towards the use of technology. Jiayin qi et al. (2009) indicates that Technology Acceptant Model (TAM) has been proven as useful theory. The Technology Acceptant Model (TAM) system has its structures to describe the new data receiving process of users. Zhang & Prybutokl (2003); Wong et al (2014) state that TAM explains how characteristic integration causes e-loyalty and e-satisfaction.

The shops on websites use product characteristics for making its catalogs (Brynjolfsson, 2003). The online business strategy depends on product characteristics (Zhu, 2010). The product characteristics affect consumers' acceptance in e-commerce. Marketers need to pay attention to product characteristics (Jain, 2011) which has been proven that the products characteristics are the key factors for purchasing products via websites (Sinha, 2014).

A website quality is one factor affecting the main behavior of consumers in purchasing products via websites at the first time. It is very important to define purchase intention of consumers which leads to returning purchase (Zhou et al., 2009). The multidimensional view affected to website quality level is the website usage, safety, and privacy (Chen & Dibb, 2010). Most of positive and negative perceptions depend on the website quality (Bolar & Shaw, 2015).

Both marketers and researchers are interested in values perceived because it plays an important role in predicting purchase behavior and competitive advantages (Parasuraman, 1997).

Values perceived of each consumer purchasing products via websites is considered as benefit perceived and risk perception in any purchase contexts that is likely to affect more or less purchasing products via websites (Chang et al., 2009 & Sarkar, 2011).

Social information is the process in which customers checking their social information before deciding to purchase products (Ajzen, 1991). The social information is a major role in making decision of consumers. When consumers face difficulties such as time limitation or restriction on products or services information they do not know, the social information will eliminate the risk in the process of consumers decision (Lee et al, 2011), (Scaraboto et al., 2012).

An e-trust is a relative characteristic based on consumers' experiences (Wang et al., 2004). The e-trust in purchasing products via websites has two dimensions: purchase e-trust and online business e-trust (Lopez & Montoro, 2005). Gefen (2003) explains that the mechanism of e-trust looks like a life cycle. The e-trust cycle is divided into 1) initial stage e-trust for the first time of ordering and 2) if consumer is satisfied with the order, he/she will develop an e-trust to the seller continuously. \

For developing consumer satisfaction consistently, it starts by listening to customer's comments or feedbacks and analyzing them for further improvement (Zairi, 2000). Kotler (2003) says that consumers judge the satisfaction from all experiences they receive from the products, sales process and sales services. The satisfaction after purchasing products depends on company's special offer relating to customer expectation. Evanschizky et al. (2004) & Ha (2012) state that satisfaction theory hangs on purchase characteristic perception of consumers, website management effectively; these features enhance consumer perception accordingly.

Demers E & Lev B (2001) support that customer loyalty act as the performance indicator for e-shops. Working process will be driven by number of different visitors. Ouzaka (2002) explains that the royalty is manifested by behavior and it is the result from psychology strengthening for further relationship so the loyalty should be concerned continuously. Flavian, Guinaliu & Guerra (2006) state that e-loyalty affects more on consumers who are likely to buy goods from the same website rather than switching to others. It is in accordance with Cyr, Head & Ivanov (2009) and Wong et al. (2014) indicate that e-loyalty can describe the intentional perception and website usage as well as returning to the previous website in the near future.

### **3. Proposed Model and Hypothesis**

#### **Product Characteristics**

The product characteristics in term of product category and product price affect customer's e-trust in purchasing products via websites (Cheung et al., 2005). The sellers via websites should provide in-depth information of product characteristics to meet the need of consumers and make them trust (Wong et al., 2014).

The consumers receive benefits from product characteristics (Brynjolfsson et al., 2003). The online shops are operated on product characteristics (Janda & Ybarra, 2005). To separating product characteristics helps consumers to access the desired product easily (Zhang, 2011 & K. Jain & Jain, 2011). The seller companies via websites need to develop the products in their shops appropriately that will increase customer satisfaction (Zhu & Zhang, 2010).

The product category of website shops will increase its level of loyalty. (Amine, 1998) because consumers are convenient in searching products they want. Moreover, product characteristics enhance customer's e-loyalty by increasing the repeated purchase behavior significantly (Huang, 2012).

