

## **CHAPTER THREE**

### **METHODOLOGY**

The study was a cross-sectional design conducted during November-December, 2008. This research aimed to study the attitudes towards e-Customs in the shipping business. This chapter describes: (1) subject, (2) materials, (3) the procedures used in collecting the data, and (4) analysis of the data.

#### **3.1 SUBJECTS**

The population of the study was employees working in shipping business in Thailand. Respondents sampled by this study were those who work in the Japanese shipping business, its subsidiaries and their clients in Bangkok. In order to get the respondents that use electronic customs processing, the sample group included individuals who were in charge of manifesting the documentation via e-forms, directly contacting with the customs department, and having experienced use of a web-based system.

#### **3.2 MATERIALS**

The research study was conducted by a set of self-administered questions distributed to 115 respondents who are Japanese companies' customers. This study used the questionnaire with a total of 36 questions asking about facts, opinions and suggestions of each subject on customers' attitudes towards e-Customs and barriers to the growth of this method. The research had been already pre-tested in sample groups who had qualifications similar to the expected respondents. Then, the questionnaire was adjusted so the unclear wording and unrelated questions were deleted. The questionnaire is divided into three parts as follows:

##### Part I: Demographic Information of the Respondents

This part consists of closed-ended questions and opened-ended questions aimed to collect demographic data on the subjects such as gender, age, education, marital status, occupation and working experience in shipping business.

### Part II: Attitudes towards e-Customs in Each Aspect

As for this part, the respondents were required to use their judgments in closed-ended questions to measure feeling and opinion of respondents to understand their attitudes towards e-Customs. Each of the questions was measured with the Likert-type scale of five levels: extremely agree, agree, uncertain, disagree, and extremely disagree. The score of each level was as follows:

<b>Level</b>	<b>Score Value</b>
Extremely agree	5
Agree	4
Uncertain	3
Disagree	2
Extremely Disagree	1

$$\begin{aligned} \text{Worth of internal scale} &= \frac{\text{Maximum Value} - \text{Minimum Value}}{\text{Number of Value}} \\ &= \frac{5 - 1}{5} = 0.80 \end{aligned}$$

As a result, the outcomes of interpretations are as follows:

<b>Result</b>	<b>Average Score</b>
4.21 - 5.00	Extremely agree
3.41 - 4.20	Agree
2.61 - 3.40	Uncertain
1.81 - 2.60	Disagree
1.00 - 1.80	Extremely disagree

### Part III: Suggestions

This part used the open-ended questions to encourage the respondents to share their opinions and suggestions to improve the e-Customs system in further development.

### **3.3 PROCEDURES**

#### **3.3.1 Research Design**

This research study is a cross-sectional descriptive design which describes the attitudes of customers towards e-Customs.

#### **3.3.2 Data Collection**

The data was collected at one of the Japanese shipping companies, its subsidiaries, and their customers in Bangkok, such as forwarding and shipping companies. With the sampling technique, 75 questionnaires were distributed to a Japanese shipping company and its subsidiaries, and 40 questionnaires were distributed to their clients. The respondents were requested to fill in the questionnaires by themselves. All the questionnaires were collected after the respondents completed answering them.

### **3.4 DATA ANALYSIS**

The Statistical Package for Social Sciences (SPSS) program for windows version no.15 was used to analyze the data. Descriptive statistics, such as frequency distribution, mean, and percentage, are presented as means to answer the research question and presented in terms of the descriptive statistics of frequency distribution, percentage, and mean.

In summary, this chapter presents a summary of the methodology including Subjects, Materials, Procedures, and Data analysis for studying the attitudes towards e-Customs. In the next chapter, the result will be presented.