

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This research is designed as quantitative causal research which means the researcher tries to find the direct and indirect impact of the independent variables, such as, product quality, brand equity, place, promotion on repurchase intention decision as the intervening variable. According to Faenkel and Wallen (1990), survey is a research by collecting information from a sample by distributing questionnaire or interviewing to describe some aspects from population. Research methods based on the philosophy of positivism are used to examine a particular population or sample, data collection using research instruments, quantitative/statistic data analysis, to describe and test hypotheses that have been set (Sugiyono, 2007).

B. Operational Definition of Variables

The operational definition is a description of research with the variables used. Operational definitions can be as a clue how to a variable defined (Siyoto & Sodik, 2015). This is used to explain the indicators used in questionnaires. The definitions mentioned in this study are:

1. Dependent Variable (Y)

The dependent variable is a variable that is influenced by other variables. This is also referred to as a variable that structurally scientific thinking becomes a variable caused by changes in other variables (Hardani, 2020). The dependent variable is repurchase intention decision. According to Fang (2014) defines repurchase intention as the tendency of customers to buy products from the same manufacturer over a long period of time. Stated that another common term for repurchase is retention, which is often considered one of the most important variables in relationship marketing (Wu, 2014). For companies to repurchase intentions is also an important thing to be a concern, especially in an effort to increase sales of products and services

2. Independent Variable (X)

The independent variables are variables that cause or have a theoretical possibility of impacting other variable (Hardani, 2020). In this study, 4 independent variables were used, there is Product Quality (X_1), Brand Equity (X_2), Place (X_3), and Promotion (X_4).

- a. Product Quality (X_1) Product quality is the ability of a product to perform its functions which include durability, reliability, accuracy, ease, operation, and improvement as well as other attributes. When a product has been able to perform its functions, it can be regarded as a good quality product (Kotler & Armstrong, 2008). Product quality is one of the consumer's considerations in choosing the products they wanted to buy. Therefore, the company should be able to produce the high quality products or services, so that it can compete with the other competitors. If the product quality is as good as expected, the consumers will buy it.

There are four indicators of product quality in culinary:

1. The culinary serving a varied food and beverages menu
2. The culinary serving food and beverages according to the portion
3. The culinary serving food and beverages with taste good
4. The culinary serving food and beverages with hygienic and clean

- b. Brand Equity (X_2) Brand equity is a set of brand assets and liabilities linked to a brand; its name and symbol, which add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers (Aaker, 2009). Brand equity generates value for the company and the consumers. It creates value to the consumers by giving information to consumers, giving confidence in making decision, reinforcing buying, and contributing to self-esteem, such as confidence in using the brands. In this researcher uses brand awareness, brand associations, and brand loyalty.

1. Brand awareness is the ability of a brand to appear in consumers mind when they are thinking about a category of a product (Kim & Kim, 2004).
 2. Brand associations is something in consumers minds or memories that connect to the brand including product attributes, consumers' benefits, uses, life-styles, product classes, competitors and countries of origins (Aaker, 2009)
 3. Brand Loyalty, according to Aaker (1991) defined brand loyalty as a measurement of how consumers' bond to a brand. Brand loyalty reflects whether consumers will change to other brand due to changing of prices or features.
- c. Place (X_3) Location is seen as a place of business that greatly affects consumers' desire to come and shop (Sumarwan, 2004). Place is one of the most important in making purchasing decisions, because place and location is a factor that determines the success of a business, by choosing a strategic place and location.
- There are three indicator of place:
1. The place that have locations traversed or easily reached
 2. The place are comfortable, gated security, and cleanliness
 3. The place provide supporting facilities for customer needs.
- d. Promotion (X_4) According to Kotler and Armstrong (2004:79) Promotion is an activity that communicates product advantages and persuade target customers are notification messages about a product and provides confidence in the benefits to buy it. The purpose of promotion is to get attention, educate, remind, and convince potential customers. In the researcher uses advertising, sales promotion, and personal selling.
1. Advertising is any paid from non-personal presentation and promotion of ideas, goods, or services by sponsors identified through priont media (newspapers and magazines), broadcast media (radio and television), network media (telephone, cable, satellite, wireless), electonic media (recordings, video recordings, videodisks,

- CDROMs, web pages), and display media (billboards, signs, posters).
2. Sales Promotion is various short-term incentives to encourage trial or purchase of products or services including customer promotions (such as samples, coupons, and premiums), trade promotions (such as advertising and support displays), and business and sales promotion forces (contests for sale reps).
 3. Personal selling (Face to Face Sales) is Face-to-face interaction with one or more prospective employees for the purpose of making presentations, answering questions, and procuring orders.

