# CHAPTER III RESEARCH METHOD

#### A. Research Design

Research design is a form of design about the relationship between variables studied that it can provide an overview to answer questions or test the research hypothesis. This explains that a study is expected to fulfill the stages and methods that are in accordance with the variables to be revealed.

## 1. Object / Subject of the Research

The location of this research was in the Yogyakarta samsat office which was located at Jalan Tentara Pelajar no 13, Yogyakarta, 55231. The objects of this research were performance expectancy, effort expectancy, social factor, facility condition, self efficacy, quality system, behavioral intention in the Yogyakarta samsat office, while the subjects of this research were taxpayers using E-Samsat as a tax payment tool or who have known the manual of the E-Samsat system but have never tried it directly.

## 2. Data Type

The data used in this study was primary data. Primary data was data obtained directly from the source, namely by interview, observation, discussion and questionnaire. The primary data used in this study was obtained from a questionnaire filled by respondents directly by the taxpayers in the Yogyakarta samsat office.

# 3. Sampling Technique

The sampling method used in this study was convenience sampling. Convenience sampling is a sampling method that is carried out by selecting samples freely at will of the researcher (Risal, 2013). This sampling method was chosen to facilitate the conduct of research on the grounds that the population studied was unknown so there was freedom to choose the fastest and cheapest sample.

## 4. Data Collection Technique

Data was collected by using primary data through questionnaire method. Assessment of respondents using a Likert Scale measurement models with range 1-4 because the questions were made as it is so that people agree, cannot answer neutral question or disagree. Item questions was directed at statements relating to the variables to be studied.

## 5. Operational Definition of Research Variables

The researcher developed research instruments by defining operational variables and decreasing statements from indicators. Following this research instrument:

# a) Behavioral Intention to Use E-samsat (Y)

Variables behavioral intention to use E-samsat is the level of desire or intention of users of taxpayers to use E-samsat continuously on the assumption that they have access to the system.

## b) Performance Expectancy (X2)

Performance expectancy is a level at which a person individually trusts using the system will help the person to get performance benefits at work

# c) Effort Expectancy (X3)

Effort expectancy is a level of ease of use of the system that will reduce the effort (energy and time) of an individual in doing his work. In this study, effort expectancy makes it easier for users to deal with the complexity of a system.

## d) Social Factors (X4)

Social factor is defined as the level of someone who views important beliefs from other individuals that he must use a new system. social influence aims to influence someone to use the system to support their performance.

## e) Self Efficacy (X5)

Self-efficacy is a belief and hope about the ability of individuals to use a system of technology. Self-efficacy can be a determinant of the success of a performance and implementation of the system. Self-efficacy also greatly influences mindset, emotional reactions, in making decisions.

# f) Facility Condition (X6)

The facilitating condition is an independent variable on the dependent variable using the e-s system. The facilitating condition is

the level at which an individual believes that there is an infrastructure of organization and technicians to support the use of the e-samsat system.

# g) Quality System (X7)

According to Hartono (2005) in Baikhuni (2018) system quality can be defined as a system in an organization which is a combination of people, facilities, technology, media, procedures and controls aimed at obtaining important communication lines, processing transaction types certain routines, giving signals to management and others to internal and external events as a basis for information for decision making.

## 6. Data Analysis

Data analysis is a process of inspecting, cleansing, transforming and modeling data with the goal of discovering decision making.

#### a. Descriptive Statistics

Descriptive statistics are used to provide a description of a data seen from the mean, standard deviation, variance, maximum-minimum, kurtosis, and skewness. This needs to be done to see the overall picture of the samples collected and meet the requirements to be used as research samples.

## b. Validity Test

Validity test (validity) is the extent to which in testing to find out that a study is able to measure valid or true things. Therefore, it can be said to be valid if the result Confirmatory Factor analysis (CFA) is <0.5 for each item. And if the significant value is < $\alpha$  of 0.05 then it is said to be valid. If the value is significant>  $\alpha$  0.05, the variable is said to be invalid.