- H1: The product characteristics affect e-trust
- H2: The product characteristics affect e-satisfaction
- H3: The product characteristics affect e-loyalty

## **Web Site Quality**

A website quality influences e-trust (Hsu et al., 2013). The good website quality offers security, personal information protection (Everard & Galletta, 2005). The customer information will be kept confidentially and customers can manage their personal information (Chen & Dibb, 2010). Website quality is attractive, orderly, clearly of product details (Lowry et al., 2008). These will enhance an initial e-trust to customers (Zhou et al., 2009).

Alam & Yasin, 2010 describe the good website quality in various aspects, especially in term of designing an attractive website (Cai & Xu, 2010) that will keep users interested and enjoyable (Maghrabi & Dennis, 2010). A user-friendly website and good guideline system help customers accessing to product pictures in many sides (Luo et al., 2012). The quality website is good performance, it can upload data and photo quickly which leads to customer satisfaction (Kincla & Trach, 2012).

Designing a website as a user-friendly and privacy website directly affects to loyalty (Cyr, 2008) because of its fast command processing (Hsieha & Tsao, 2014) and friendly users, attractiveness, and interesting (Roy & Butaney, 2014). Also, a good website quality makes customers enjoyable (Ilsever et al., (2007). Thus, product sellers via websites should upgrade their websites for encouraging customer loyalty behavior (Chen & Dibb, 2010).

- H4: A website quality affects e-trust
- H5: A website quality affects e-satisfaction
- H6: A website quality affects e-loyalty

## **Values Perceived**

The values perceived are important factors affecting e-trust of customers who purchase products via websites (Natour et al., 2011) and it has positive effect towards e-trust (Zhu et al., 2011). In addition, when the risk perception level of those customers is decreased, their e-trust of shopping via website will increase automatically (Jones & Kim, 2010).

The customer values perceived in various areas result to customer satisfaction (Chang et al., 2009). The customers will perceive beneficial values which means they can access to products and services immediately (Santana & Loureiro, 2010). If they perceive values in term on time that means customers can order products anytime (Khan & Rizvi (2012). If customers perceive values in term of place, they can purchase products anywhere (Wiedmann et al. (2010). When consumers perceive values from shopping via websites, it will lead to satisfaction.

All aspects of values perceived have both direct and indirect effect to e-loyalty (Mai et al. (2013)). Especially, the beneficial and friendly user's perception that cause more understanding in shopping via websites (Wong et al. (2014)). Even if the customer dissatisfies for shopping via websites, they will be loyalty by returning their purchases because customers perceive values of convenience shopping via websites (Maghrabi et al. (2011)).

H7: The values perceived affects e-trust

H8: The values perceived affects e-satisfaction

H9: The values perceived affects e-loyalty

## **E- Trust**

When the customer is confident and trusted to shopping via websites, it will affect to customer satisfaction and the purchase intentional behavior of shopping via websites will be developed (Lin, 2013). The entrepreneurs should create an e-trust to customers (Dkudiene & Mccorkle, 2015).

An e-trust affects e-loyalty due to the first stage of e-trust in customer leads to e-loyalty (Zhou et al., 2009) because customers believe that company will responsible in their duties consistently and continuously (Santos & Fernandes, 2011).

H10: An e-trust affects e-satisfaction

H11: An e-trust affects e-loyalty

## **E-Satisfaction**

An e-satisfaction directly affects e-loyalty positively and significantly (Christodoulides & Michaelidou, 2011). When customers are satisfied, they are likely to develop loyalty by repurchasing and making word of mouth positively (Chang et al., 2009). The satisfaction is a crucial factor affects e-loyalty (Ltifi & Gharbi, 2012).

H12: An e-satisfaction affects e-loyalty

## **Social Information**

A social information is the moderator variable between product characteristics and attitudes together with purchase intention via purchasing products via websites which are the satisfaction element and they influence to e-trust of customers (Lee et al., 2011).

A social information is the control variable between website quality and e-trust of customer because the good website quality affects customer e-trust rather than low website quality (Chin et al., 2011).

A positive social information is moderator variable related to consumer perception and customer attitude (Lee et al., 2011).

