

## CHAPTER IV

### DATA ANALYSIS AND DISCUSSION

This section presents the research findings of the discussions. The data used in this study are primary data obtained from respondents' answers through questionnaires distributed to 200 respondents who are classified as the millennials (born between 1980s – 1997s) and have been used online customization service more than 1 time.

In accordance with the problems and formulation of the model that has been stated, as well as the importance of testing the hypothesis, the analytical techniques used in this study include Structural Equation Modeling (SEM).

#### 4.1 Respondent Characteristics

This section explains the demographics of the respondents, which include gender, age, job, online shopping experience, ect.

##### a. Gender

The respondents based on gender can be grouped as follows:

**Table 4.1** The Gender of Respondents

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Man	96	46%
Women	104	54%

<b>Total</b>	200	100%
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**Source:** Results of Data Processing, 2018

Table 4.1 shows that the total of respondents in this study are dominated by women 104 respondents or 46%, while the total male respondents are 96 respondents with a percentage of 54%.

b. Age-Based Respondents

The respondents are picked from millennials generation born between 1980s – 1997s. Based on the age, the respondents can be grouped between the age range 19 - 23 years old, 24 - 28 years old, 29 – 33 years old, and 34 - 39 years old as seen in the following table:

**Table 4.2** The Age of Respondents

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
19 – 23 years old	154	77%
24 – 28 years old	44	22%
29 – 33 years old	1	0.5%
34 – 39 years old	1	0.5%
<b>Total</b>	200	100%

**Source:** Results of Data Processing, 2018

Based on 200 respondents involved in this study, table 4.2 shows that the majority of respondents in this study are aged between 19 - 23 years old is 154 respondents or 77%, the respondents aged between 24 – 28 years old are to 44 respondents or 22%, while the respondents aged between 29 – 33 years old and 34 - 39 years old has the same amount of respondent which is only 1 respondent or 0.5%.

c. Job-Based Respondents

Based on the respondent's job, the respondents can be grouped as follows:

**Table 4.3** The Job of Respondents

<b>Job</b>	<b>Frequency</b>	<b>Percentage</b>
Student	136	68%
Private Employee	44	22%
Civil Servant / Military / Police	5	2.5%
Housewife	2	1%
Entrepreneur	5	2.5%
Searching for Job	8	4%
<b>Total</b>	200	100%

**Source:** Results of Data Processing, 2018

Table 4.3 displays that majority of the respondents are students with a total of 136 or 68%, followed by private employees which is 44 respondents or 22%, civil servant / military / police with a total of 5 respondents or 2.5%, housewife with a total of 2 respondents or 1%, entrepreneur with a total of 5 respondents or 2.5%, and the rest is still searching for job with a total of 8 respondents or 4%.

d. Online Shopping Experience

Based on the online shopping experience, the respondents can be described as follows:

**Table 4.4** Respondents Online Shopping Experience

<b>Ol Shopping Experienced</b>	<b>Frequency</b>	<b>Percentage</b>
Expereinced	200	100%
Not Expereinced	0	0%
<b>Total</b>	200	100%

**Source:** Results of Data Processing, 2018

Table 4.4 demonstrates that all respondents in this study have the experience of using/doing transactions online with a total of 200 respondents or 100%.

e. Where Respondents Find Out Online Shops?

Based on the information source on online shops, respondents can be described as follows:

**Table 4.5** Where Respondents Find Out Online Shops?

	<b>Frequency</b>	<b>Percentage</b>
Social Media	177	88.1%
Advertising	101	50.2%
Recommendation	29	14.4%
Self Initiative	12	6%

**Source:** Results of Data Processing, 2018

Table 4.5 shows that the majority of respondents in this study find out online shops from social media with a total of 177 respondents or 88.1%, from advertising a total of 101 respondents or 50.2%, from recommendation 29 respondents or 14.4%, and by self-initiative 12 respondents or 6%.