# c. Reliability Test

Reliability test is a tool to measure a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable if someone's answer to the question is consistent or stable over time. The value of the reliability coefficient (Cronbach's Alpha) is above 0.7 (fair), above 0.8 (good) (Nazaruddin and Basuki, 2016).

## d. Classical Assumption Test

## 1) Normality Test

The normality test has the purpose of testing whether in the residual or residual variable regression model has a normal distribution. To detect residuals normally distributed or not, two methods are used, namely, graph analysis and statistical tests.

#### 2) Autocorrelation Test

An autocorrelation test was conducted to test whether there was a correlation between residuals in one observation and another observation (Nazzarudin & Basuki, 2016). If there is a correlation, then the problem is called autocorrelation. Research data is good if not affected by autocorrelation. To detect the

existence of autocorrelation is using Durbin-Watson (DW test) or  $\mathbf{du} < \mathbf{dw} < \mathbf{4} - \mathbf{du}$ .

# 3) Multicollinearity Test

The multicollinearity test aims to test the existence of correlation between independent (independent variables) in the regression model. A good regression model is that, there is no correlation between independent variables. If the independent variables are mutually correlated, then the variable is said to be not orthogonal. The variable is said to be orthogonal if the value of correlation between the independent variables is 0. This is to know that there is multicolonity with a Tolerance value of 10 or equal to the VIF value ≥ 10 (Ghozali, 2016) in Nadita (2019).

#### 4) Heteroskedaticity test

Heteroscedasticity test has the purpose of testing the occurrence of variance inequalities from the residuals of one other observation observation in the regression model. If the residual variance from one observation of another observation remains then it is called a homoroskedasticity and if it is different it is said to be heteroscedasticity. A good regression model is not heteroscedasticity or is said to be a homoroskedasticity (Ghozali, 2016). If the alpha >0,05 it can be concluded that the regression are free from heteroskedaticity.

# e. Hypothesis Test and Data Analysis

Hypothesis testing is a statistical method that is used in making statistical decisions using experimental data.

## 1. Analysis Model

This research using simple regression analysis is an approach method for the relation between six dependent variable and one independent variable. In this regression, the relation of both variables are linier, means the changes in X variable will be followed by the Y variables permanently. The following is a multiple regression equation:

Y = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 + eExplanation:

Y = Behavioral Intention

A = Constants

b1-b6 = Regression Coefficient

X1 = Performance Expectancy

X2 = Effort Expectancy

X3 = Social Factor

X4 = Facility Condition

X5 = Self Efficacy

X6 = Quality System

e = Random Error

## 1. Hypothesis Test

For test the hypothesis using 3 method F-test, T-test, and R square :

#### a. F-Test

According to Apriliana Niken (2018) the t test is used to determine whether the independent variable affects the dependent variable individually. The t test can be seen from a significant value, when a significant value is smaller than 0.05 then the independent variable has a significant effect on the dependent variable, the proposed hypothesis to be accepted. Whereas when a significant value is greater than 0.05 then the independent variable has not a significant effect on the dependent variable, the proposed hypothesis is rejected.

#### b. T-test

According to Ghozali (2006) t test is used to find out how the influence of independent variables as individuals explains the dependent variable. With a significant level of 0.05 ( $\alpha = 5\%$ ), a T test can be tested. There are 2 criteria for knowing whether the hypothesis is accepted or rejected:

• If the significance value is  $\leq 0.05$  and the regression coefficient is positive, the hypothesis is accepted (significant regression coefficient). This means that

partially the independent variable has a significant effect, meaning the hypothesis is accepted.

 If the significance value is> 0.05 and the regression coefficient is negative then the hypothesis is rejected (regression coefficient is not significant). This means that partially the independent variable does not have a significant effect, meaning the hypothesis is rejected.

## c. Adjusted R Square

The coefficient of determination can be used to show the level of correctness of predictions from the regression tests performed. The adjusted R square value can show the level of ability of the regression model in explaining the variability of the dependent or dependent variable. The magnitude of the determination coefficient is from 0 to 1. If the results of the analysis are known to be closer to 0, the smaller the ability to explain. Conversely, if the results of the analysis are known to be closer to 1, the greater the ability to explain the independent variables on the dependent variable