H13: Social information has interaction effects between product characteristics and e-trust

H14: Social information has interaction effects between website quality and e-trust

H15: Social information has interaction effects between customer values perceived and e-trust

## Conceptual Model

From the above literature review, the researcher developed the model of purchasing products via websites. The independent variables were product characteristics, website quality and values perceived moderator. The moderator variable was social information. The dependent variable was composed of electronic satisfaction, electronic trust, and electronic loyalty as shown in Figure 1 as below:

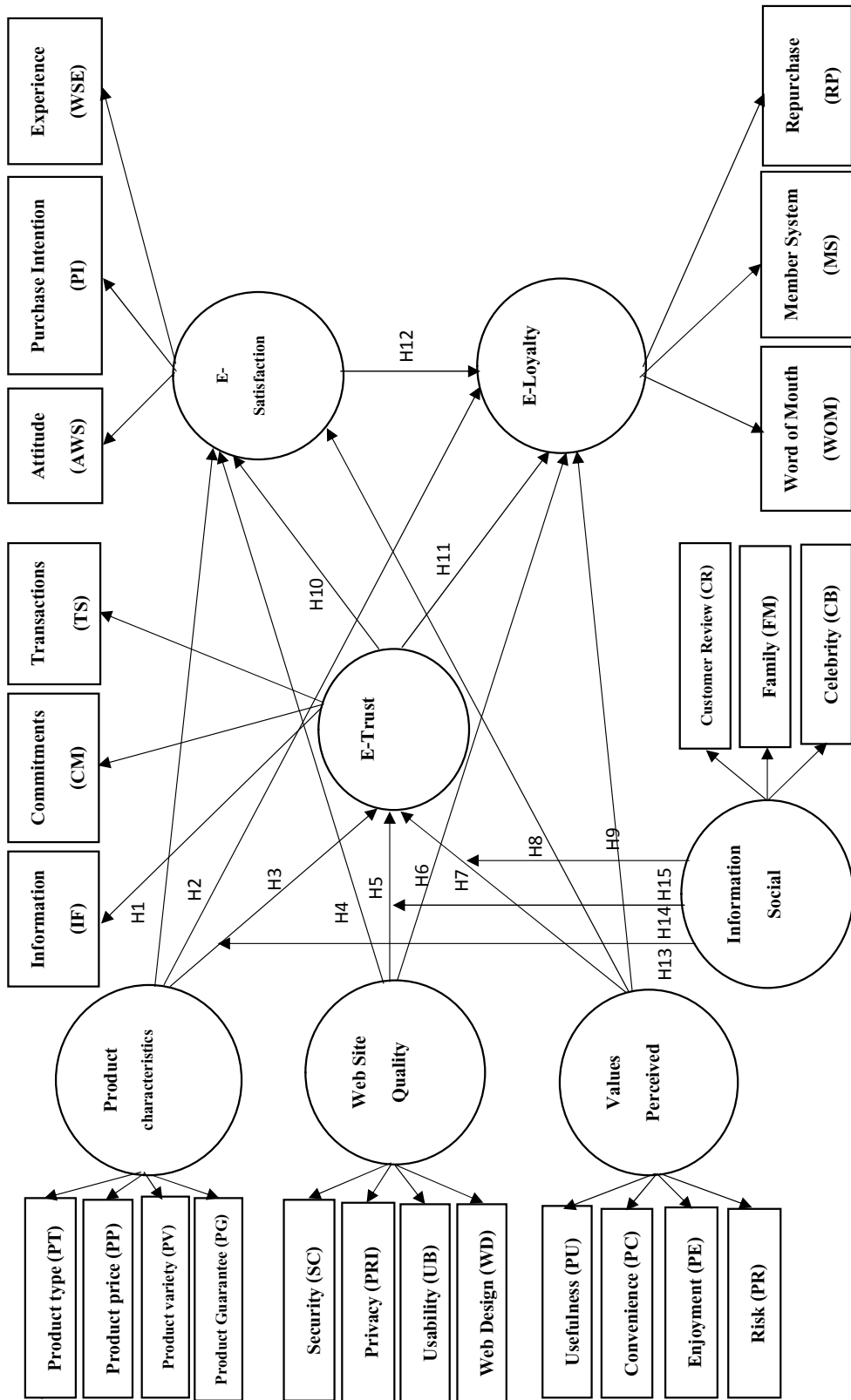


Figure 1 Conceptual Model

## **4. Research Methodology**

This research used mix method methodology between qualitative research and quantitative research and its research design showed as follow:

For qualitative research, the researcher used in-depth interview to study the influences of variables affect purchasing products via websites.

For quantitative research, the researcher collected data by using questionnaire and analyzing by Structural Equation Model (SEM) technique. The data analysis showed the variable role model that affected the purchase behavior via websites.

### **1. Population**

The population was the customers who used to book or purchase products and services via internet across Thailand at the amount of 1,568,398 persons (National Statistics Office, 2015).