f. The Loyalty of Online Shopping Experience

Based on the loyalty of the respondent's online shopping experience, respondents can be described as follows:

**Table 4.6** Loyalties of Respondent Online Shopping Experience

<b>Loyalties of Ol Shop</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	200	100%
No	0	0%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Results of Data Processing, 2018

Based on 200 respondents involved in this study, table 4.6 shows that all respondents in this study will and/or have a plan for coming back to the online shop with a total of 200 respondents or 100%.

g. Online Customization Experience

Based on the online customization experience, it can be described as follows:

**Table 4.7** Respondent Online Customization Experience

<b>The Loyalty of Online Shop</b>	<b>Frequency</b>	<b>Percentage</b>
Experienced	200	100%
Not Experienced	0	0%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Results of Data Processing, 2018

Based on 200 respondents involved in this study, table 4.7 shows that all respondents in this study have an experience of doing online customization with a total of 200 respondents or 100%.

h. Reasons for Doing Online Customization

Based on table 4.8 below provides the reasons for doing online customization:

**Table 4.8** Reasons for Doing Customization

	<b>Frequency</b>	<b>Percentage</b>
Customizing the Clothes Style	172	85.6%
Customizing the Clothes Size	141	70.1%
Recommendation	41	20.4%
Try Something New	76	37.8%

**Source:** Results of Data Processing, 2018

It can be seen that most of the respondents (172 or 85%) just intended to customize their clothing style, 141 respondents / 70.1% intended to customize size, 41 respondents / 20.4% did customization by

recommendation and 76 respondents / 36.8% just intended to try something new.

i. Online Customization Experience

Based on the respondent's online customization experience, it can be described as follows:

**Table 4.9** Online Customization Experience

<b>Loyalties of Online Shop</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	158	78.6%
Maybe	43	21.4%
No	0	0%
<b>Total</b>	200	100%

**Source:** Results of Data Processing, 2018

Based on 200 respondents involved in this study, table 4.9 shows that most of the respondents in this study stated they will come back and/or use the online customization again (158 respondents or 78.6%), and the rest of the respondents said that they probably will come back and/or use online customization again (43 respondents or 21.4%).



## 4.2 Descriptive Analysis

Based on the data collected, the answers from the respondents have been recapitulated and then analyzed to find out the descriptive answers for each variable. The assessment is based on the following criteria:

The lowest score is: 1

The highest score is: 5

$$\text{Interval} = \frac{5-1}{5} = 0.80$$

So that the limits of the assessment of each variable are as follows:

1.00 - 1.80 = Strongly Disagree

1.81 - 2.60 = Disagree

2.61 - 3.40 = Neutral

3.41 - 4,20 = Agree

4,21 - 5,00 = Strongly Agree

### 4.2.1 Descriptive Analysis of Online Customization

From the respondents answers that have been collected, it can be explained that the distribution of respondent's assessment from online customization can be shown in Table 4.10 below:

**Table 4.10** The Results from Data Analysis of Online Customization

<b>Indicator</b>	<b>Average</b>	<b>Criteria</b>
I feel that my personal needs are met when using this online site or making transactions with this online store.	3.93	Agree
The online customization site I've used provides me with information and products based on my preferences.	3.65	Agree
I feel that the online store that I have used has the same norms and values that I have.	3.395	Agree
<b>Average</b>	<b>3.66</b>	<b>Agree</b>

**Source:** Processed primary data, 2019

The results of the descriptive analysis as in Table 4.10 shows that the average rating of respondents for variable online customization is 3.66 (agree). The highest rating is for the the indicator "I feel that my personal needs are met when using this online site or making transactions with this online store" with the average answer of 3.93 (agree). The lowest rating is for "I feel that the online store that I have used has the same norms and values that I have" which is 3.39 (agree). This means that the respondents contended online customization provides a value that will meet their personal needs. "I feel that my personal needs are met when

using this online site or making transactions with this online store" is the most important factor in assessing online customization variable.

