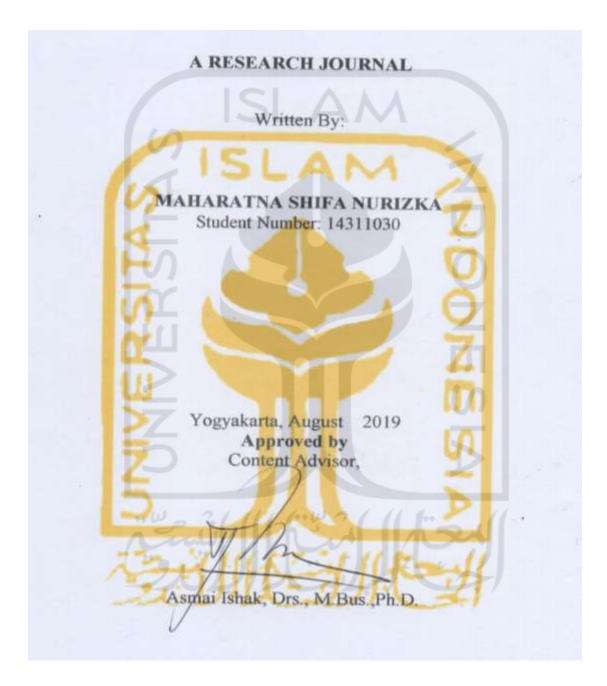
# FEMALE ONLINE SHOPPERS EXAMINING THE MEDIATING ROLES OF E-SATISFACTION AND E-TRUST ON E-LOYALTY DEVELOPMENT

## A RESEARCH JOURNAL



# FEMALE ONLINE SHOPPERS EXAMINING THE MEDIATING ROLES OF E-SATISFACTION AND E-TRUST ON E-LOYALTY DEVELOPMENT



### Female Online Shoppers Examining the Mediating Roles of E-Satisfaction and E-Trust on E-Loyalty Development

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#### ABSTRACT

The competition of e-tail or e-commerceincreases the number of female customer to shop in online stores. Thus, understanding how female customers' e-loyalty is formed and fostered in this type of online store becomes very important. The aim of this research is to focus on female Shopee online shoppers and to examine the mediators of e-loyalty in the context of online stores: e-satisfaction and e-trust. The data was collected by using questionnaire based on Likert Scale with the total of 255 respondents. The data was analyzed by using Structural Equation Modeling (SEM) analysis and moderated regression analysis with the help of SPSS and LISREL. This research revealed that perceived online privacy did not have a direct and positive effect associated with e-trust. Perceived online security had positive effect on e-trust. Furthermore, perceived delivery time and web site design were positively associated with e-satisfaction. Both e-trust and e-satisfaction in turn positively influence e-loyalty for female online shoppers.



**Keyword:** *e-Loyalty, e-Satisfaction, e-Trust, Female online shoppers,Perceived online privacy, Perceived online security* 

### Pembeli Online Wanita Menguji Peran Mediasi E-Kepuasan dan E-Kepercayaan pada Pengembangan E-Loyaltitas

#### ABSTRAK

Seiring persaingan e-tail (elekronik retail) atau *e-commerce*, membuat semakin banyak pelanggan wanita berbelanja online. Dengan demikian, memahami bagaimana loyalitas pelanggan wanita terbentuk dalam jenis toko online ini menjadi sangat penting. Tujuan dari penelitian ini adalah fokus pada pembeli online wanita pada Shopee dan untuk memeriksa mediator loyalty (*e-loyality*) dalam konteks toko online: kepuasan (*e-satisfaction*) dan kepercayaan (*e-trust*). Data dikumpulkan dengan menggunakan kuesioner berdasarkan Skala Likert dengan jumlah 255 responden. Data kemudian dianalisis dengan menggunakan analisis Structural Equation Modeling (SEM) dan analisis regresi moderat dengan bantuan SPSS dan LISREL. Penelitian ini mengungkapkan bahwa privasi online yang dirasakan tidak memiliki efek langsung dan positif yang terkait dengan kepercayaan (*e-trust*). Persepsi keamanan online berpengaruh positif pada kepercayaan (*e-trust*). Selain itu, persepsi waktu pengiriman dan desain situs web secara positif terkait dengan kepuasa. *E-trust* dan *e-satisfaction* pada gilirannya memengaruhi *e-loyalty* untuk pembeli online wanita.

Keyword: e-Loyalty, e-Satisfaction, e-Trust, Female online shoppers, Perceived online privacy, Perceived online security

#### INTRODUCTION

Nowadays, technology and globalization are developing that make almost everything use technology to help people life more productive, more flexible, more efficient and easier. In this digital and modern era, the growth of technology is developing rapidly. Along with the growth of digital technology, many changes happened. One of the significant changes is internet and online media. Recently, many of traditional (offline) retail developing their businesses into e-tail or online retailing.