### **2. Sample Group**

The sample group used for this research had been conditioned as customers who used to book or purchase products or services via websites for 400 people without identifying region, administrative region, and gender by using Toro Yamane for identifying sample group.

### **3) Data Collection**

The research used online questionnaires to collect data because of many reasons as a lot of samples, time saving, and less expenses. The first question was asked whether the respondent had been reserved or purchased products and services via internet before. If the respondent said "No." he/she would not answer the next questions, thus that respondent was not the sample group. The research identified the sample group by using online questionnaires for 400 respondents.

## **5. Results Analysis**

### **5.1 In-depth Interview**

The researcher used an in-depth interview to confirm the conceptual framework. The quantitative questions were developed by collecting data from key information using purposive sampling who was website operators, website designers, and academic researchers for 5 people. The result of expert's interview confirmed the variables and conceptual framework.

### **5.2 Demographic data of respondents**

The respondents in this research are 400 people, they are mostly female (70.75%). The respondents are under 25 years old for 41.25 %. Their education backgrounds are the Bachelor degree for 56.25%. The respondents are students for 36.25%. Their monthly incomes are less than or equal to 10,000 baht (32.00 %).

### **5.3 Data on consumer behavior in purchasing goods via websites**

The respondents are 400 people and most of them purchase shopping goods for 65%. The respondents have paid money for buying goods at 1,000-2,999 baht per one time



(32.75%). The purchase frequency one time per month is 70.25%. The respondents purchase products during 20.00-23.59 hrs (38.50%).

#### **5.4 Pearson's Product - Moment Correlation Coefficient**

From Table 1, from the correlation coefficient between all observed variables, the criteria used to consider in this research is the relationship of each pair that must not exceed to 0.80. That means each observed variable has relationship within their own. The data analysis found that correlation coefficient of all observed variables were between 0.092 - 0.835

**Table 1** Pearson's Product - Moment Correlation Coefficient

observe d	PT	PP	PV	PG	SC	PR	U	W	PU	PC	PE	PR	CR	F	CB	PI	Aw	Ws	IF	T	C	R	Wo	M
	PT	PP	PV	PG	SC	PR	U	W	PU	PC	PE	PR	CR	F	CB	PI	Aw	Ws	IF	T	C	R	Wo	M
	1																							
PP	.45 7**	1																						
PV	.44 1**	.53 0**	1																					
PG	.34 9**	.51 1**	.46 9**	1																				
SC	.23 0**	.38 3**	.30 6**	.53 1**	1																			
PR	.26 4**	.38 3**	.28 6**	.51 8**	.83 5**	1																		
UB	.34 2**	.35 3**	.37 2**	.43 8**	.55 9**	.57 9**	1																	
WD	.31 2**	.37 7**	.36 7**	.46 1**	.53 5**	.57 1**	.69 6**	1																
PU	.42 5**	.40 1**	.36 6**	.44 2**	.52 0**	.52 5**	.52 1**	.52 0**	1															
PC	.33 5**	.33 8**	.34 5**	.38 2**	.34 9**	.36 3**	.47 5**	.46 2**	.54 4**	1														
PE	.27 9**	.38 6**	.38 2**	.46 6**	.48 5**	.50 1**	.46 2**	.52 0**	.56 3**	.47 5**	1													
PR	.24 4**	.25 0**	.23 3**	.31 9**	.34 9**	.36 1**	.47 7**	.48 5**	.44 4**	.46 7**	.53 2**	1												
CR	.15 0**	.18 1**	.20 1**	.20 8**	.22 6**	.24 3**	.26 1**	.25 5**	.29 2**	.26 0**	.39 6**	.31 2**	1											

Table 1 (Continue)

