

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter explains the research designs in this study which are (1) the subjects, (2) the materials, (3) the procedures used in the collection and analysis of the data, and the data analysis.

#### **3.1 SUBJECTS**

The study population of the survey was the employees who worked in either IT-related organisations or the division of IT development domestically and overseas. However, the sampling frame of the study was difficult to be identified. The samples were thus selected by employing the quota and accidental sampling techniques as a sampling procedure. The quota of the sample of the study was 173 people working in IT, who worked near the Silom and Sathorn areas, where the researcher works, plus those whom the researcher could have access to via e-mail and online interactive messaging applications like MSN Messenger and Google Talk.

#### **3.2 MATERIALS**

The questionnaire instrument was developed to collect data from the sampling units. It was divided into three parts as follows:

**Part I** was composed of closed-ended questions about personal information of the sample: gender, age, educational background, marital status, level of salary, and awareness of SE.

**Part II** made use of closed-ended questions to quantify the degree of SE which was practiced in IT people's way of life in the following aspects: the behavior of spending money, health concerns, materials utilised and energy consumed in the workplace and at home, by using the 5-point Likert scale. The sample was asked to rate their own choices towards each aspect. The 5-point rating scale, ranging from

‘Never’ to ‘Always’ was shown in Table 2 as well as the determination of the degree of SE applied to the IT people’s way of life was given in Table 3.

**Part III** employed an open-ended question to explore thorough information on the difficulties in putting SE to use in IT people’s way of life.

***Table 2. The 5-Point Rating Scale Utilised in This Study***

<b>Rating Score</b>	<b>Interpretation of the Score</b>
5	Always
4	Often
3	Somewhat
2	Seldom
1	Never

***Table 3. The Determination of the Degree of SE Applied to IT People’s Way of Life***

<b>Level of SE applied to IT people’s way of life</b>	<b>Mean</b>
Always applied	4.21-5.00
Often applied	3.41-4.20
Somewhat applied	2.61-3.40
Seldom applied	1.81-2.60
Never applied	1.00-1.80

### **3.3 PROCEDURES**

#### **3.3.1 Research Design**

This study is cross-sectional design to describe roles of SE in IT people’s way of life in terms of the behaviour of spending.

### **3.3.2 Data Collection**

In order to design a viable questionnaire, the researcher had widely and intensively reviewed and understood the structure of SE, its application, and related works obtained from various sources such as online journals and books as well as observing the behaviour of IT people in the workplace for almost nine years which is the period that the researcher has been working. Based on the cumulative knowledge, a self-administered questionnaire was developed and could match the objectives of the study thoroughly. In addition, the title and the clear objectives of the study, plus the instructions on how to complete the questionnaire were provided on a cover page. A pre-test group – the particular group of IT people – was given this questionnaire so as to assure that all questions in the questionnaire were unambiguous and comprehensible. Ultimately, the amended questionnaire was used to collect data from the sample of the study.

In doing so, the copies of the questionnaire will be distributed to the sample by hand, for IT people of the companies where the researcher works with and via e-mail or interactive messaging applications, for those which were in the distance. The researcher attempted to point the significance of the study out to the sample and emphasised that it could be done with their assistance so that this would minimise the number of ‘No Response’ questionnaires – especially those which were sent to the former employees of the companies. The confidentiality of their data was promised.

The survey was conducted from the beginning of December 2007 to the last week of January 2008. 191 copies of the questionnaires were distributed but only 173 were filled out and returned by hand and via email and interactive messaging applications.

## **3.4 DATA ANALYSIS**

Version 12.0 of the SPSS (The Statistical Package for Social Sciences) computer application was used to accomplish the statistical analysis of the data collected from the respondents’ questionnaires. Descriptive statistics featuring the

frequency distribution, percentage, arithmetic mean, and standard deviation was utilised in the analysis of personal data. Apart from that, inferential statistics were a part in testing the study hypotheses. The statistical devices employed in the process were described here:

1. **Cronbach's Alpha Coefficient** was used to evaluate reliability of the questionnaire in which the 5-point Likert scale is used to measure Part II of the questionnaire.

2. **Frequency Distribution and Percentage** were used to describe the data from Part I of the questionnaire: gender, age, marital status, educational background, level of salary, and awareness of SE.

3. **Arithmetic Mean and Standard Deviation** were used to calculate the average degree of SE which was applied to IT people's way of life.

4. **t-Test** was used to test the hypotheses 1 – 5.

In summary, this chapter illustrated the methodology of this research concerning subjects, materials, procedures, and data analysis. In the next chapter, the results of this study will be presented.