

CHAPTER III

RESEARCH METHOD

3.1 Research Sites

The location of this research was in Yogyakarta. The total number of tourist attractions and uniqueness in the city of Yogyakarta were one of the reasons of many tourists wanted to visit Yogyakarta and stayed at various hotels in Yogyakarta.

3.2 Type of Study

The type of study of this type of research was quantitative research. This research tries to investigate attitudes, opinions, behaviors, and other defined variables and generalize results from a larger population sample. Furthermore, this research will use the primary data since the data was collected directly from the first-hand experience.

The purpose of this research was to develop a theory between website interactivity as a branding tool and examine it with research hypotheses. There are five latent variables considered in the present research: two-way communication, brand awareness, brand image, brand value, and purchase intention.

3.3 Data Collection Methods

Questionnaire items were evaluated on a 5-point Likert scale. The scale was adapted from previous research studies, with "strongly disagree" and "strongly agree" scale. Words are modified in statements that fit the hotel context.

Examine the introduction which consists of an online survey about the consequences of website interactivity. The participant questionnaire was used to check face validity and reliability issues. It aims to recognize with a questionnaire, identify both grammatical or spelling errors, and ensure that one third of the participants understand the direction of the review and question items.

3.4 Population and Sample

An online survey was conducted using a nationally recognized consumer panel research service. The Empirical data for this research was gathered by using questionnaires and the population of this research consisted of reviews those who are Indonesian citizen age 15-65 years old. Thus, the questionnaire was written in Indonesian. In terms of sampling techniques, this research used non-probability sampling. The techniques used techniques such as multi-judgment sampling and convenience sampling.

For sampling, the researcher use an online survey platform that were conducted during the survey. The researcher conducted the online survey to fulfill the questionnaires. The hotel was located in Yogyakarta that had a minimum requirement of 3-star hotel.

From reviews of those techniques, the sample of this research was tourists who have traveled to Yogyakarta in less than five years. The tourists that were chosen were the domestic ones. This is because, one of the limitations of sample size and it was easier to get the data from domestic tourists rather than foreign tourists.

In this research sample, research was the indigenous people who lives in Yogyakarta. Counting the number of samples using Hair et al. (2010) 5 multiple the number of samples of several indicators. Hair et al. (2010) also suggested that the appropriate sample size ranged from 100-200 respondents. The number of indicators in this research was 24, then the number of samples in this research were 120 respondents.

3.5 Operational Definition and Measurement of Variable

The research among two-way communication, brand awareness, brand value, brand image, and purchase intention had been carried-out widely. Thus, this research used the existing literature as a basis and then modified such questionnaires to fit the research purposes as well as the targeted population. Because the items in the questionnaire had not been studied in the context of the website. The main concern is about the extent of the relationship between items contained in the questionnaire. Incomplete questionnaires and cases with incorrect and missing data were deleted and not considered.

3.5.1 Independent Variable

3.5.1.1 Two-way communication

Two-way communication was measured by Barreda et al. (2016) scale. Brand awareness, brand value measured and brand image was measured by Barreda et al. The purchased intention is measured by Liu et al. (2017). The variables are measured by 5 Likert-type scales (1 strongly disagree, 5 strongly agree). Indicator of Two-way Communication (TC) as follow:

TC1. This website is effective in gathering visitor's feedback.

TC2. This website makes me feel like I wants to listen to its visitors.

TC3. This website encourages visitors to offer feedback.

TC4. This website gives visitors the opportunity to talk back.

3.5.2 Intervening Variable

3.5.2.1 Brand Awareness

Brand awareness has a purpose where consumers can remember, recognize, or be aware of brands that affect the consumer's decision making process (Liu et al., 2017). Although brand awareness is not significant in the dimensions of brand equity, brand awareness can make consumers in initial decisions. Consumers do not realize more quickly that high brand awareness has a positive effect and is more likely to motivate purchasing behavior (Liu et al., 2017). Indicators of Brand Awareness (BA) are as follow:

BA1. The name of this hotel is well-known in the hotel industry.

BA2. This hotel is recognized as a strong brand hotel.

BA3. The hotel is known for good service,

BA4. Compared to other hotels, this hotel is leading

3.5.2.2 Brand Image

Brand image is created within minds of customers that come from a set of beliefs about a specific brand within the minds of the target customers (Yuan et al., 2016). Brand image has been observed as synonymous to the status of that relates to general status and perception of a hotel brand (Barreda et al., 2016).

Indicators of Brand Image (BI):

BI1. Hotel is a company that takes good care of reviews from guests.

BI2. We can predict how this hotel brand will perform.

BI3. Compared to other hotel brands, this hotel brand is known to deliver very high quality consistently.

BI4. Compared to other hotel brands, this hotel is a highly respected brand.

BI5. Hotel brand has a very rich history.

