CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

Research design refers to the way the data should be collected and analyzed to solve some problems. According to Ary (2010), the research design is the researcher's plan of how to proceed to gain an understanding of some group or some phenomenon in its context.

The design of this study will be qualitative because this research aims to understand the phenomena or meaning of the research subject by describing it in the form of words. In this study, the researcher wants to get information or data in order to describe the customers perception towards purchasing electronic cars.

Qualitative research, in contrast, focuses on understanding social phenomena from the perspective of the human participants in its natural settings. It does not begin with formal hypotheses, but it may result in hypotheses as the study unfolds (Ary, 2010).

3.2 Population and Sample

3.2.1 Population.

Population According to (Sudaryono, 2018) population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that are determined by research to be studied and then draw conclusions. And this researches population will be the people of Bandar Lampung city who are above 20years of age which is a whapping 923970 people

3.2.2 Sampling

According to (Sugiyono, 2016), the sample is part of the number and characteristics possessed by the population. Samples are carried out if the population is large and the research may study everything in the population.

Whereas according to (Arikunto, 2013), argues that the sample is a part or representative of the population studied. If the subject is less than 100, it is better to take all so that the study is a population study. But, if the number of subjects is large, it can be taken between 10%-15% or 20%-25% or more". Because the buyers of catfish every day are unknown, the samples are taken from consumers and not buyers for (ordinary) stalls.

Due to the number of populations, the authors determined the sample size in this study using the Quota sampling technique, which is a sampling technique by setting a certain number as a target that must be met in sampling from the population (especially those that are infinity or unclear) (Sugiyono, 2016).

For this particular research the researcher will use a non-probability sampling method using snowball technique where by non-probability sampling is a method in which it is unknown who will be selected as a sample from the given population According to (Kotler & Keller, 2012),

Snowball technique will be used as away of distributing the questioner to the sample where by snowball technique According to (Kotler & Keller, 2012), where new units are recruited by other units to form part of the sample. Snowball sampling can be a useful way to conduct research about people with specific traits who might otherwise be difficult to identify. In this research the researcher shall distribute online questionnaires with a target to receive or collect feedback from 100 respondents thus the researchers determined a sample of 100 people.

3.3 Data Sources

The data source in this research is Primary data. According to (Narimawatiet all, 2019) Primary data is data that comes from the first source, namely the resource person or better known as the respondent. The data used in this study are data obtained from the results of distributing questionnaires that are distributed to respondents (residents of bandar Lampung city) whose criteria have been determined.

3.4 Data collection method

According to Bourgma in Grant (2017), data are all kinds of information, such as facts, numbers, letters, and symbols, that has been processed to describe an object, idea, condition, or situation. In this study, the researcher will collect data by distributing a questionnaire to the selected sample. The researcher also took data from books, journals, previous researchers, and the internet as the supporting resources. The questionnaire in this study will be based on the Likert scale as a measurement. Likert scale is defined as a unidimensional scale used to 18 collect the respondent attitudes and opinions. This scale is often used to understand respondent ratings and agreement levels with the topic in-hand (Bath, 2017). According to Bath (2017), there are 5 answer that should exist within a Likert scale.

Table 1 Likert Scale

Answer	Score
Strongly Disagree	1
Disagree	2
Neutral	3

Agree	4
Strongly Agree	5

3.5 Variables and Indicator.

Operational Definition of Variables

Table 2 variable description

Variable	Variable Definition	Indicators
Price (X1)	According to (Kotler & Keller, 2012), Price is the amount of money charged for a product or service, or the amount of value provided by a customer to benefit from owning or using a product or service.	1) Affordability 2) Customizing capability pricing 3) Price according to quality 4) Price conformity to benefits Source :(Kotler & Armstrong, 2014)
Product Quality (X2)	According to (Kotler & Keller, 2012), Product Quality is a characteristic of a product in the ability to meet	1) Performance 2) Additional privileges 3) Reliability

	predetermined and latent needs.	4) Specification conformity(conformance) 5) Durability 6) Service capability 7) Aesthetics 8) Perceived quality Source:(Lupiyoadi&Hamdani, 2014)
Purchase intentions (Y)	According to (Kotler & Keller, 2012), Consumer buying interest is a hidden desire in the minds of consumers	1) Transactional Interests 2) Referenced Interest 3) Preferential Interests 4) Exploratory Interests Source: (Ferdinand, 2012)