observe d	PT	PP	PV	PG	SC	PR	U	W	PU	PC	PE	PR	CR	F	CB	PI	Aw	Ws	IF	TS	C	RP	Wo	Ms	
FM	.13 8**	.14 7**	.14 2**	.26 0**	.27 0**	.28 0**	.24 5**	.26 8**	.28 8**	.29 5**	.26 5**	.35 8**	.29 3**	1											
CB	.14 9**	.15 6**	.09 2**	.16 2**	.22 7**	.23 3**	.24 4**	.22 3**	.23 2**	.22 7**	.23 8**	.32 9**	.34 4**	.37 3**	1										
PI	.27 8**	.37 0**	.28 4**	.41 1**	.52 7**	.52 0**	.47 5**	.42 3**	.53 3**	.43 8**	.49 3**	.36 7**	.25 6**	.25 1**											
AWS	.36 7**	.41 0**	.36 8**	.41 3**	.51 1**	.53 2**	.49 2**	.44 9**	.59 1**	.51 0**	.58 2**	.35 8**	.28 9**	.33 7**	1										
WSE	.33 0**	.39 6**	.34 7**	.45 5**	.55 1**	.59 5**	.53 3**	.50 3**	.61 4**	.47 2**	.56 4**	.40 3**	.29 6**	.30 5**	.64 5**	.74 7**	1								
IF	.22 1**	.31 9**	.24 3**	.46 4**	.54 4**	.60 5**	.41 2**	.42 1**	.44 3**	.32 2**	.50 0**	.32 5**	.32 4**	.29 0**	.26 3**	.54 3**	.51 0**	.60 4**	1						
TS	.26 5**	.33 1**	.29 6**	.45 1**	.52 1**	.59 7**	.47 6**	.53 9**	.50 2**	.38 1**	.55 3**	.37 9**	.31 9**	.30 4**	.26 9**	.54 2**	.58 5**	.67 4**	.76 3**	1					
CM	.27 1**	.27 5**	.20 4**	.39 5**	.49 9**	.55 5**	.43 9**	.50 4**	.49 8**	.39 9**	.45 8**	.37 2**	.32 4**	.29 1**	.24 9**	.46 9**	.50 6**	.63 9**	.69 1**	.74 0**	1				
RP	.29 4**	.42 0**	.36 1**	.43 7**	.54 2**	.56 3**	.50 5**	.49 3**	.54 8**	.39 8**	.53 7**	.35 2**	.28 1**	.30 8**	.26 7**	.59 7**	.66 2**	.67 9**	.56 7**	.61 7**	.54 0**	1			
WOM	.25 5**	.34 4**	.29 3**	.38 1**	.52 3**	.54 7**	.45 2**	.50 1**	.51 1**	.35 1**	.48 9**	.29 3**	.25 8**	.30 4**	.32 1**	.56 9**	.63 9**	.67 6**	.55 6**	.57 6**	.55 4**	.74 1**	1		
MS	.22 0**	.33 3**	.26 6**	.40 0**	.52 8**	.53 7**	.43 2**	.46 4**	.47 9**	.37 7**	.44 2**	.42 0**	.27 0**	.32 4**	.24 8**	.50 2**	.52 8**	.59 2**	.60 4**	.58 1**	.65 7**	.65 4**	.677* 4**	1	

Source: From calculation

### 5.5 Goodness-of-fit indices and Model Modification

After the model modification, the model analysis of goodness-of-fit indices is found that the model is in harmony with the observational data empirical. All six goodness-of-fit indices have passed the accepted criteria as  $\chi^2 = 542.659$ ,  $\chi^2/d.f. = 2.608$ , RMSEA = 0.063, CFI = 0.918, TLI = 0.900, SRMR = 0.056 (Table 2)

**Table 2** Goodness-of-fit indices

Goodness-of-fit measure	Acceptable Values	Value	Result	Value Model Modification	Result
$\chi^2$ .	Closer to 0	732.924	Passed criteria	542.659	Passed criteria
d.f.	-	234		208	
$\chi^2/d.f.$	$2 < \chi^2/d.f. \leq 3$	3.132	Fail criteria	2.608	Passed criteria
RMSEA	$0 \leq RMSEA \leq 0.08$	0.073	Passed criteria	0.063	Passed criteria
CFI	$0.90 \leq CFI \leq 1.00$	0.882	Fail criteria	0.918	Passed criteria
TLI	$0.90 \leq TLI \leq 1.00$	0.861	Fail criteria	0.900	Passed criteria
SRMR	$0 \leq SRMR \leq 0.08$	0.067	Passed criteria	0.056	Passed criteria

Source: Adaptation from (Hair et al., 2006)

### 5.6 Confirmatory Factor Analysis: CFA

The researcher analyzed the Confirmatory Factor Analysis (CFA) to check the appropriateness and accuracy of Structural Equation Modeling (SEM) by considering the values of Factor Loading, Residual, SE, t-value, and  $R^2$  value Estimate in order to determine the fluctuations of joint indicators. The analyzed results are divided into seven categories: Product Characteristics, Web Site Quality, Values Perceived, Information Social, Electronic Satisfaction, Electronic Trust and Electronic Loyalty (Table 3).