When shifting from offline to online, the loyalty evolves into e-loyalty. This is defined as "feelings or attitudes that prompt a positive memory and thus make a customer to re-visit a website for information, communication or entertainment purposes, or to re-purchase a particular product or services from an online business" (Li H. et al., 2015). The internet has become the foundation for technology-enabled relationship management (Ratnasingam, 2005).). In recent years, internet has a profound impact on the subject of marketing. Recently most of the consumers feel comfortable buying products through online mechanism (Muhammad et al., 2014). The internet and web development have been the most exciting developments in the field of information and communications technology in recent years (Eid, 2011). The Internet is known to provide businesses with new ways of doing business transactions in an increasingly sophisticated and competitive environment (Dubihlela & Grobler, 2013). The internet together with the

implementation of innovative business practices plays a fundamental role in the development of e-commerce (Liao & Shi, 2009). E-commerce has become a pervasive business phenomenon in the world. By making business more competitive and productive, e-commerce is important for both developed and developing countries in strengthening their economies and in supporting national economic development (Zhu & Thatcher, 2010).

The open market is a market place where individuals and businesses can interact directly as buyers and sellers. Many online transactions occur in open markets with the adoption of internet, communication, and digital technologies. Although many studies have examined the issue of transaction intentions in the context of e-commerce, few have explained the factors influencing the adoption of open markets (Ha et al., 2014). The enormous online market growth has led to a rapid increase in the number of online retailers and shoppers, causing scholars to focus on how to improve the online shopping experiences of internet users, especially in terms of loyalty intention (Lu et al., 2013). Online and offline environments present different shopping experiences, even for identical products. For the former, customers must interact with online businesses in a virtual space that consists of a technical interface, rather than with employees in a physical space, as with the latter (Lu et al., 2013).

The objective of this study is to contribute to the existing limited knowledge on how female e-tail shoppers develop their e-loyalty by answering the preceding research questions and by proposing and testing a model of female customer e-loyalty in the context of e-tail stores. Specifically, this study investigates the impact of e-tail experience on e-satisfaction and e-trust on e-loyalty development. Specially, prior studies have found that in decision-making situations (e.g. online purchasing decisions), male shoppers tend to be more assertive and self-confident with their decisions than females, resulting in overconfidence and risk-seeking behavior (Chou, et al. 2015). For example a survey from PriceGrabber (2008) that investigated 1,850 online shoppers indicated that 74% of female shoppers browse for online shopping, compared to 64% of male shoppers. Internet usage has become more popular among females in these days, and the population of female Internet users is increasing to the level of male users. In addition, females tend to be more active shoppers in the offline shopping environment, and as such, it is reasonable to expect that they can become as involved online shoppers as males currently are (Soonyong & Taesik, 2011). Women may seem to be more rational shoppers than men because the purchase decisions they more frequently make are better served by an optimizing rather than a minimizing strategy. Sex differences in online behavior may depend on the kinds of products purchased as they do on contrasting information processing styles (Shukla, 2016). Female shoppers have greater spending power and have great influential power in altering others' purchase decisions. They are in general good communicators who like to share positive or negative word-of-mouth feedback to influence the purchasing decisions of their friends, families, and colleagues, which can help grow or contribute to damaging an online store (Huddleston & Minahan, 2011).

#### LITERATURE REVIEW

#### **Perceived Delivery Time**

Delivery time defined as the total time between order placement and delivery, which includes dispatch, shipping, and delivery. Prior studies have found that long delivery time is one major complaint among online customers because they do need to wait to receive the item they order. The longer the wait time between ordering and receiving, the more anxious and discontent the customer feels. Consumer's overall valuation of the usefulness of a service is based on the perception of what is received and what is given (Sastry & Rao, 2017).

Specifically, prior studies have suggested that when an item can be delivered efficiently and when a web site is designed in a way that saves shoppers time, it will make the site easy to be used, and allows the site to provide a variety of information, and customers may feel satisfied (Chou, et al. 2015). Thus, customers would be more satisfied with their online shopping experiences if online firms could guarantee to process their orders and deliver their items quickly (Schaupp & Bélanger, 2005). Therefore, the researcher proposed the following hyphothesis:

#### H1: Perceived delivery efficiency positively influences e-satisfaction.

#### Web Site Design

Consumer experience with a website may come from the website design itself (layout, interface, and decoration of the website). A good web site design has been found as a key factor increasing customers' satisfaction (Chou et al, 2015). Websites are essentially a type of information technology. Direct confrontation is an internet transaction platform. Shopping websites allow customers to choose products based on their own needs and provide businesses with transaction platforms through interactive communications to fulfill the transactions. However, for the customer to easily consume online, he or she must first find the website useful and easy to use. This takes into account information search, internet subscription, and payment methods. The means objectives represent aspects of the customer's desired e-service experience (e.g. assure system security, maximize product information, maximize ease of use) and are operationalized by e-service process attributes during the customer's interaction with the e-service (Grace & Chia, 2009).