3.5.2.3 Brand Value

Brand Value recommends that individuals prefer to link themselves to products and services that represent strong and unique brands (Barreda et al., 2016). Brands that offer tangible relationships tend to be considered better brands and lead to better brand values (Gupta et al., 2018). Indicators of Brand Value (BV) are as follow:

BV1. It makes sense to book hotel rooms/services from X website instead of any other brand even if they are the same.

BV2. Even if another hotel brand has the same features as the X, I would prefer to buy X.

BV3. If there is another hotel brand as good as X, I prefer to buy X.

BV4. If another hotel brand is not different from X in any way, it seems smarter to purchase from hotel X.

3.5.3 Dependent Variable

3.5.3.1 Purchase Intention

Purchase intention is the likelihood that a customer will buy a product/service that becomes a vital predictor of actual buying behavior in tourism

industry (Lien et al., 2015). In booking hotels online, purchase intentions indicate consumers' desire to book rooms through hotel websites, supported by previous research such as brand image, price, trust, and value are that drive forces online purchase intentions (Lien et al., 2015). Indicators of Purchase Intentions (PI) are as follow:

PI1. I will consider to stay at this hotel.

PI2. The hotel is one of my main selection.

PI3. I am happy to stay at this hotel.

PI4. I am interested to stay again at this hotel.

PI5. I am happy to recommend this hotel to others.

PI6. I am happy for the positive comments about this hotel to others.

PI7. I gladly encourage friends and relatives to choose this hotel.

Table 3.1 Pilot Test Result

| Variable / Name of Indicator | Measurement | Cronbach Alpha | Cut Off | Status |
|------------------------------------|-------------|-------------------|---------|----------|
| Two Way Communication | | 0.912 | 0.6 | Reliable |
| TW1 | 0.779 | | 0.177 | Valid |
| TW2 | 0.886 | | 0.177 | Valid |
| TW3 | 0.820 | | 0.177 | Valid |
| TW4 | 0.741 | | 0.177 | Valid |

| Variable / | Measurement | Cronbach | Cut Off | Status |
|------------|-------------|----------|---------|--------|
|------------|-------------|----------|---------|--------|

| Name of Indicator | | Alpha | | |
|--------------------------|-------|--------------|-------|----------|
| Brand Awareness | | 0.831 | 0.6 | Reliable |
| BA1 | .663 | | 0.177 | Valid |
| BA2 | .653 | | 0.177 | Valid |
| BA3 | 0.843 | | 0.177 | Valid |
| BA4 | 0.568 | | 0.177 | Valid |
| Brand Value | | 0.910 | 0.6 | Reliable |
| BV1 | 0.676 | | 0.177 | Valid |
| BV2 | 0.836 | | 0.177 | Valid |
| BV3 | 0.839 | | 0.177 | Valid |
| BV4 | 0.883 | | 0.177 | Valid |
| Brand Image | | 0.914 | 0.6 | Reliable |
| BI1 | 0.872 | | 0.177 | Valid |
| BI2 | 0.821 | | 0.177 | Valid |
| BI3 | 0.796 | | 0.177 | Valid |
| BI4 | 0.869 | | 0.177 | Valid |
| BI5 | 0.611 | | 0.177 | Valid |

| Variable / | Measurement | Cronbach | Cut Off | Status |
|-------------------|--------------------|-----------------|----------------|---------------|
|-------------------|--------------------|-----------------|----------------|---------------|

| Name of Indicator | | Alpha | | |
|--------------------|-------|-------|-------|----------|
| Purchase Intention | | 0.929 | 0.6 | Reliable |
| PI1 | 0.666 | | 0.177 | Valid |
| PI2 | 0.820 | | 0.177 | Valid |
| PI3 | 0.891 | | 0.177 | Valid |
| PI4 | 0.748 | | 0.177 | Valid |
| PI5 | 0.827 | | 0.177 | Valid |
| PI6 | 0.741 | | 0.177 | Valid |
| PI7 | 0.763 | | 0.177 | Valid |

Source: Processed Primary Data, 2019

As noted in Table 3.1, it can be seen that all variables have the count $r >$, so it can be said to be valid. All-grain instrument questions are related to the two-way, brand awareness, brand value, brand image, and purchase intention. Acceptable reliability test was Cronbachs Alpha ≥ 0.6 , while all items of instrument questions are related to brand awareness, brand image, and purchase interest that can be expressed reliable. Thus, the questions contained in the questionnaire can be used in research studies. The next 24 questions are circulated as a questionnaire to the respondent. In addition, the completed questionnaires obtained can be analyzed further by r-table.

3.6 Data Analysis Method

3.6.1 Analysis of Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) is a statistical technique that analyzes the pattern of relationships between the latent construct and indicators, latent construct with each other, as well as of direct measurement error. SEM is a combination between the two statistical methods, namely factor of analysis and model of simultaneous equations developed in econometrics (Yamin and Kurniawan, 2011). There are two reasons that underlie the use of SEM:

1. SEM can estimate the relationship and variables that are multiple relationships. This relationship is formed in the structural model or the relationship between the dependent and independent construct.
2. SEM can describe the pattern of the relationship between the construct latent (unobserved) and manifest variables (indicators).