#### 4.2.2 Descriptive Analysis of E-Satisfaction

From the respondent's answers that have been collected, it can be explained that the distribution of respondent's assessment from E-Satisfaction can be shown in Table 4.11 below:

**Table 4.11** The Results from Data Analysis of E-Satisfaction

<b>Indicator</b>	<b>Average</b>	<b>Criteria</b>
In general I am happy with the online customization service from the company that I have used.	3.79	Agree
The website of an online customization company that I have used is quite fun.	3.78	Agree
I am very satisfied with the online customization service from the company that I have used.	3.39	Neutral
I am happy with this online customization company.	3.62	Agree
<b>Average</b>	<b>3.65</b>	<b>Agree</b>

**Source:** Processed primary data, 2019

Table 4.11 demonstrates that, the average rating of brand equity is 3.65 (agree). The highest rating is for the indicator “In general I am happy with the online customization service from the company that I have used” by 3.79 (agree). The lowest rating is for the indicator “I am very satisfied with the online customization service from the company that I have used.” at 3.39 (agree). This means the majority of the respondents feel happy and satisfied with the service of online customization that they already use.

#### 4.2.3 Descriptive Analysis of E-Trust

From the respondent’s answers that have been collected, it can be explained that the distribution of respondent’s assessment from E-Trust can be shown in Table 4.12 below:

**Table 4.12** The Results from Data Analysis of E-Trust

Indicator	Average	Criteria
I am ready to give my personal information to online companies.	3.38	Neutral
I am willing to give my credit card number to most online companies.	2.17	Disagree
It is not a problem to 'pay in advance' to products purchased through the internet.	3.43	Agree
These 'online' companies are professionals in	3.77	Agree

their fields.		
Online companies have the intention to fulfill their 'promises'.	3.57	Agree
<b>Average</b>	<b>3.26</b>	<b>Neutral</b>

**Source:** Processed primary data, 2019

Based on the results of the descriptive analysis, Table 4.12 shows that the average rating of respondents for E-Trust is 3.26 (neutral). The highest rating is in "These 'online' companies are professionals in their fields" is 3.77 (agree), while the lowest rating is in "I am willing to give my credit card number to most online companies" which is 2.17 (disagree). This means that the respondents have assessed that the professionalism of the company is the most important factor in assessing brand awareness variable.

#### **4.2.4 Descriptive Analysis of E-Loyalty**

From the respondents answers that have been collected, it can be explained that the distribution of respondent's assessment for E-Loyalty can be shown in Table 4.13 below:

**Table 4.13** The Results from Data Analysis of E-Loyalty

<b>Indicator</b>	<b>Average</b>	<b>Criteria</b>
I will recommend online companies that I have used with others.	3.75	Agree
I will recommend websites from online companies that I have used with others.	3.69	Agree
I intend to continue using / buying products from the online company again.	3.57	Agree
I prefer to go back to using online companies that I have used than other companies that are in the same field.	3.38	Neutral
<b>Average</b>	<b>3.6</b>	<b>Agree</b>

**Source:** Processed primary data, 2019

Table 4.13 displays that, the average rating of brand equity is 3.6 (agree). The highest rating is for the indicator “I will recommend online companies that I have used with others” with the average of 3.75 (agree). The lowest rating is for the indicator “I prefer to go back to using online companies that I have used than other companies that are in the same field” with the average of 3.38 (neutral). This

means that the majority of the respondents will come back and will recommend the company to others.

