#### **CHAPTER III**

#### RESEARCH METHODOLOGY

## 3.1. Type of Study

In general, this research was conducted based on the method of quantitative which focused on examining the correlation among the variables that had been explained in the chapter II. By doing so, it is expected that these correlations examined in this research will be able to provide clear insight of the source credibility of electronic word of mouth (e-WOM) toward consumer's information adoption regarding to the use of online travel agent. In this research, the primary data was gathered by using quantitative method by spreading the questionnaire survey, and using Five-Point Likert Scale who had experienced purchase through OTA in Indonesia.

#### 3.2. Population and Sample

There were population and sample of the data in this research. According to Sekaran & Bougie (2016), population is defined as the group of individuals that has the same similarity with the predetermined characteristics. While for sample, it refers to the collection of respondents that is chosen from the population.

This research used non-probability convenience sampling method. As for more, the population itself is the Indonesian people who are in the age of 18-60 years old who had experienced the service of Online Travel Agents when doing hotel bookings and purchasing it.

#### 3.3. Data Collection Method

This research used the primary data as it was gathered directly from the respondents who have experienced using OTA in Indonesia. Based on the explanation in Zikmund et al. (2010), primary data is the data that obtained directly from the object of research by using a measurement or data retrieval tool directly on the subject as the source of the information sought. The researcher has distributed the questionnaires to 260 respondents. However, only 200 responses that is eligible to be used in this research. Moreover, online questionnaires were used in this research and spread online through google form. Moreover, the type of question is closed question.

The variables in this research are also categorized into three, namely; independent, intervening, and dependent. The source credibility of electronic word of mouth (e-WOM) which consist of expertness, trustworthiness, objectivity, and homophily are counted as independent variables. While perceived risk, argument quality, and information usefulness are the intervening variables, and last, information adoption as the dependent variable. To measure those variables, the Five-Point Likert Scale that ranging from (1) strongly disagree to (5) strongly agree is used in this research is as follow:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neutral

- 4 = Agree
- 5 = Strongly agree

#### 3.4. Measurement of Variable

## 3.4.1. Independent Variables

## 1. Expertness

- a. I believe that the Online Travel Agent site gave me useful information.
- b. I believe that the number of reviews from reviewers represents the knowledge and experience of the product being evaluated.
- c. I believe in reviewers who have been registered for a long time on the Online Travel Agent site.
- d. I rely on reviews that other readers also follow.

### 2. Trustworthiness

- a. I believe the same opinion from different reviewers because it actually shows the actual conditions.
- b. The use of the word of "I" or "Us" in the review is quite appropriate.
- c. I believe that reviewers give honest reviews about their experiences.
- d. I believe that the detailed length of the review content shows the depth of the review.

# 3. Objectivity

 Emotional conditions of reviewers can affect their perception of the object being assessed.

- b. Unusual conditions (e.g. natural disasters or strikes) can affect the quality of the object being assessed.
- c. Reviews are written by staff as they are.

# 4. Homophily

- a. I rely on reviews written by people of my age.
- b. I rely on reviews written by people of the same gender.
- c. I rely on reviews written by people who have similar interests.
- d. I rely on reviews written by people who buy products in the same way.

#### 3.4.2. Intervening Variables

#### 1. Perceived Risk

- a. Reading reviews helps me reduce the uncertainty of transacting online.
- b. Reading reviews reduces my worries about unexpected experiences.
- c. Reading reviews increases my confidence when doing online transaction.

#### 2. Argument Quality

- a. Reviews on the Online Travel Agent site are relevant.
- b. Reviews on the Online Travel Agent website are appropriate.
- c. Reviews on the Online Travel Agent website can be applied.
- d. Reviews on the Online Travel Agent website are up-to-date.
- e. Reviews on the Online Travel Agent site are reliable.

- f. Reviews on the Online Travel Agent site are complete.
- g. Reviews on the Online Travel Agent website include the values needed.

#### 3. Information Usefulness

- a. The information presented on the Online Travel Agent website is valuable.
- b. The Online Travel Agent website is informative.
- c. The information presented is very helpful.

## 3.4.3. Dependent Variable

#### 4.1.1. Information Adoption

- a. I like to follow the advice of positive comments and buy the recommended product.
- b. I agree with the suggested opinions of comments on the internet.
- c. I like to follow the information on the Online Travel Agent site.
- d. Information from the Online Travel Agent website is worth following.

#### 3.5. Validity and Reliability Test of Instrument

In this research, the validity test is used to measure the variables accuracy. The data used can be categorized as valid if the value of corrected item of total correlation is higher than  $0.3 (\geq 0.3)$ . On the other hand, the reliability test in this research is used to find out the consistency of the measurement in this research. Here, the value of Cronbach's Alpha is taken into account to measure its

acceptance. All the data can be categorized as reliable if the Cronbach Alpha is higher than  $0.6 \ge 0.6$ ). Moreover, both of the pilot test was done using the SPSS 25 by including the first 30 respondents.