There are two approaches in SEM, the SEM based on covariance (Covariance Based Structural Equation Modeling - CBSEM) and SEM on the basis of the variance (Partial Least Square Path Modeling - PLS-PM). Both are based on the assumptions of researchers; the intended use of the model will be used for testing or development of theory for purposes of prediction. This research will use for PLS-PM, wherein the basic assumptions of researchers for the purpose of prediction (Yamin and Kurniawan, 2011). PLS-PM has become popular because it is supported by the analysis of the practical use of supporting software that helps processor data using Smart-PLS program assistance.

By calculating of the number of samples using Hair et al (2010) the number of samples are 5 times the number of indicators. Hair et al., (2010) also suggested that suitable sample sizes ranged from 100-200 respondents. The number of indicators in this research was 24, so the number of samples in this research was 120 respondents.

3.6.2 Methods of Partial Least Square (PLS)

According to Yamin and Kurniawan (2011), PLS is one of the alternative methods of SEM that can be done to overcome the problem of the relationship of complex variables but the sample size is small data (≤ 200 samples) and assumes nonparametric, meaning that the research data do not refer to one particular distribution. PLS can also be regarded as an approach to structural modeling that shows the relationship with hypothesized constructs.

Testing the PLS method includes two stages, namely outer models (model measurements) and the inner workings of the model (structural model). Outer models (model measurement) specification specifies the relationship between the latent construct and indicators, whereas the inner workings of the model (structural model) specification specify the relationship between the latent construct and other latent constructs (Yamin and Kurniawan, 2011).

3.6.2.1 Outer Models Testing or Models Measurement

There are two outer testing measured moels. They are validity test and realibility test.

3.6.2.1.1 Validity Test

Validity in quantitative research gives the sense that the definition of the concept in the conceptual stage and operations must be consistent with each other. An indicator is said to be valid if the indicators can achieve the purpose of measurement of the latent construct appropriately (Yamin and Kurniawan, 2011).

There are several methods to test the validity as PLS as follow:

3.6.2.1.1.1 Convergent Validity

Evaluation of convergent validity starts with seeing the item reliability (validity indicators) indicated by the loading factor. Loading factor is a number that shows the correlation between the score of an item questions with a score indicator construct indicators that measure the construct. Rated loading factor > 0.7 is said to be valid. However, according to Hair et al. (1998), rules of thumb that are usually used for the initial examination of the matrix is ± 0.3 factor which considered to have met the minimum level, and for the loading factor ± 0.4 is considered better, and for the loading factor > 0.5 is generally considered significant. In summary, the parameters used in this research for convergent validity are described in the following table:

Table 3.2

Parameters Convergent Validity

| Parameter | Rules of Thumb |
|----------------------------------|----------------|
| Loading Factor | More than 0.5 |
| Communality | More than 0.5 |
| Average Variance Extracted (AVE) | More than 0.5 |

Sources: Processed Primary Data, 2019

3.6.2.1.1.2 Discriminant Validity

Discriminant validity evaluation was done by looking at the value of cross loading extract measurement. Rated cross-loading shows the magnitude of the correlation between each construct to construct the indicator and the indicator of other blocks. A measurement model has good discriminant validity if the correlation between a construct with the indicator is higher than the correlation with other indicators of the constructing block. Subsequent evaluation is done by comparing the value of the correlation among extract roots of AVE. Results The recommended value should have higher AVE root of correlation among extract (Yamin and Kurniawan, 2011).

Table 3.3
Parameters Discriminant Validity

| Parameter | Rules of Thumb |
|---|---|
| Cross loading | More than 0.7 in one variable |
| Roots AVE and the correlation among construct | AVE Roots > correlation among construct |

Sources: Processed Primary Data, 2019

3.6.2.1.2 Reliability Test

Reliability can be measured with Cronbachs alpha and composite reliability (Hair et al. 1998). Cronbachs alpha is a coefficient that indicates how

well the reliability of the items in a collection to be positively correlated with each other (Sekaran, 2006), while the reliability of composite measure the true value of the reliability of a construct. The value of Cronbachs alpha and composite reliability for all a construct are above 0.7 (Yamin and Kurniawan, 2011).

3.6.2.2 Inner Testing Models or Structural Models

The test is performed to test the hypothesis. Structural models can be evaluated by looking at R² (reliability indicator) to construct the dependent variable and the value of the test statistic t-path coefficient. The higher the value of R², the better the prediction model of the proposed research model. Value path coefficients indicate the level of significance in hypothesis testing. Value path coefficients indicated by the t-statistic values must be above 1.96 (Hair et al. 1998).