**Table 3** Confirmatory Factor Analysis: CFA

Construct	Measurement item	Factor loading	Residual	SE	t-value	$R^2$ value Estimate
Product characteristics						
	PT	0.581	0.662	0.059	9.820	0.338
	PP	0.831	0.310	0.033	25.043	0.690
	PV	0.838	0.298	0.032	26.262	0.702
Web Site Quality						
	SC	0.649	0.579	0.032	20.280	0.421
	PRI	0.828	0.314	0.039	21.184	0.686
	UB	0.638	0.592	0.039	16.431	0.408
	WD	0.682	0.535	0.036	18.773	0.465
Values Perceived						
	PU	0.774	0.401	0.027	29.009	0.599

	PC	0.652	0.575	0.034	19.164	0.425
	PE	0.722	0.479	0.032	22.751	0.521
	PR	0.565	0.681	0.046	12.273	0.319
Information Social						
	CR	0.582	0.661	0.053	10.930	0.339
	FM	0.573	0.672	0.053	10.784	0.328
	CB	0.578	0.666	0.056	10.296	0.334

Table 3 (Continue)

Construct	Measurement item	Factor loading	Residual	SE	t-value	R <sup>2</sup> value Estimate
E-TRUST						
	IF	0.780	0.391	0.026	29.520	0.609
	TS	0.840	0.295	0.025	33.982	0.705
	CM	0.765	0.415	0.028	27.408	0.585
E-Satisfaction						
	PI	0.762	0.419	0.025	30.071	0.581
	AWS	0.769	0.409	0.027	30.071	0.591
	WSE	0.822	0.324	0.019	42.569	0.676
E-Loyalty						
	RP	0.813	0.339	0.022	36.483	0.661
	WOM	0.811	0.342	0.021	39.307	0.658
	MS	0.753	0.433	0.029	25.703	0.567

Chi-square = 542.659, RMEA = 0.063, CFI = 0.918, TLI = 0.900, SRMR = 0.056

Source: From calculation

### 5.7 Path Analysis

The result of path analysis shown direct and indirect effects and total influence of variables as Table 4 and Figure 2 below:

**Table 4** Parameter direct and indirect influences and total influences of cause variables and effect variables after model modification

Cause Variables	Effect Variables								
	E-TRUST			E-Satisfaction			E-Loyalty		
	DE	IE	TE	DE	IE	TE	DE	IE	TE
Product characteristics	-	-	-	0.162	-	0.001	-	-	-
	0.300*		0.300*		0.161*		0.108	0.038	0.147
Web Site Quality	0.614*	-	0.614*	-	0.331*	0.080	0.243	0.136	0.379
				0.251	*				
Values Perceived	0.375*	-	0.375*	0.582*	0.202*	0.783*	-	0.604*	0.537*
	*		*	*	*	*	0.067	*	*
E-Trust	-	-	-	0.538*	-	-	0.129	-	-
				*					
E-Satisfaction	-	-	-	-	-	-	0.710*	-	-
							*		