### 4.3 Test Statistics and Results

#### 4.3.1 Validity Test

Validity test is a test with the CFA test or construct validity test used to see whether the indicator is feasible or does not support latent variables. The indicator is said to be valid if the criteria ratio (CR) > 1.96 with a probability value (P) < 0.05 using AMOS software assistance. The results of the validity test can be seen in table 4.14 below:

**Table 4.14** Validity Table

	Estimate	S.E.	C.R.	P
OC3 <--- Online Customization	1.000			
OC2 <--- Online Customization	1.040	.127	8.203	***
OC1 <--- Online Customization	.930	.104	8.965	***
ES1 <--- E-Satisfaction	1.000			
ES2 <--- E-Satisfaction	.939	.113	8.294	***
ES3 <--- E-Satisfaction	1.020	.095	10.726	***
ES4 <--- E-Satisfaction	1.106	.104	10.688	***
ET5 <--- E-Trust	1.000			
ET4 <--- E-Trust	1.317	.157	8.379	***
ET3 <--- E-Trust	1.113	.139	8.031	***

	Estimate	S.E.	C.R.	P
ET2 <--- E-Trust	1.587	.190	8.338	***
ET1 <--- E-Trust	1.385	.166	8.344	***
EL1 <--- E-Loyalty	1.000			
EL2 <--- E-Loyalty	.979	.062	15.872	***
EL3 <--- E-Loyalty	.733	.060	12.148	***
EL4 <--- E-Loyalty	.918	.067	13.605	***

**Source:** Results of data processing, AMOS 7.0

Based on table 4.14 above, it is known that all values are  $CR > 1.96$ . it can be concluded that all instruments, namely online customization, e-satisfaction, e-trust, and e-loyalty, are validated.

#### 4.3.2 Reability Test

Reliability test with reliability construct test is used to see data consistency. This means that if the value of the reliability construct is  $> 0.6$  then it is categorized that the indicators in the study are good. The following is the reliability test results in table 4.15.

**Table 4.15** Reliability Table

Indicator	Construct Reliability
Online Customization	0.710



E-Satisfaction	0.791
E-Trust	0.816
E-Loyalty	0.876

**Source:** Processed primary data, 2019

Based on table 4.15, the value of the reliability construct  $> 0.6$  indicates that all indicators in the study are good and can be used in this research.

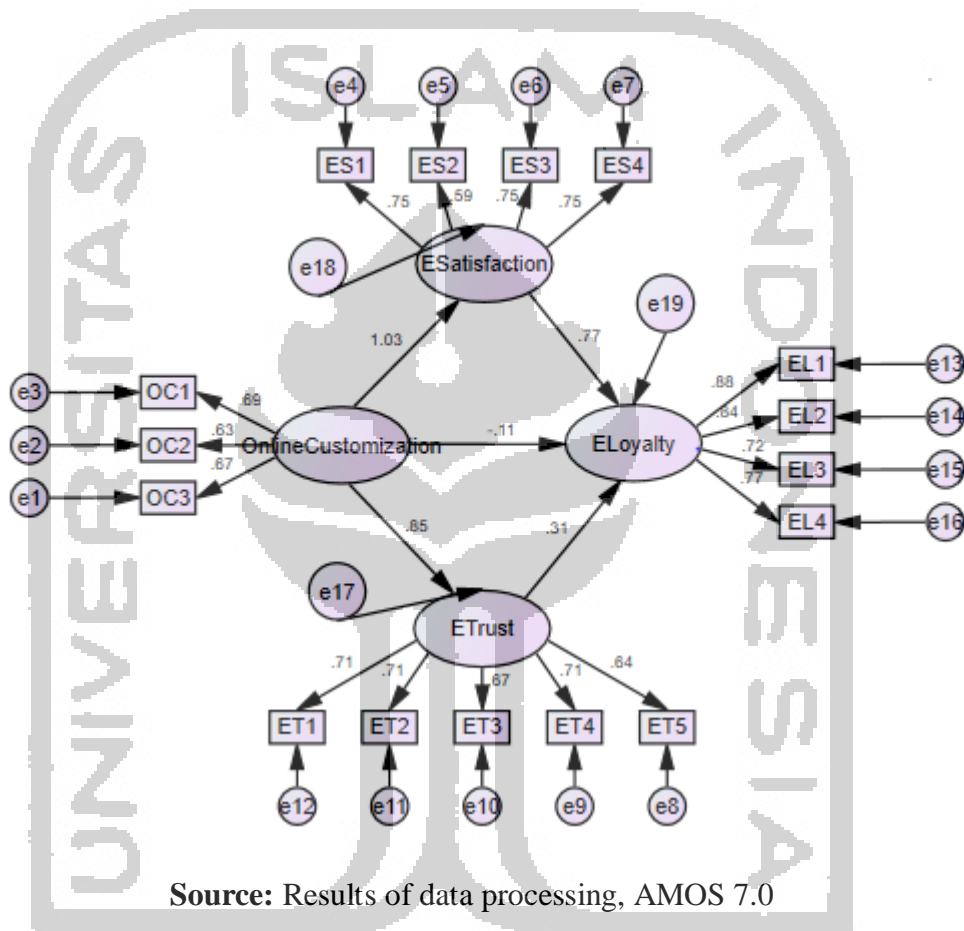
#### **4.4 Structural Equation Modelling (SEM)**