3.6 Validity and Reliability.

Validity explains how well the collected data covers the actual area of investigation by Ghauri and Gronhaug in Taherdoost (2016). Validity basically means "measure what is intended to be measured" by Field from Taherdoost (2016). Validity test can be tested from sig. Pearson correlation values are compared with the significance level and valid values when sig. value is $\leq$ 0.05.

Carmines and Zeller in Taherdoost (2016) stated that reliability is the extent in which a measurement of a phenomenon provides a stable and a consistent result. Reliability is also related with repeatability. For example, a scale or a test is said to be reliable if the same result is obtained from the same scale or test when it is administered under constant conditions will show a similar result (Moser and Kalton in Taherdoost, 2016).

3.7 Data Analysis Method

3.7.1 Multiple Regression Analysis

The process of analyzing the data for this research is completed by multiple regression analysis method. According to Priyatno (2014), multiple regression is used to find out the effect of several independent variables towards one dependent variable. The multiple regression analysis equation in this research is as follows

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$

Constanta

β_1: Price Regression coefficient

β_2: Product Quality Regression coefficient

Y: Customer's Purchase Decision

3.7.2 Hypothesis testing.

The measure of the significance of hypothesis support can be used to compare the value of the T-table and the T-statistic. If the T statistic is higher than the T-table value, it means that the hypothesis is supported or accepted (Suharyadi and Purwanto, 2015). In this study, for a confidence level of 95% (alpha 95 percent), the T-table value for the one tailed hypothesis with a T value of 1.645 and for 2 tails (two tailed) with a T value of 1.96

3.7.3 R-Square.

is a statistical measure that represents the proportion of the variance for dependent variables that is explained by an independent variable (Suharyadi and Purwanto, 2015)?

3.8 Research Variables

Basically, a research variable is something in the form of anything that is determined by researchers to be studied so that information can be obtained about it later on draw conclusions (Sudaryono, 2018). This research variable uses two variables, among others, the independent variable exogenous and the dependent variable endogenous. With the following explanation:

Dependent Variable (Y / Endogenous)

The dependent variable is also called the output variable, criteria, consequence. The dependent variable is a variable that is described or influenced by the 30independent variable (Sudaryono, 2018). The explanation of a certain phenomenon is systematically described by the dependent variables. For this particular research the dependent variable is the {purchase intention}.

Independent Variable (X / Exogeneous)

The independent variable is also called the stimulus variable, predictor, Independent variables are variables that affect or cause the emergence of dependent variables (Sudaryono, 2018). For this research the independent variables will be {x1(price) x2(product quality)} and in this research the researcher will find out how this independent variable affect the dependent variable Y.

3.9 Measurement Model.

Convergent validity from the measurement model with the indicator reflective model, the score is based on the correlation between the item score / component score and the contract score calculated by PLS. The reflective measure is said to be high if it correlates more than 0.70 with the construct to be measured. However, for research in the early stages of developing a measurement scale the loading value of 0.5 to 0.60 is considered sufficient (Chin, 1998 in Ghozali 2006). Discriminant validity of the measurement model with a reflective indicator is assessed based on the cross-loading measurement with the construct. If the correlation with the measurement item is greater than any other construct measure, it will show that the latent construct predicts the size of the block better than the other construct measures, it will show that the latent construct predicts the size of the block better than the other block sizes. Composite reliability which measures a construct can be evaluated with two kinds of measures, namely internal consistency and Cronbach's Alpha (Ghozali, 2006).