CHAPTER III

RESEARCH DESIGN AND METHODE

3.1 Research Location and Research Objectives

This research is conducted in the special region of Yogyakarta. The respondents come from millinnial generation, born between the years 1980 – 2000. This study analyzes the effect of online customization on e-loyalty directly or mediated by variable e-satisfaction and e-trust. This research is conducted empirically on active e-commerce users, especially e-customization users. This study consists of four variables, which are online customization as an independent variable, e-satisfaction and e-trust as the mediating variable, while the dependent variable is e-loyalty. In this study, the object used is an active e-commerce user, especially e-customization of the user located in Yogyakarta.

3.2 The scope of research

This research is conducted to e-commerce users, especially online customization users. The population in this research are the millennials who are online customization users, who were born between 1980 – 2000. Millennials are chosen because they are the biggest e-commerce users in Indonesia.

3.3 Population and Sample Research

The population is all the individuals or units of interest; typically, there is no available data for almost all individuals in a population. While, a sample is a subset of the individuals in a population; there is typically data available for individuals in samples Hanlon & Larget (2011). The population in this study is the millennial generation in Yogyakarta and has more than one experience in doing online customization. Since the population of millennials in Indonesia are very large, the number of the sample taken in this study is 200 respondents from the population.

3.4 Data Collection Techniques

This research makes use of a nonprobability sampling method in data collecting. Nonprobability sampling is the sampling method by not providing equal opportunities for each element or member of the population to be selected as samples and using convenience sampling techniques. This technique is also called an accidental technique. According to Sugiyono (2006) accidental sample is the technique of selecting respondents based on anyone who by accident is seen fulfilling the criteria of the data source, then he/she will be chosen as the respondent. Based on this technique, the criteria of whether or not a respondent fits in this study is based on the following characteristics:

1) Respondents are Indonesians who were born between 1980s – 2000s (millennials).

2) Respondents are online customization users who are using the service of online customization more than 1 (one) time.

The data used in this study are primary data. Primary data is the data obtained directly from the research subject by using a measurement or data retrieval tool directly on the subject as the source of the information. In this study, the data was obtained using a questionnaire distributed to 200 respondents. The types of questions that are used in this research are closed-ended questions. Questionnaires are distributed either directly (print out) or online (Google forms) to the respondents.

3.5 Definition of Operational Variable and Measurement

The variables analyzed in this study are online customization as the independent variable, e-satisfaction and e-trust as the mediating variable and e-loyalty as the dependent variable. Then, to measure those variables, this study makes use of the Five-Point Likert Scale, ranging from 1 that indicates Strongly Disagree and 5 that shows Strongly Agree. The operational definition and measurement details of each of these variables are as follows:

3.5.1 Online Customization

Customization in e-retailing is defined as "the ability of an e-retailer to tailor products, services, and the transactional environment to individual customers" Cho & Fiorito (2009). It is in line with Thirumalai & Sinha (2011) Customization is the tailoring of products to the individual needs and

preferences of customers, There are a few indicators to measure online customization according to Ribbink, Liljander, & Streukens (2004):

a. I feel that my personal needs are met when using this online site or making transactions with this online store (totally disagree to totally agree)
b. This online site provides me with information and products based on my preferences (totally disagree to totally agree)
c. I feel this online store has the same norms and values that I have (totally disagree to totally agree)

3.5.2 E-Satisfaction

E-satisfaction according to is "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a consumer's prior feelings about the consumer experience" Oliver (1997). Similarly, it is the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm Anderson & Srinivasan (2003). There are few indicators to measure e-satisfaction Ribbink, Riel, Liljander, & Streukens (2004):

a) In general, I am happy with the online services of this company (very dissatisfied to very satisfied)
b) The website of this online company is fun (very dissatisfied to very satisfied)

c) I am very satisfied with the online services of this company (very dissatisfied to very satisfied)

d) I am happy with this online company (very dissatisfied to very satisfied)

3.5.3 E-Trust

Trust is a critical factor in the relationship building process and is recognized as a precursor of commitment toward a firm Morgan & Hunt (1994). According to Jin, Park, & Kim (2008) e-trust is a customer's belief or confidence that the word or promise by the merchant can be relied upon (i.e. credibility) because benevolence (i.e. the seller will not take advantage of the consumer's vulnerability) may not be easily captured in the internet customer's mind. Ribbink, Liljander, & Streukens (2004), revealed a few indicators to measure e-trust:

a) I am ready to give my personal information to online companies (totally disagree to totally agree)

b) I am willing to give my credit card number to most online companies (totally disagree to totally agree)

c) It is not a problem to 'pay in advance' to products purchased through the internet (totally disagree to totally agree)

d) These 'online companies' are professionals in their fields (totally disagree to totally agree)

e) These online companies have the intention to fulfill their promises (totally disagree to totally agree)