Structural Equation Model is a second generation multivariate analysis technique that allows researchers to examine the relationship between complex variables both recursive and non-recursive to obtain a comprehensive picture of the overall model (Ghozali, 2008). Structural equation modeling (SEM) is carried out with the help of the AMOS program. The AMOS program shows measurements and structural problems, and it is used to analyze and test hypothetical models.

##### **4.4.1 Goodness of Fit Test**

The model goodness test is used to test the model used in the study. The model goodness test determines the impact of online customization on e-loyalty. According to (Ghozali, 2008), several statistical test are used in SEM analysis to test the hypothesis of the model developed, and to measure the suitability of the model after the assumptions in the SEM are met.

**Figure 4.1.** The Results of the AMOS Data Structural Equation Model



Testing the goodness of fit model is carried out in seven stages, namely  $\chi^2$  (df), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), Incremental Fit Index (IFI), Tucker Lewis Index (TLI), normalized fit index (NFI), comparative fit index (CFI), dan root mean square error of approximation (RMSEA) with the criteria for measurement values that have been set. Obtained df

= 84, with a significance of 5%, and using Microsoft excel the results show that df = 84 is 106.4.

**Table 4.16** Model Feasibility Criteria

Indeks	Criteria Value ≤, Chi square from df	Analysis Results	Model
chi square	is 84 with sig level 5% = 106.4	134.26	Good
GFI	> 0.05	0.926	Good
AGFI	> 0.90	0.898	Not Good
IFI	> 0.90	0.979	Good
TLI	> 0.90	0.975	Good
CFI	> 0.90	0.979	Good
NFI	> 0.90	0.926	Good
RMSEA	< 0.08	0.42	Good

**Source:** Processed primary data, 2019

Based on table 4.16 above, it is known that the feasibility of the model has met the set criteria. Obtained values on GFI, IFI, TLI, CFI, and NFI greater than 0.90 except AGFI the value is less than 0.90 which means 'not good'. As stated in the table above, the RMSEA values is below 0.08 so that it can be said that the model is feasible to use and fit.

#### 4.4.2. Hypothesis Testing

Hypothesis testing is based on the results of the structural model test (inner model) which includes the parameter coefficients and t-statistics as follows:

##### 1) Inner Model Testing

**Table 4.17** Inner Weight Results in AMOS Output

Hypothesis	Dependent Variable	Independent Variable	C.R.	P	Label
H1	E-Satisfaction	<--- Online Customization	9.323	***	Accepted
H2	E-Trust	<--- Online Customization	7.520	***	Accepted
H3	E-Loyalty	<--- Online Customization	-.192	.848	Rejected
H4	E-Loyalty	<--- E-Satisfaction	1.291	.197	Accepted
H5	E-Loyalty	<--- E-trust	2.316	.021	Accepted