Source: From calculation

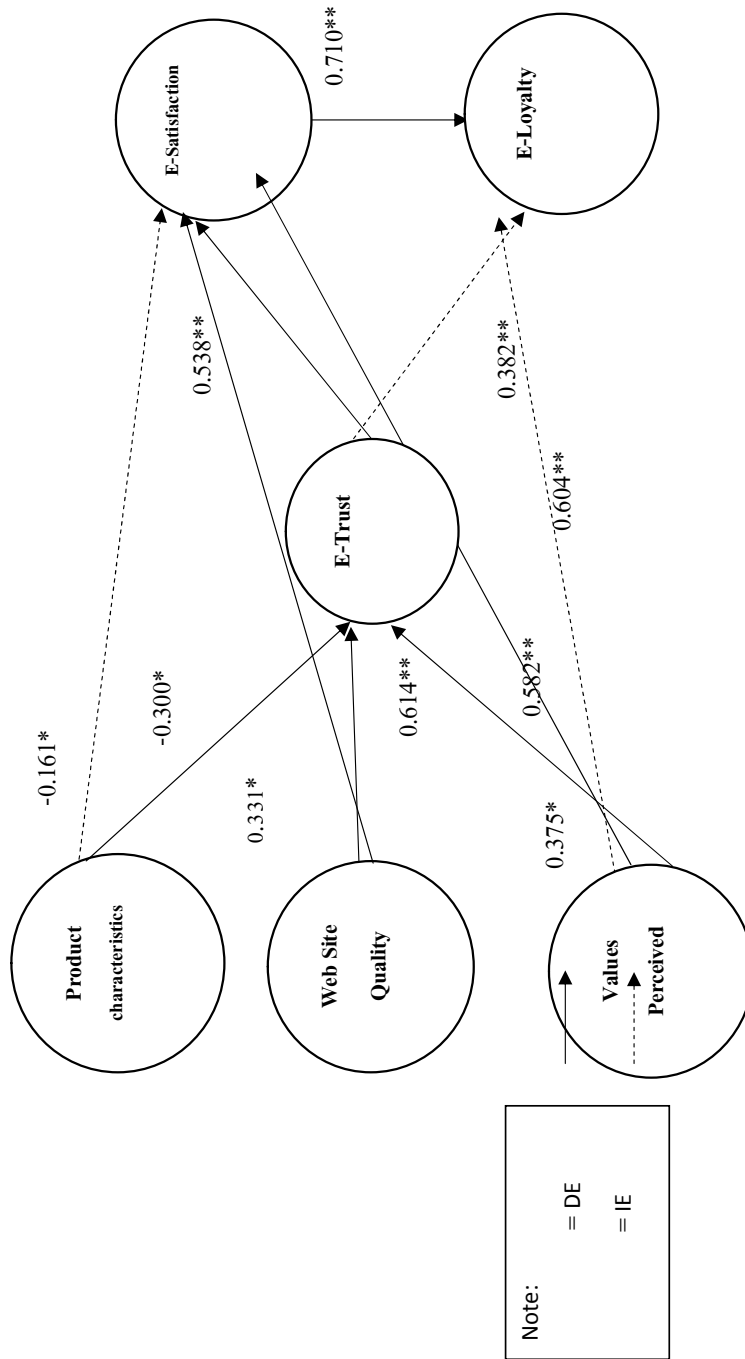


Figure 2 Parameter direct and indirect influences

### 5.8 Analysis of interaction effects of moderator variables

The analyzed result is to test the hypotheses to find the relationship between social information and product characteristic variables with e-trust. The social information is the relationship moderator variable between website quality and e-trust. Also, the social information is the relationship moderator variable between values perceived and e-trust. The data analysis found that the moderator variable of social information has no any influences to moderator variable of e-trust as shown in Table 5 below:

Table 5: Interaction effects of moderator variables

Interaction effects			
Hypothesis	Path Analysis	Coefficient	t-value
H13	Product x ISI → Trust	0.216	1.010
H14	Website x ISI → Trust	0.103	0.633
H15	Value x ISI → Trust	0.066	-

## 6. Discussion

The research "the development of loyalty model effecting consumers in purchasing goods via websites" can be discussed the results according to hypotheses as follow:

The product characteristics directly affect e-trust which is consistent with Pavlou & Fygenson (2006) & Sinha & Sinh (2014) who state that products characteristics in term of price is the control variable for risky perception that effects the e-trust of customer order. The product characteristics indirectly affect e-satisfaction. It is in accordance with Janda (2005) states that product characteristics in term of price or the amount of money paid for purchasing orders via websites intensively affects to purchasing experience and satisfaction. Thus, for the high price product, customers will read the product information more than low price product before making decision. The researcher surprisingly found that product characteristics do not affect e-loyalty with is inconsistent to Amine (1998) states that product characteristics in term of brand can increase the returning purchase behavior significantly.

The website quality directly affects e-trust that is in line with Everard & Galletta (2005) & Lowry et al. (2008) state that website quality is a significant indicator of e-trust. Hence, the security and privacy protection are important to e-trust which leads to confidence. The initial trust of customers may be the factor controlled customer purchase easily. The quality website indirectly affects e-satisfaction, it is consistent with Alam & Yasin (2010); Cai & Xu (2010) & Luo et al. (2012) state that website designing is motivation factor affects the satisfaction of shopping via websites significantly. It reduces customer misunderstanding of purchased products and enhance satisfaction. However, the website quality does not affect e-loyalty that is consistent with Zhou & Tian (2011) find that designing website does not always affect the selling via website because in China there are extensively cheating via websites by using many techniques such as creating interesting website for swindling money from customer, many internet users find the high quality websites but in fact these websites possibly cheat the customer.