3.5.4 E-Loyalty

E-loyalty is a consumer's intention to buy from a web site and that consumers will not change to another web site Flavian, Guinaliu, & Gurrea (2006). Cyr, Bonanni, C., & Ilsever (2005) defined e-loyalty as the intention to revisit a web site or to consider purchasing from it in the future. To put it another way, it is perceived intention to visit or use a web site in the future and to consider purchasing from it in the future Cyr, Kindra, & Dash (2006). According to the research that has been done before by Ribbink, Liljander, & Streukens (2004), there are few indicators to measure e-trust:

a) I would recommend the online company that I have used (totally disagree to totally agree)
b) I will recommend websites from online companies that I have used with others (totally disagree to totally agree)
c) I intend to continue using/buy products from this online company again (totally disagree to totally agree)
d) I prefer to use this online company 'back' than other competitors (totally disagree to totally agree)

3.6 Validity and Reliability Tests

Validity test indicates the extent to which a measure (indicator) can measure what you want to measure (variable) Zikmund & Babin (2007). An indicator is said to be valid if it has a value corrected item-total correlation ≥ 0.30. The reliability of the instrument was ensured through acceptable values of Cronbach 's alpha.

Thus, before distributing questionnaires to the sample of this research, the questionnaire validity and reliability are tested first. In the end, the questionnaires are distributed to 50 (fifty) respondents. The data collected from the respondents are then analyzed for knowing the validity and reliability with respect to the limitation described above.

	Reability		**Validity**		**Decision**
Variable/Indicator	**Score**	**Cut Off**	**Score**	**Cut Off**	
Online Customization	0.661	0.6			Reliable
I feel that my personal needs are met when using this online site or making transactions with this online store.			0.719	0.2732	Valid
The online customization site I've used provides me with information and products based on my preferences.			0.537	0.2732	Valid
I feel that the online store that I have used has the same norms and values that I have.			0.524	0.2732	Valid
E-Satisfaction	0.636	0.6			Reliable
In general I am happy with the online customization service from the company that I have used.			0.641	0.2732	Valid

The website of an online customization company that I have used is quite fun.			0.523	0.2732	Valid
I am very satisfied with the online customization service from the company that I have used.			0.593	0.2732	Valid
I am happy with this online customization company.			0.726	0.2732	Valid
E-Trust	0.768	0.6			Reliable
I am ready to give my personal information to online companies.			0.584	0.2732	Valid
I am willing to give my credit card number to most online companies.			0.652	0.2732	Valid
It is not a problem to pay in advance to products purchased through the internet.			0.665	0.2732	Valid
These 'online' companies are professionals in their fields.			0.659	0.2732	Valid
Online companies have the intention to fulfill their 'promises'.			0.603	0.2732	Valid
E-Loyalty	0.850	0.6			Reliable
I will recommend online companies that I have used with others.			0.824	0.2732	Valid
I will recommend websites from online companies that I have used with others.			0.723	0.2732	Valid
I intend to continue using / buying products from the online company back.			0.710	0.2732	Valid

I prefer to go back to using online companies that I have used than other companies that are in the same field.	0.803	0.2732	Valid

Table 3.1. Test Results I Reliability and Validity of Research Instruments

3.7 Analysis Technique

Data analysis used in this research is the analysis of structural equation modeling (SEM), given that the conceptual model of this research has one dependent variable, two mediating variables, and one independent variable. SEM analysis is a technique that allows analyzing the influence of several variables on another variable simultaneously (Ghozali, 2008).

SEM arises as an integral part of academic managerial research. SEM (Structural Equation Modeling) is a model of multiple equations from the development of the econometry principle that is aligned with the principles of psychology and sociology regulations (Ghozali, 2008).

Ghozali (2008) stated that the minimum sample size recommended in the use of SEM is 100 or using a comparison of 5-10 times the number of observations for each estimated parameter or indicator used. However, most researchers recommend using at least 200 samples (Kline, 2011).