**Table 3.1 Validity Test Result** 

| Variable                                | Measurement | r counted | r table | Description |
|---|-------------|-----------|---------|-------------|
| Source Credibility<br>(Expertness)      | SCE1        | 0.611     | 0.361   | Valid       |
|   | SCE2        | 0.869     | 0.361   | Valid       |
|   | SCE3        | 0.840     | 0.361   | Valid       |
|   | SCE4        | 0.815     | 0.361   | Valid       |
| Source Credibility<br>(Trustworthiness) | SCT1        | 0.555     | 0.361   | Valid       |
|   | SCT2        | 0.609     | 0.361   | Valid       |
|   | SCT3        | 0.639     | 0.361   | Valid       |
|   | SCT4        | 0.634     | 0.361   | Valid       |
| Source Credibility<br>(Objectivity)     | SCO1        | 0.387     | 0.361   | Valid       |
|   | SCO2        | 0.771     | 0.361   | Valid       |
|   | SCO3        | 0.721     | 0.361   | Valid       |
| Source Credibility<br>(Homophily)       | SCH1        | 0.703     | 0.361   | Valid       |
|   | SCH2        | 0.536     | 0.361   | Valid       |
|   | SCH3        | 0.659     | 0.361   | Valid       |
|   | SCH4        | 0.549     | 0.361   | Valid       |

| Perceived Risk            | PR1 | 0.962 | 0.361 | Valid |
|---------------------------|-----|-------|-------|-------|
|                           | PR2 | 0.923 | 0.361 | Valid |
|                           | PR3 | 0.899 | 0.361 | Valid |
| Argument Quality          | AQ1 | 0.778 | 0.361 | Valid |
|                           | AQ2 | 0.710 | 0.361 | Valid |
|                           | AQ3 | 0.659 | 0.361 | Valid |
|                           | AQ4 | 0.726 | 0.361 | Valid |
|                           | AQ5 | 0.790 | 0.361 | Valid |
|                           | AQ6 | 0.609 | 0.361 | Valid |
|                           | AQ7 | 0.679 | 0.361 | Valid |
| Information<br>Usefulness | IU1 | 0.867 | 0.361 | Valid |
|                           | IU2 | 0.909 | 0.361 | Valid |
|                           | IU3 | 0.860 | 0.361 | Valid |
| Information<br>Adoption   | IA1 | 0.398 | 0.361 | Valid |
|                           | IA2 | 0.692 | 0.361 | Valid |
|                           | IA3 | 0.706 | 0.361 | Valid |
|                           | IA4 | 0.672 | 0.361 | Valid |

Source: Primary Data (Computed), 2019

**Table 3.2 Reliability Test Result** 

| Variable               | Cronbach's Alpha | Status   |
|------------------------|------------------|----------|
| Expertness             | 0.811            | Reliable |
| Trustworthiness        | 0.726            | Reliable |
| Objectives             | 0.734            | Reliable |
| Homophily              | 0.727            | Reliable |
| Perceived Risk         | 0.871            | Reliable |
| Argument Quality       | 0.773            | Reliable |
| Information Usefulness | 0.854            | Reliable |
| Information Adoption   | 0.737            | Reliable |

Source: Primary Data (Computed), 2019

# 3.6. Analysis Technique

# 3.6.1. Respondent's Characteristics

This part explains the demographic characteristics of the respondents that includes the gender, age, education, monthly income, the choice of Online Travel Agents, the frequency of usage, and the habits of reading review before create a purchase.

### 3.6.2. Structural Equation Model Analysis

#### 1. Normality Test

The normality of data must be fulfilled so that the data can be further processed for SEM modelling. Testing the univariate normality is done to observe the value of skewness and kurtosis of the data used, if the CR value in the data is in the range of -2.58 to 2.58, the research data can be said to be normal.

#### 2. Outliers Test

Outliers are observations or data that have unique characteristics that look different from other observations and appear in the form of extreme values, both for a variable and for variable combinations. The outliers can be evaluated using analysis of multivariate outliers seen from the Mahalanobis Distance value.

## 3. Confirmatory Analysis or Goodness of Fit Criteria

Confirmatory analysis was used to measure the proposed concept by using several measured indicators. The proper fit model test is tested using the loading factor of each indicator and *Goodness of Fit Index* which includes *Chi-Square*, *probability*, RMSEA, GFI, CFI, TLI and CMIN/DF. Below is the table showing the minimum value of the indexes to be accepted.

**Table 3.3 Parameter of Goodness of Fit Index** 

| Goodness of Fit Index    | Cut-off-value |
|--------------------------|---------------|
| X2 (Chi-Square)          | Small Value   |
| Significance Probability | ≥ 0.05        |
| RMSEA                    | ≤ 0.08        |
| GFI                      | ≥ 0.90        |
| AGFI                     | ≥ 0.90        |
| CMN / DF                 | ≤ 2.00        |
| TLI                      | ≥ 0.90        |
| CFI                      | ≥ 0.90        |

Source: Ferdinand, 2002