Other studies in the literature have supported that a good web site design positively influences customer satisfaction (Chou et al., 2015). Therefore, in terms of online shopping activities, if the customer is familiar with the transaction methods of a shopping website, he or she will use this shopping website more often. Forming a certain purchasing habit at this website, the customer may spend more time and effort in learning how to use or shop on the website (Grace & Chia, 2009).Therefore, e-tailers have attempted to design website to attract customers to visit and revisit their sites. Some studies have investigated the factors that could affect customers purchase behavior on the Web (Muhammad et al., 2014). Thus, we posit the proposed hypothesis is as follow:

#### H2: Web site design positively influences e-satisfaction.

In e-commerce, trust is the confidence in the quality and credibility of the goods and services provided by the online store. Trust is very important in many business relationships, especially in e-commerce relationships, since there will be more obstacles to establish trust with customers, such as customers cannot see real products but only some pictures, and customers will be charged before they receive their products. Unless Consumers believe that online store will not bring those risks and loss, they will not be assured of shopping, and they would not consider this online store (Bhaskar, et al, 2016). Trust has been defined as an individual's perceptions of the institutional environment that stems from embedded social practices as well as the perceptions, resulting from past and expected future exchanges (Kananukul, et al, 2015).For instance, found that a good web site design can relieve feelings of anxiety and also provide a sense of confidence while shopping online (Chou et al., 2015). Thus, the researcher proposed:

### H3: Web site design positively influences e-trust.

### **Perceived Online Security**

Although online security techniques have continued to develop and improve, web security vulnerability still exists and security measures are violated frequently, even among widely reputable companies. As a result, online security is always a main concern for online shopper. After all customers are often required to provide essential data, such as personal profiles information, while shopping online. If customers feel insecure (e.g the website has been invaded before), they may not trust the website (Chou et al, 2015). Thus, the researcher proposed the following:

### H4: Perceived online security positively influences e-trust.

### **Perceived Online Privacy**

Online privacy is a technical mechanism or policy to protect customer data from unauthorized use or disclosure (Chou et al., 2015). The dimension of privacy is defined as the degree to which the site is safe and protects customer information (Parasuraman et al., 2005). Companies that establish fair information practices and disclose these practices before collecting personal information from customers can greatly reduce perceived risks and the subsequent negative consequences associated with privacy concerns. They suggest that fair information practices operationalized procedural fairness and by incorporating them into a privacy statement and living up to their requirements, the firm can create a 'privacy leverage point'. This privacy leverage point provides an intervention opportunity for firms to build trust with their customers as they collect and use personal information. Therefore, making customers willing to disclose personal information can be done by minimizing the risks of disclosure to these individuals (Nemati & Dyke, 2009). When consumers believe that an online firm tries hard to protect their privacy through technical mechanisms and/or policies, they will be more comfortable providing personal data while shopping online (Chou et al., 2015). Thus, the researcher proposed the following hypothesis:

### H5: Perceived online privacy positively influences e-trust.

### **E-Satisfaction**

Satisfaction is defined as the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a consumer's prior feeling about the customer experience (Valvi & Fragkos, 2012). Satisfaction is an emotional status that happens in response to an evaluation of customer-agent mutual interaction experiences (Hsu et al., 2013). E-satisfaction is defined as the difference between expectations and results in the use of a website for the purchase of products and services (Forgas-Coll et al., 2013). Numerous previous studies have acknowledged that e-satisfaction is not only the main target of online shopping continuance intention, but also the key to build and retain a loyal base of long-term customers (Hsu et al., 2013). For example, in an e-retailing context, it is reported that e-satisfaction has a significant effect on consumer trust with a service provider. Others suggest that customer satisfaction is closely related with trust and acts as its prime driver (Butt & Aftab, 2013).

Thus, e-satisfaction is the precursor of customers' commitment. Actually, it is the result of customer's evaluations regarding the product and the key elements of their decision to repurchase (Muhammad et al., 2014). Thus, the higher the level of e-satisfaction, the higher the level of e-trust (Chou et al., 2015). Therefore, the proposed hypothesis is as follow:

### H6: E-Satisfaction positively influences e-trust.

A high degree of e-loyalty is usually associated with a high degree of e-satisfaction. When customers perceive better website service quality, such as special treatment benefits, they will have more e-satisfaction; when customers feel e-satisfaction with the website, they will feel more e-loyalty; and when the website is responsive, it will directly influence the customers' e-loyalty (Grace & Chia, 2009). Customer loyalty to a product is reflected through the customer's habit to purchase a product continuously. Therefore, in order to understand the customers' needs and expectations as well as to achieve the objectives, a company needs to observe customer loyalty (Dimyati, 2015). Indeed, the positive effect of e-satisfaction on e-loyalty has been suggested by several studies (Chou et al., 2015). Thus, the proposed hypothesis is as follow:

### H7: E-Satisfaction positively influences e-loyalty.

### E-Trust

Trust can be defined as a consumer's confident beliefs that he or she can rely on the seller to deliver promised services. (Sahin et al, 2011). E-trust captures specific cues of Internet sites important to consumers in visiting Websites and builds components as a key driver to e-retail, especially in the light of transaction based financial information continuing to be a major inhabiting factor for online consumers' success. Trust in e-commerce is defined here as the belief that allows consumers to willingly become vulnerable to a website after having taken its characteristics into consideration (Chu & Yuan, 2013). As a result, in order to create loyalty, an e-retailer should strive to meet the needs of customers to a greater degree than competitors. Loyalty is a biased behavioral purchase process that results from a psychological process. Loyal customers are more likely to make repeat visits to a website or consider purchasing from it in the future. Thus, loyal customers have a dramatic influence on a company's financial ''bottom line'' (Hsu et al., 2013).