Table III.1
Operational Definition of Variables

Research Variable	Dimension	Indicator
Product Quality (X₁) Product quality is the ability of a product to perform its functions which include durability, reliability, accuracy, ease, operation and improvement as well as other attributes	1. Feature, the feature dimension refers to the additional characteristics or features that complement the basic benefits of a product.	1.1. The culinary serving a varied food and beverages menu
	2. Conformance, the conformance dimension is the suitability of product performance with the standards stated in a product.	1.2. The culinary serving food and beverages according to the portion
	3. Durability, durability	1.3. The culinary

	<p>is endurance shows the age of a product, that is, the amount of use of a product before the product is replaced or damaged.</p>	<p>serving food and beverages with hygienic and clean</p>
	<p>4. Aesthetic, aesthetic also refers to product design or packaging. Some brands improve their aesthetic to make their products appear more attractive in the eyes of consumers.</p>	<p>1.4. The culinary serving food and beverages with taste good</p>
<p>Brand Equity (X₂) Brand equity is a set of brand assets and liabilities linked to a brand; its name and symbol, which add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers</p>	<p>1. Brand awareness is the ability of a brand to appear in consumers mind when they are thinking about a category of a product</p>	<p>2.1. Brand awareness plays an important role in consumers purchase intention as it can increase the familiarity of consumers towards the brand, which can then lead to possible purchase.</p>

	<p>2. Brand associations is something in consumers' minds or memories that connect to the brand including product attributes, consumers' benefits, uses, life-styles, product classes, competitors and countries of origins</p>	<p>2. Brand associations affect the basis for purchase intention towards a brand as it helps consumers to obtain information, distinguish the brand, generates reasons to purchase, and creates positive values/attitudes to the firms and their consumers.</p>
	<p>3. Brand Loyalty, defined brand loyalty as a measurement of how consumers' bond to a brand. Brand loyalty reflects whether consumers will change to other brand due to changing of prices or features.</p>	<p>2.2. Brand loyalty will make consumers attached to the brand. Consumers do not only repeat buying but also make them invulnerable to any brand changes such as change of price or product features</p>

<p>Place (X₃)</p> <p>Place/ location is seen as a place of business that greatly affects consumers' desire to come and shop</p>	<p>Place is the location of the shop or retailers in strategic areas so as to maximize profits. Existing premises must also provide for the needs and facilities of consumers.</p>	<p>3.1. The place that have locations traversed or easily reached</p> <p>3.2. The place are comfortable, gated security and cleanliness</p> <p>3.3. The place provide supporting facilities for customer needs.</p>
<p>Promotion (X₄),</p> <p>Promotion is an activity that communicates product advantages and persuade target customers are notification messages about a product and provides confidence in the benefits to buy it.</p>	<p>1. Advertising is any paid from non-personal presentation and promotion of ideas, goods, or services by sponsors identified through print media (newspapers and magazines), broadcast media (radio and television), network media (telephone, cable, satellite, wireless), electronic media (recordings, video recordings, videodisks, CDROMs,</p>	<p>4.1. Make a promotions through social media, or others.</p> <p>4.2. Advertisements that are disseminated provide clear, attractive, and appropriate information.</p>

	web pages), and display media (billboards, signs, posters).	
	2. Sales Promotion is various short-term incentives to encourage trial or purchase of products or services including customer promotions (such as samples, coupons, and premiums), trade promotions (such as advertising and support displays), and business and sales promotion forces (contests for sale reps).	4.3. Provide discounts, such as through grabfood / gofood, as well as other fintechs (Shopeepay, Ovo, etc).
	3. Personal selling (Face to Face Sales) is Face-to-face interaction with one or more prospective employees for the purpose of making presentations, answering questions,	4.4. Consumer recommends and attracts interest to buy / consume the product.