**Source:** Processed primary data, 2019

Based on table 4.17 above obtained:

- a) That online customization has a positive effect on e-satisfaction, this is known from the  $p\text{-value} < \alpha$ , i.e. p-value is 0.000 while  $\alpha$  is 0.05. This indicates that **H1 is accepted.**
- b) That online customization has a positive effect on e-trust, this is known from the  $p\text{-value} < \alpha$ , i.e. p-value is 0.000 while  $\alpha$  is 0.05. This indicates that **H2 is accepted.**

- c) That online customization has a negative effect on e-loyalty, this is known from the  $p\text{-value} < \alpha$ , i.e.  $p\text{-value}$  is 0.848 while  $\alpha$  is 0.05. This indicates that **H3 is rejected**.
- d) That e-satisfaction has a positive effect on e-loyalty, this is known from the  $p\text{-value} < \alpha$ , i.e.  $p\text{-value}$  is 0.197 while  $\alpha$  is 0.05. This indicates that **H4 is accepted**.
- e) That e-trust has a positive effect on e-loyalty, this is known from the  $p\text{-value} < \alpha$ , i.e.  $p\text{-value}$  is 0.021 while  $\alpha$  is 0.05. This indicates that **H5 is accepted**.

#### 4.5 Recapitulation of Hypothesis Testing

From the overall analysis the results of the research can be concluded in table 4.18 below:

**Table 4.18** Recapitulation of Hypothesis Test Results

Hypothesis	Hypothesis	Explanation
H1	Online customization has a positive impact on e-satisfaction	<b>Proven</b>
H2	Online customization has a positive impact on e-trust	<b>Proven</b>
H3	Online customization has a positive impact on e-loyalty	<b>Not Proven</b>
H4	E-satisfaction has a positive impact on e-loyalty	<b>Proven</b>
H5	E-trust has a positive impact on e-loyalty	<b>Proven</b>

## **4.6 Discussion**

### **1. Online customization has a positive impact on e-satisfaction**

Based on the results of the structural equation model in the inner model testing, the results show that online customization has a positive effect on e-satisfaction. These results indicate that a higher value of online customization affects the value of e-satisfaction. This means that the first hypothesis in this study is accepted.

This research proves that online customization can give choices to the customer for creating a product based on their personal preference. Mostly, the personal needs of the customer will be fulfilled by some choices they got in customization. The customization choices provided by an online apparel company usually are size, color, material, pattern, and so on. According to the previous study by Ostrom & Iacobucci (1995), customized product offers are aimed to satisfy a customer more than standardized product offers, because customized products facilitate a real match between customer and product. Contradictory results from a study conducted by Surprenant and Solomon (1987) reported that customization does not always lead to greater customer satisfaction with the service offering. Moreover, most previous research says that a customized product will positively affect the satisfaction of the customer in buying a product online or offline.

The marketing implication for the relation of online customization toward e-satisfaction is by analyzing consumer behavior with demand analysis techniques. By understanding the demand of customers, the company can estimate which product

line is most ordered products and they can produce it more to prevent the unsatisfied customer because they cannot get a product that they wanted to buy. It is very important for the company to read the demand of the customer because it will affect the satisfaction rate. then, it will directly or indirectly affecting the customers for coming back or not to buy other products from the company.

## **2. Online customization has a positive impact on e-trust**

Based on the results of the structural equation model in the inner model testing, the results show that online customization has a positive effect on e-trust. These results indicate that a higher value of online customization affects the value of e-trust. This means that the second hypothesis in this study is accepted.

In line with the previous study by Moorman et al (1993), it says that customization decreases customer feeling of uncertainty and vulnerability when buying a product, then it creates customer trust. Customers often feel insecure when buying a product online, because it provides uncertainty. Online customization providing some choices for customers to buy a product based on their preferences. By giving the choice to the customers to take part in creating the product, it will help in increasing the trust of the online customers. Some empirical studies find that the perceived willingness of companies to customized product is a constructor for increasing trust of the customers (Doney and Cannon, 1997).