Trust building strategies promote affective (or willing) commitment – referred to as the 'desire to maintain a relationship that the customer perceives to be of value' (Carter et al., 2014) based on assurances that customers will receive promised services. E-Loyalty has been a key issue in the research of e-commerce in recent years because of its benefits for business. It leads to repurchasing and is defined as a customer's commitment and favorable attitude towards online companies (Safa & Von; 2016). Consumers trust in organization or its brands, does not only help build loyalty, but it also generate positive word of mouth (Butt & Aftab, 2013). In this respect, e-loyalty is a long term commitment between e-retailers and e-consumers (Wong et al., 2014).

Indeed, the positive relationship between e-trust and e-loyalty has been suggested by several studies conducted in the context of the online environment (Chou et. al., 2015). Therefore, the proposed hypothesis is as follow:

#### H8: E-Trust positively influences e-loyalty.

#### **E-Loyalty**

E-Loyalty has become one of the critical issues for online business partly because customers can easily switch from one online store to another and partly because they can easily compare similar items across different online stores (Lu et al., 2013). Loyalty, or e-loyalty, has been conceived as a "consumer's intention to buy" from a website, and an indicator that consumers will not change to another website (Chu & Yuan, 2013). Loyalty uses a base of information that is forcing refers to one product or another product. In this stage, loyalty is only based on belief and it is hardly strong. Loyalty in this stage is much more difficult to change because it was entered through the customer's mind. Loyalty action is the ultimate stage of customer loyalty. It includes behavioral habits and routine responses. Action is seen as a very important thing in combining the next stage (Dimyati, 2015).

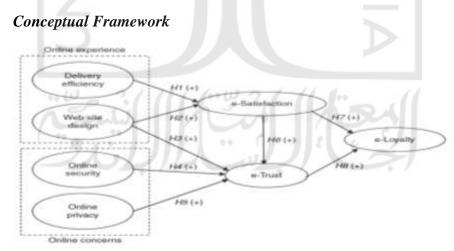


Figure 1 Full Framework Model

### **RESEARCH METHOD**

The purpose of this research was to test the hypotheses, or it is usually called as causal study, which aims to explain the nature of certain relationships. This research attempted to find the correlation and/or relationship between female online retail (e-tail) shoppers and aim to examine the mediators of e-loyalty in the context of online stores: e-satisfaction and e-trust. The results of this research are expected to be helpful to online store managers in increasing their customers' loyalty. Specifically, online retail (e-tail) store managers have to create quick item delivery methods and friendly online shopping web sites that provide all necessary information and are easy to navigate and use so as to increase customers' e-satisfaction. They also need to establish reliable and trustworthy web sites by letting their customers easily perceive the web sites' privacy and security features to enhance customers' e-trust. As e-satisfaction and e-trust increase, e-loyalty is fostered. The approach used in this research was quantitative approach, conducted by spreading questionnaire as the research instrument and used Likert scale as the itemized rating scale to assess data from 255 respondents who had an account and had experienced purchasing on e-tail stores.

#### **Population and Sample**

Population is the scope or magnitude characteristic of the whole object. This research basically was conducted in Yogyakarta. However, during the collecting of data, there is a possibility that the data were not only gathered in Yogyakarta. The data could be gathered from all people in Indonesia because Google form is used.

The sampling was confined to specific types of people who can provide the desired information, and who conform to some criteria set by the researcher. The sample is the amount of certain characteristics of the part of the population that has the same characteristics of the population. The research population was people in all parts of Indonesia who ever bought something(no spesific brand of: fashion, electronics, books, food, medicine, etc) through online from e-tail "Shopee". Survey of this research was conducted from December 2017-February 2018. The sample in this research focused on e-tail *Shopee* shoppers and consisted of randomly selected 262 respondents.

### Data Collection Method

The research data used in this research was primary data. In this research, the data was obtained by using online questionnaire distributed to 262 respondents. All questions in the questionnaire were translated to Indonesialanguage to help the respondents understand the questions better. The types of questions that will be used in this research were closedquestionnaire. Questionnaires were distributed directly by using online (Google forms) to the respondents. The questionnaire was measured by using Likert scale. The underlying reason why the reseracher choose 6-point Likert scale is to avoid neutral answer (1): Strongly Disagree and (6): Strongly Agree

Data Analysis Method

This research mainly used LISREL and SPSS to conduct data analysis. This research consist of two steps of data analysis. Structural equation modeling (SEM) is used as the technical analysis in this research, by considering the conceptual model of this research in which, it has one dependent variable, the three mediating variables, and one independent variable. This model cannot be analyzed using multiple regression analysis. Therefore, this research used LISREL, which is one of theprogramsof SEM. It is an analysis technique that allows the researcher to analyze the influence of several variables against other variables simultaneously (Ghozali & Fuad, 2008). This technique is conducted to analyze the relationship among store image, service quality, brand image, perceived risk, price consciousness, and purchase intention.