	and procuring orders.	
Repurchase Intention Decision (Y)	preference and probability in consuming the previous service again in the future	<ol style="list-style-type: none"> 1. Desire and Trust to Repurchase 2. Frequently purchase or use in the future 3. Recommend to others

C. Population and Sample

1. Population

Population is all values both calculated and measured, quantitative and qualitative, rather than certain characteristics of a complete and clear set of objects (Usman, Husaini, 2006). Population is region generalization consisting of the objects or subjects that have certain criteria and characteristics set by the researchers. The target populations in this study are consumer Warunk Gacoan Solo who consumed one of the products and eat it in this place.

2. Sample

Samples are some of the population whose characteristics are to be investigated and are considered to represent the entire population and are fewer than the population. According to Arikunto (2010), sample is a part of the population that researched. It means that sample is the part of population that represent the characteristic of the population. Furthermore, Ghozali (2004) stated that the appropriate sample size is between 100-200 samples. Therefore, the sample used by researcher is about 182 respondents.

3. Sampling Technique

Sampling according to Margono (2004) is the way to determine sample that has appropriate amount with the real data source that will be used to get the representative sample based on the spreading of the population. This researcher uses a purposive sampling. Purposive sampling is a sampling technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study. Alternatively, purposive sampling method may prove to be effective when only limited numbers of people can serve as primary data sources due to the nature of research design and aims and objective. (Ackoff, 1953).

As this study focuses on four factors: quality product, brand equity, place, and promotion. The chosen respondents in this research are consumer Warunk Gacoan Solo who consumed one of the products and eat it in this place at least twice.

D. Source of Data

1. Primary Data

Primary data is data that is taken directly to the respondent in an organization and is processed by the researcher using analytical tools that have been determined. In this study, the researcher determined primary data based on data sources from distributing questionnaires with google from to consumer Warunk Gacoan Solo.

2. Secondary Data

Secondary data is data obtained indirectly or commonly obtained from several research or writing sources. Among them are books, journals, and websites that are related to the research theme to support the data used. Secondary data will then be included in the bibliography.

E. Data Collection Methods

This study uses questionnaires to collect data. Questionnaire is a data collection technique that is done by giving a set of questions or written

statements to respondents to answer (Sugiyono, 2007). The questionnaire in this study was distributed and filled out by consumers or people who have consumed Mie Gacoan Solo. This questionnaire will be distributed online through Social Media.

The questionnaire was used using the purposive sampling. According to Sugiyono (2009: 300) purposive sampling is data source sampling technique with certain considerations. The reason for using this method is because we known population of Warunk Gacoan Solo customers, so this method is very appropriate for this research. Respondents respond to the questionnaire statement by determining the level of agreement on an item statement from the questionnaire by selecting one of the available scales. The scale used has 5 levels as follows:

- 5 = Strongly Agree (SS)
- 4 = Agree (S)
- 3 = Neutral (N)
- 2 = Disagree (TS)
- 1 = Strongly Disagree (STS)

F. Research Instrument Test

Data analysis is an activity carried out after the data collected from the respondents. Activities in data analysis include grouping data, tabulating data, presenting data, calculating data to answer the problem formulation, and calculating to answer the research hypothesis. This research was carried out using the help of IBM SPSS Statistics version 23.

1. Validity Test

Validity test is used to determine the appropriateness of items in a list (construct) of questions or statements. Validity shows the extent to which a measuring device is able to measure what you want measured. It can be said, able to obtain precise data from the variables that are well

studied. In Sugiyono (2014) Decision making to test the validity of the indicators are:

- 1.) If r -arithmetic is positive and r -calculate $>r$ - table then the item or variable is valid
- 2) If r -arithmetic is positive and r -arithmetic $<r$ -table then the item or variable is valid

2. Reliability Test

Reliability relates to the consistency of a measure. A participant completing an instrument meant to measure motivation should have approximately the same responses each time the test is completed. Although it is not possible to give an exact calculation of reliability, an estimate of reliability can be achieved through different measures (Roberta & Alison, 2015). Reliability shows the level of reliability (trustworthiness) of an indicator used in research. The method used in this study is to use Cronbach's Alpha. In this case, the researcher used the SPSS application to measure the reliability of the instrument data. A constructor variable is said to be reliable if the minimum value of Cronbach alpha > 0.60 .