E-trust in the customer relationship is important to be a foundation for a company to create a long term relationship with the customer. Mostly, customer

nowdays cannot easily give their trust to the online company because they can not directly visit the store. It is a challenge for the company to get the trust from customer, but the customization strategy at least fulfills the three criteria for a good signal, such as it is clearly visible for the consumer; it unambiguously signals high quality; and customers perceive it as an investment that is committed and cannot be salvaged (Singh & Sirdeshmukh, 2000).

### **3. Online customization has a positive impact on e-loyalty**

Based on the results of the structural equation model in testing the inner model, the results show that there is no effect of online customization on e-loyalty. Based on these results indicate that the higher or lower the value of online customization does not affect the value of e-loyalty. This means that the third hypothesis in this study was rejected.

Thibaut and Kelley's (1959) explain about exchange relationships. It states that a relationship maintains by individuals when the attractiveness from other alternatives is below the attractiveness from the current offer. Ideally, customization creates switching costs and increases the attractiveness of the current exchange relationship in comparison to the alternatives., The exchange relationship partners investments constitute relationship in specific assets, which are positively associated with a loyal customer (Levinthal and Fichman, 1988). It is contradicted with the result from this study which is online customization did not directly affect e-loyalty.



Moreover, online customization has an undirect effect on e-loyalty toward the other variables such as e-satisfaction, and e-trust.

As an online customization company, it implies the marketing strategy is by treating a good pre-purchase and post-purchase service to the customer. It can be done if the e-satisfaction and e-loyalty are fulfilled by the company. In line with the result from this research which is online customization cannot affecting e-loyalty directly.

#### **4. E-satisfaction has a positive impact on e-loyalty**

Based on the results of the structural equation model in the inner model testing, the results show that e-satisfaction has a positive effect on e-loyalty. These results indicate that a higher value of e-satisfaction affects the value of e-loyalty. This means that the fourth hypothesis in this study is accepted.

In line with the result of this research, the relationship between e-satisfaction and e-loyalty is significant in numerous studies (Anderson and Srinivasan, 2003; Cai and Xu, 2006; Park and Kim, 2003; Rodgers et al., 2005). As the majority of the study found that e-satisfaction has a positive effect on e-loyalty. It means that once the customers satisfied with the product they get from the company, most likely they will coming back and doing the transaction with the company again.

As the marketer, the company should understand which one is a satisfied customers, and not a satisfied customers. By distinguish them, the company can create a specific strategy to maintain the satisfy customers and to make an evaluation

to the unsatisfied customers. The goal of this strategy is to maintain the long term relationship with the customer, and ultimately to create loyal customers.

### **5. E-trust has a positive impact on e-loyalty**

Based on the results of the structural equation model in the inner model testing, the results show that e-trust has a positive effect on e-loyalty. These results indicate that a higher value of e-trust affects the value of e-loyalty. This means that the fifth hypothesis in this study is accepted.

In business studies, trust is important for building and maintaining long-term relationships (Geyskens et al., 1996). A good long-term relationship between the e-commerce and customers is the impact of trust given by customer to e-commerce. In line with the result of this study, Reichheld et al. (2000), stated that trust is proposed as another important antecedent of loyalty. E-trust can be defined as the degree of confidence customers have in an online transaction, or an online exchange channel (Ribbink. D, 2004). Also, there is some evidence supporting a positive relationship between customer e-trust and e-loyalty, in terms of increased spending (Gefen, 2000).

As an e-commerce, to maintain e-trust is by creating a good purchasing system to get the confidence of the customers. for an example is, a good security system will increase the confidence level of the customers because they will feel safe in doing the transaction. The other strategy the company can use is always maintaining a good relationship with customers by always sell the same product as in the description.