The first step of analysis is conduct the pilot test. Pilot test is conducted to test the validity and realiability of the indactors used in the questionnaire. Pilot test was conducted by spreading questionnaire for 30 respondents, in order to test the validity and reliability of the questionnaire. The results was analyzed by using SPSS. Once the pilot test completed, the next step is measuring the error, testing the structural model as well as research hypotheses, and analyzing the model fitness by using LISREL (Ghozali & Fuad, 2008).

After conduct the validity and reliability test for pilot test, there is one indicator that below the predetermined value to meet the elements of the validity of an indicator. There was one indicator that was below the predetermined value to meet the elements of the validity of an indicator (because the result was less than 0.3). The indicator was from E-Trust variable. Because of that result, this indicator was invalid. Thus, the researcher deleted one indicator and tested the validity and reliability of E-Trust variable. The results of the retest were as follows:

Constructs/Indicator	Corrected Item-Total Correlation	Cronbach Alpha	Minimal Score	Status
Perceived delivery time (PDT)	10/11	0.792	0.6	Reliable
Overall, I can receive the ordered item quickly;	0.573	Es.	0.3	Valid
Overall, I feel that the online store process my order quickly;	0.663	Č,	0.3	Valid
Generally, I would be able to know my order status at any time	0.706		0.3	Valid
Web site design (WSD)		0.743	0.6	Reliable
The online store provides depth information;	0.471		0.3	Valid
The online store does not waste time;	0.550		0.3	Valid

Table 1 Validity and Reliability Test for the Questionnaire

It is easy to complete a transaction at this online store;	0.439		0.3	Valid
This online store offers appropriate personalized services;	0.559		0.3	Valid
This online store has good selection.	0.543		0.3	Valid
Perceived online privacy (POP)		0.764	0.6	Reliable
I was informed about the information of the company that would be collectedon me;	0.623		0.3	Valid
The online store explained how they would use the information collected n me;	0.511		0.3	Valid
The online store has a clear mechanism/policy to review and change incorrect personal information;	0.608	Z	0.3	Valid
I feel that the online store is making effort to keep my personal information out of hands of unauthorized individuals;	0.515	D	0.3	Valid
I feel that the online store will not release my personal information about me without my express permission.	0.415	9	0.3	Valid
Perceived online security (POS)		0.785	0.6	Reliable
I believe that the online store implements security measures to protect internet shoppers;	0.529	S	0.3	Valid
I believe that the online store usually ensures that transactional information is protected from accidentally altered or destroyed during transmission on the internet;	0.619	A	0.3	Valid
I believe that the online store has a very safe online paying mechanism;	0.572	المح	0.3	Valid
I believe that the online store has the superior ability to handle online hijackings; and	0.512	in the	0.3	Valid
			0.3	Valid
I believe that transactions are protected by the state-of-the-art security technique at this online store.	0.617		0.5	
the state-of-the-art security technique at	0.617	0.919	0.5	Reliable

I am pleased with the experience of purchasing products from the online store;	0.927		0.3	Valid
I think purchasing products from the online store is a good idea; and	0.816		0.3	Valid
Overall, I am satisfied with the experience of purchasing products from the online store.	0.819		0.3	Valid
E-Trust		0.824	0.6	Reliable
I believe that this online store honestly provides correct information;	$\Delta M$	0.859	0.3	Valid
I believe that there is no misrepresentation at this online store;		0.640	0.3	Valid
I believe that this online store would not take adverse actions against its consumers.		0.623	0.3	Valid
E-Loyalty		0.905	0.6	Reliable
If the online store continues maintaining current service performance, I will not switch to other online stores;	0.764	0	0.3	Valid
As far as the product types sold at this online store are concerned, I do not quite consider purchasing at other online stores;	0.862	ZE	0.3	Valid
I like to utilize this online store; and	0.701	10	0.3	Valid
To me, this online store is the best web site to shop.	0.834		0.3	Valid

Source: SEM data processing results (2019)

### DATA ANALYSIS AND DISCUSSION

As what have already been explained in the previous chapter, 200 questionnaires have been spread out to 262 respondents to collect the data. The respondents in this research are only women or female. This research was mostly between 20-24 years old with the total number of 168 respondents or 65.9% of the total respondents. The majority of educational backgrounds of the respondents were high school/equivalent with the number 153 respondents or 74.5% of the total respondents. The respondents in this research mostly spent their web surfing 6-15 hours per week or 29% of the total respondents.