The values perceived directly affects e-trust that is consistent with Jones & Kim (2010) ; Natour et al. (2011) & Zhu et al. (2011) state that reducing risk perception related to shopping via websites that can create satisfaction, beneficial perception, and accessibility. It has positive relationship to e-trust and values perceived affects e-satisfaction both direct and

indirect ways that is in accordance with Chang et al. (2009); Wiedmann et al. (2010) & Santana & Loureiro (2010) state that values perceived in various aspects affect customer e-satisfaction. For individual values perceived in terms of beneficial perception and convenience which refers to time and place advantages, these make customers to buy products without leaving home. It represents the accessibility immediately and the values perceived affect e-loyalty indirectly, it is in line with Maghrabi & Dennis (2010) & Maghrabi et al. (2011) Mai et al. (2013) & Hsieh & Tsao (2014) describe that beneficial and enjoyable perception as well as the convenience of using website directly and indirectly influence the repurchase intention via websites.

The e-trust directly affects e-satisfaction that corresponds to Lin (2013) & Dkudiene & McCorkle (2015). Yahoo website has received e-trust from customers extensively. There are regulations for sellers in uploading the real product pictures that causes the buyer trusted the purchasing products via websites. When the consumer develops an e-trust via websites, it will lead to e-satisfaction. An e-trust influences e-satisfaction of purchase intention. The research result surprisingly shown that an e-trust does not affect e-loyalty, it is inconsistent with Cyr (2008) who reveals that an e-trust influences e-loyalty and e-trust leads to e-loyalty is more important than an e-satisfaction leads to e-loyalty.

An e-satisfaction directly affects e-loyalty which corresponds to Chang et al. (2009) state that customer satisfaction has direct and positive relationship with customer loyalty. Customers who are satisfied are more likely to recognize the perceived values by repurchasing and word of mouth communication. Roman (2010) & Christodoulides & Michaelidou (2011) & Ltifi & Gharbi (2012) find that more satisfaction results to e-loyalty significantly which is developed by the relationship of satisfaction and loyalty. Lin (2013) & Roy & Butaney (2014) mention that an attitude e-satisfaction of purchasing via websites affects customer loyalty significantly.

The social information has no interaction effects between product characteristics, website quality, perceived values, and e-trust that is consistent with Harn (2014) who says that the social information does not influence interaction effects between product characteristics and trust because sometimes consumers do not rely on other sources of information when making online purchase. Ramayah et al, (2003) state that the social information has no interaction effects between values perceived and trust. Human will comply with the trust and make their own decision without judging from other information sources. Human has the ability in making decision.

## **7. Conclusion**

The research result found that the demographic data of respondents who purchase products via websites are mostly females who are under twenty-five years old. They are students whose education backgrounds are the Bachelor degree with the monthly income less than/equal to THB 10,000. Concerning the consumer behavioral data in purchasing products via websites, the majority respondents purchase shopping goods. The expenses spend per one shopping via website is around THB 1,000-2,999. The frequency in purchasing products via website is one time per month. The respondents buy products via websites during 20.00-23.59 hrs.



The product characteristics are the key factors affect e-trust and e-satisfaction .The website quality is an important factor influences e-trust and e-satisfaction. The values perceived are significant factors affected e-trust, e-satisfaction, and e-loyalty.

## **8. Recommendation**

### **8.1 Contribution**

- This finding can be used as a common approach to strengthen and define the new market strategy for public and private operators by using factors to create e-trust, e-satisfaction, and e-loyalty in purchasing goods via websites of consumers.

- A good website quality is an important variable affects e-trust and e-satisfaction because visual appeal of website is the first part customer can see. The more a website is attractive and interesting, the more it attacks the customers' trust. Thus enterprises should pay more attention on website designing to attract the visitors.

- Reducing risk perception in online shopping leads to the trust in shopping via websites tremendously. The entrepreneurs can improve website efficiently, goods warranty, compensation to customer when problems occurred during the transaction, providing contact information for online services in order to help customers immediately. All such methods can reduce risk perception of customer and increase their trust and satisfaction which lead to purchase via websites eventually.

### **8.2 Areas for further research**

The further research should use other factor variables that affect e-satisfaction, e-trust, and e-loyalty for shopping via websites such as customer participation, entrepreneur characteristics, and so on. Also, the next research can study products separately such as convenience goods, shopping goods, specialty goods, unsought goods, etc.

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