G. Classical Assumption Test

1. Normality Test

Normality test is used to determine whether or not the normal distribution of data (Santoso, 2010). Good research data is data that has a normal distribution. The normality test used in this study is based on Kolmogorov Smirnov's approach by considering a significant value with $\alpha = 0.05$. The testing criteria are as follows:

- Significant $\geq \alpha = 0.05$, it can be said that the data used is normally distributed.
- Significant $\leq \alpha = 0.05$, it can be said that the data used is not normally distributed.

1. Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between independent variables. One method to diagnose multicollinearity is to analyze the tolerance value and its opposite variance inflation factor. The multicollinearity test aims to test whether the regression model found a correlation between independent variables. One method to diagnose multicollinearity is to analyze the tolerance value and its opposite variance inflation factor (VIF). Variance inflation factor is used to measure how much the variance of the estimated regression coefficient is inflated if the independent variables are correlated.

The value of $VIF = 1$ indicates that the independent variables are not correlated to each other. If the value of VIF is $1 < VIF < 5$, it specifies that the variables are moderately correlated to each other. The challenging value of VIF is between 5 to 10 as it specifies the highly correlated variables. If $VIF \geq 5$ to 10, there will be multicollinearity among the predictors in the regression model and $VIF > 10$ indicate the regression coefficients are feebly estimated with the presence of multicollinearity (Shrestha, 2020).

2. Heteroscedasticity Test

According to Ghozali (2007), the heteroscedasticity test aims to test whether in the regression model, there is an unequal variance from residual observations to other observations. A good research model is research that does not occur heteroscedasticity. The heteroscedasticity test can be done by looking at the results of the Glejser test at the significance level of the regression results of absolute residual values. The testing criteria are as follows:

- If the value Sig. > 0.05 , then there is no problem of heteroscedasticity.
- If the value Sig. < 0.05 , then there is a problem of heteroscedasticity.

H. Multiple Linear Regression Test

Regression analysis is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the

explanatory variables, to estimate and/or to predict the (population) mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter (Gujarti & Porter, 2013).

The functions of multiple regression analysis methods to predict the value of the dependent variable: repurchase intention decision (Y) and the independent variable: product quality (X₁), brand equity (X₂), place (X₃), and promotion (X₄) using the SPSS application. The equation model of this research is:

$$Y = Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Information:

Y = Repurchase Intention Decision

a = Constant

X₁ = Product Quality

X₂ = Brand Equity

X₃ = Place

X₄ = Promotion

β_1 = Product Quality regression coefficient

β_2 = Brand Equity regression coefficient

β_3 = Place regression coefficient

β_4 = Regression coefficient Promotion

e = error

I. Hypothesis Test

1. t-Test

The t-test shows how far the influence of the independent variables individually translates the dependent variable. The rules of decision making in the t-test using the SPSS application have a significance level of 5%:

- If the significance value > 0.05 , then the independent variable cannot explain or does not affect the dependent variable.
- If the significance value is < 0.05 , then the independent variable can explain/influence the dependent variable.

2. F-Test

A simultaneous test (F Test) is used to know whether the independent variable, namely product quality (X_1), brand equity (X_2), place (X_3), and promotion (X_4) together have a positive and significant effect on the dependent variable, namely organizational commitment (Y). The decision-making criteria in the F-test using SPSS are:

- If the significance value > 0.05 , then the independent variable cannot explain or does not affect the dependent variable.
- If the significance value is < 0.05 , then the independent variable can explain/influence the dependent variable.

J. Coefficient Determination

The coefficient of determination is a measure that can be used to determine the effect of independent variables on the dependent variable.

- If the determination coefficient $r^2 = 0$, it means that the independent variable does not influence the dependent variable.
- If the term $r^2 = 1$, it means that the independent variable has a 100% influence on the dependent variable.

A value close to 1 means that the independent variable gives almost all information to predict the variation of the dependent variable.