Furthermore, researcher used Structural Equation Modeling (SEM) and LISREL 8.80 program in analyzing the conceptual framework of this study. Before testing the hypotheses, it is necessary to test the validity and reliability of data that will be used in

the analysis. Referring to Holmes-Smith (2001), an indicator is valid if the value of t is  $\geq$  1.96 and a variable is valid if it has composite reliability  $\geq$ 0.50. Based on these requirements all indicator or item questions are valid and reliable in measuring the variables. Based on these requirements all valid or reliable indicator or item of question in measuring its variable can be seen on the table below:

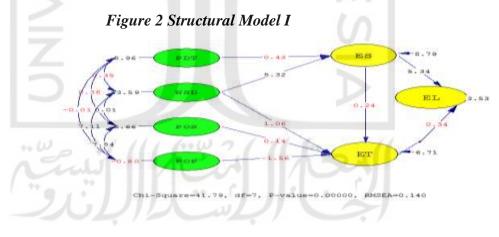
Item	Loading Factor (\lambda i)	t-values	R <sup>2</sup>	Description			
	E-LOYALTY (EL)						
EL1	0.77		0.71	Valid			
EL2	0.68	10.02	0.55	Valid			
EL3	0.78	9.76	0.49	Invalid			
		E-SA	TISFACTION	(ES)			
ES1	0.94		0.65	Valid			
ES2	0.76	11.85	0.86	Valid			
ES3	0.93	10.20	0.39	Invalid			
		1	E-TRUST (ET)				
ET1	0.35	•	0.19	Invalid			
ET2	0.71	7.73	0.98	Valid			
ET3	0.71	7.63	1.02	Valid			
	PERCEIVED DELIVERY TIME (PDT)						
PDT1	0.65	11.34	0.57	Valid			
PDT2	0.57	11.57	0.59	Valid			
PDT3	0.40	9.53	0.39	Invalid			
	WEB SITE DESIGN (WSD)						
WSD2	0.53	12.27	0.51	Valid			
WSD3	0.63	15.69	0.74	Valid			
WSD4	0.60	13.28	0.58	Valid			
WSD5	0.48	11.79	0.48	Invalid			

## Table 4.6 The Results of Validity Test of Indicators

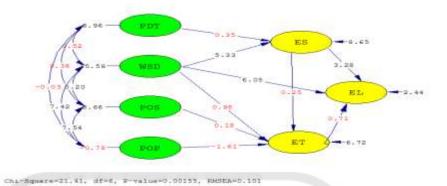
		PERCEIVED ONLINE SECURITY (POS)			
POS1	0.54	11.40	0.55	Valid	
POS3	0.42	9.34	0.36	Invalid	
POS4	0.66	12.91	0.72	Valid	
PERCEIVED ONLINE PRIVACY (POP)					
POP1	0.53	12.42	0.60	Valid	
POP2	0.86	14.73	0.84	Valid	
POP3	0.41	9.08	0.32	Invalid	

Source: SEM data processing results, 2019

Then, with valid and reliable data, the researchers conducted structural analysis using LISREL 8.80 program to test the hypotheses from this study. The influence of exogenous variables on the endogenous variables and the t values of each effect appear as shown in Figure 2. The statistical value of the final structural model indicates that the model is not good enough to representing this research. It because  $X^2$  has a value of 21.41 which is higher than the expected value and RMSEA has a value of 0.10 which is higher than the maximum value to be good (fit). Moreover, there are nine directions that were hypothesized in this research; there were six insignificant hypotheses, which were ES  $\rightarrow$ ET, ET  $\rightarrow$ EL, PDT  $\rightarrow$ ES, WSD  $\rightarrow$ ET, POS  $\rightarrow$  ET, and POP  $\rightarrow$  ET. From re-modification model, one new finding was found. Thus, the new finding was WSD  $\rightarrow$  EL hyphothesis. Figure 3 is the statistical value of the final structural in representing this research data.



### Figure 3 Structural Model II



The significance of the influence between variables and hypothesis testing of this research is shown in Table 3 below:

Hypotheses	Directions Influence	β or γ (t-value / α level)	Desc.		
H1: Perceived delivery efficiency positively influences e-satisfaction.	+	0.08 (0.35/> 0.70)	Rejected		
H2: Web site design positively influences e- satisfaction.	+	0.74 (5.33/>0.001)	Supported		
H3: Web site design positively influences e-trust.	+	0.24 (0.98/< 0.50)	Rejected		
H4: Perceived online security positively influences e-trust.	+	0.04 (0.18/> 0.70)	Rejected		
H5: Perceived online privacy positively influences e-trust.		-0.36 (-1.61/< 0.1)	Rejected		
H6: E-Satisfaction positively influences e-trust.	w 2+( (	0.02 (0.25/> 0.70)	Rejected		
H7: E-Satisfaction positively influences e-loyalty.	( إ	2.88 (3.28/< 0.50)	Supported		
H8: E-Trust positively influences e-loyalty.	+	1.05 (0.71/> 0.50)	Rejected		
NEW FINDING					
H9: Web site design positively influences e-loyalty	+	9.31 (6.05/>0.001)	Supported		

 Table 3 the Result of Hypotheses Testing

Source: SEM data processing results, 2019

The data analysis results of 9 proposed hypotheses above, there were 3 accepted hypotheses, which were H2, H7, dan H9. Meanwhile, the other six hypotheses, H1, H3, H4, H5, H6, and H8, were rejected.

Based on Table 3, with the real level of ( $\alpha$ ) >70% = 0.7, the calculation of Structural Equation Modeling (SEM) result was t-statistic value = 0.35 with probability-statistic = 0.7383. Thus, hypothesis H1 which stated that perceived delivery efficiency positively influences e-satisfaction for female online shoppers was insignificant and unacceptable. The result of this hypothesis showed that perceived delivery efficiency had no effects on e-satisfaction. According to Sastry, (2017) satisfaction is defined as the comparison made by the consumer between the initial expectation on a product and what they get as a final result. Schaupp & Bélanger (2005) defined delivery time as the total time between order placement and delivery, which includes dispatch, shipping, and delivery.

Secondly based on Table 3, with the real level of  $(\alpha)$  ) >0.1% = 0.001, the calculation of Structural Equation Modeling (SEM) result was t-statistic value = 5.33 with probability-statistic = 0.0018. Thus, hypothesis H2 which stated that web site design positively influences e-satisfaction, was significant and acceptable. The result of this hypothesis indicated that web site design had positive effect on e-satisfaction. It means that the better web site design on Shopee, will increase satisfaction of the Shopee customers. Kalia et al. (2016) stated that web presence and low prices were believed to be key drivers of success but now online stores had realized the importance of customer satisfaction because higher customer satisfaction is believed to be best indicator of firms future profit, product or service performance, adaptation or disconfirmation and post-purchase behavior (e.g., repurchase, complaining).

Based on Table 3, with the real level of ( $\alpha$ ) <50% = 0.5, the calculation of Structural Equation Modeling (SEM) result was t-statistic value = 0.98 with the probability-statistic = 0.3649. Thus, hypothesis H3 which stated that web site design positively influences e-trust, was insignificant and unacceptable. Thus, the result of this hypothesis indicated that web site design had no effect on e-trust. In accordance with the research conducted by Van et al. (2007) that stated in order to gain consumer trust, e-commerce firms must find a way to convince consumers that the personal information obtained through their websites will remain secure. Web merchants had employed a wide variety of approaches to increase consumer trust. Given the importance of trust in the e-commerce environment, the factors that produced a perception of trustworthiness within consumers need to be identified. Their interactions need to be understood and their relative importance needs to be determined. Understanding the roles of these different factors would allow online retailers to ease consumers' concerns and could improve customer perceptions of web retailing.

Based on Table 3, with the real level of  $(\alpha) > 70\% = 0.7$ , the calculation of Structural Equation Modeling (SEM) results were t-statistic value = 0.18 with the probability-statistic = 0.8631. Thus, hypothesis H4 which stated that perceived online privacy positively influences e-trust, was insignificant and unacceptable. The result of this hypothesis showed that perceived online security had no effects on e-trust. There was growing concern regarding security issues and the use of information given online in terms of the privacy of personal information and the unintended uses of it. Customers are reluctant to enter their personal information when the sites were asked for it because they

were concerned about the interception and misuse of information sent over the internet and how their data was used. Thus, online consumers hesitated to disclose any personal or financial information to companies because they felt that these companies could make unauthorized use of it or divulge it to other organizations (Roca et al., 2009).

Based on Table 3, with the real level of ( $\alpha$ ) >70% = 0.7, the calculation of Structural Equation Modeling (SEM) results were t-statistic value = -1.61 with the probability-statistic = 0.1585. Thus, hypothesis H5 which stated that perceived online privacy positively influences e-trust, was insignificant and unacceptable. The result of this hypothesis showed that perceived online privacy did not have effect on e-trust. It means that the better online privacy did not make trust of consumers higher. A number of researches had examined the importance of privacy on consumer perceptions on online shopping. According to Kim & Kim (2010), consumers hesitate to patronize a retail store when they feel insecure and perceive risk associated with purchase. With regard to risk perceptions, protection of personal information which facilitates consumer trust is a critical issue in the context of e-retailing. However, this is aligned with Chou et al., (2015) statement that stated this concern may negatively influence customers' perceptions about online firms' technical abilities to prevent their web sites from being intentionally invaded and damaged, resulting in reduced e-trust.

Based on Table 3, with the real level of  $(\alpha) > 70\% = 0.7$ , the calculation of Structural Equation Modeling (SEM) results were t-statistic value = 0.25 with probability-statistic = 0.8109. Thus, hypothesis H5 which stated that e-satisfaction positively influences e-trust, was insignificant and unacceptable. The result of this hypothesis indicated that e-satisfaction had positive effect on e-trust. It means that e-satisfaction had strong relationship with e-trust of the Shopee customers or buyers. Shihyu et al., (2015) stated that the emergence of e-commerce; researchers have extended the concept of loyalty into the context of the online environment, renaming it e-loyalty. Therefore, from Wong et al. (2014) found that satisfaction through website is achieved when its attributes exceed satisfaction levels. User satisfaction is obtained when information systems matched with the presented information.

Based on Table 3, with the real level of ( $\alpha$ ) <50% = 0.5, the calculation of Structural Equation Modeling (SEM) results were t-statistic value = 3.28 with the probability-statistic = 0.0168, thus, hypothesis H7 which stated that e-satisfaction positively influences e-loyalty, was significant and acceptable. The result of this hypothesis indicated that e-satisfaction had positive effect on e-loyalty. It means that while customers felt satisfied, it created loyalty on the Shopee customers. The statement from Muhammad et al. (2014) stated that similarly online customers over all evaluations of satisfactory consumption experiences make a positive impact on the degree of commitment in the relationship. Dimyati (2015) stated that a loyal customer is very meaningful to the vendor, since the cost to acquire the new customers is more expensive than maintaining the existing customers. Loyalty is developed by the following four stages, namely: cognitive loyalty, affective loyalty, conative loyalty, and action loyalty.

Based on Table 3, with the real level of  $(\alpha) > 50\% = 0.5$ , the calculation of Structural Equation Modeling (SEM) results were t-statistic value = 0.71 with the probability-statistic = 0.5043. Thus, hypothesis H8 which stated that e-trust positively

influences e-loyalty, was insignificant and unacceptable. The result of this hypothesis showed that e-trust had no effects on e-loyalty. From Srinivasan et al. (2002) defined eloyalty as "a customer's favorable attitude towards the e-retailer that results in repeat buying behavior". According to Butt & Aftab (2013), exploring the causal linkage between trust and loyalty in an online business environment, considered it as the most critical factor in establishing, building and maintaining customer relationships. There was additional finding based on Table 3, with the real level of ( $\alpha$ ) > 0.1% = 0.001, the calculation of Structural Equation Modeling (SEM) results were t-statistic value = 6.05with the probability-statistic = 0.0009. Thus, hypothesis H9 which stated that web site design positively influences e-satisfaction, was significant and acceptable. The result of this hypothesis indicated that web site design had positive effect on e-loyalty. It means that the better web site design on Shopee, will increase loyalty of the Shopee customers. As stated from Kim and Kim (2010), well-organized web sites should be simple to use, intuitive to navigate, easy to find information, and fast to complete transactions. Although e-retailers provide detailed information about products and services on the web site, consumers would not revisit the site if they had difficulty in finding information that they need. Providing a search engine, site map, and browsing/order instructions would be useful to improve the efficiency of navigation. Beside, express checkout makes it easy for consumers to complete their transaction process quickly. Providing live help available 24 hours a day would be an efficient tool to assist global customer needs. According to Valvi & West (2013), brand strength, functionality and website content influence customer loyalty differently for information-oriented, government and transaction-oriented websites, affecting post-purchase behaviors such as word-of-mouth.

### CONCLUSIONS

Based on the result of this research, there were 9 hyphotheses formulated. There were 6 insignificant hyphotheses, which were H1, H3, H4, H5, H6, and H8. There were 2 signifficant hyphotheses and 1 new finding hyphothesis with significant result. But, there were 8 hyphotheses that had positive direct influences and 1 hyphothesis that had negative direct influence.

From this research findings, perceived delivery efficiency directly affected esatisfaction of the store. The result of this research suggested that the waiting time between order and delivery was one of the major concerns for female shoppers shopping in Shopee. In addition, web site design, such as easy to navigate and friendly interface may also help satisfy online customers. However, this research had found that perceived online privacy did not significantly influence female consumers' e-trust. A possible reason for this finding was that Shopee typically had a unique online privacy setting. In addition, Shopee had an easy to use web site with fancy and modern homepages. They usually used interesting colorful feature and daily flash sale or discount almost every day. As the result, Shopee web sites generally looked attractive their customers because it performed daily games in their web site. This research found that e-trust and esatisfaction were important mediators of e-loyalty. Therefore, when customers had perceived e-trust from Shopee, they might feel comfortable and confident while shopping at that store. Thus, e-loyalty may also be formed.

### **RESEARCH LIMITATIONS**

The limitations of the research were as follow: The results were based on random selected sample that may create a bias from a single source data; the result could only be applied in this research and cannot be generalized to different context (because this research used a systematic random sample from Shopee buyers only); and this research used specific gender (female) its findings might not be applicable to different gender (male).

### RECOMMENDATIONS

For empirical studies, the researcher suggests the future study to examine the other dimensions that might affect loyalty. Researcher also suggests the future study to examine more about those inconsistent results.

For marketers, this study will contribute in giving the understanding about enhancing consumer's perception about their satisfaction, trust and loyalty by improving the sellers delivery time, store web site design, e-tail security, and e-tail privacy. The marketers can be started by creating the attributes that will affect consumers, such as entertainment and information disclosure. Thus, the users will be more attracted to the account and are motivated to be more satisfied and trust that would make loyal buyers. Besides that, it is important for marketers to consider the strong role of e-satisfaction and e-trust that affecting trust of the consumers. Therefore, marketers can provide excellent outcome quality by reducing consumer waiting time, offering low cost and also good quality products. Furthermore, competitive market situation of e-tail has important strategy for success in e-business to extend the business globally, understand and satisfy e-shoppers by improving e-service quality (web site design should be more interactive and easy to be used, delivery time during purchasing and delivered to customers, online security, online privacy).

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