

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter outlines the methodology used in the study and is divided into four major parts, namely the types of data obtained, research instrument, sampling procedure and data collection methods and data analysis techniques.

3.1 TYPES OF DATA

Data relevant to this study was obtained through secondary sources of information and primary data search. Secondary data was intended to provide an overview of organizational change and change processes that were crucial for successful change outcomes. Secondary data was also obtained to explore previous studies conducted on organizational change.

Secondary data was gathered mainly from journals and magazines from the Universiti Malaya library via the ProQuest and Emerald search. Other sources of secondary data included books and journals from other libraries and electronic magazines (e-zines) and articles from the internet. The data obtained from these sources formed the basis on which the questionnaire for this study was designed.

Primary data for this study was obtained by conducting a survey using questionnaires (discussed in the next section).

3.2 RESEARCH INSTRUMENT

The survey instrument was a ten-page questionnaire (see *Appendix 1*) designed to test the hypotheses as outlined in Chapter One. This questionnaire was mostly adapted from a study conducted by Abraham, Griffin and Crawford (1999). Only item '10' in Section I was adapted from a study conducted by Morris (1997). In addition several items were

developed by the researcher based on judgement of local applicability (mostly in Part 1 which contained items on personal particulars of respondents and several items on the change process scales in Part 2) and extensive review of literature.

The questionnaire comprised two parts: Part 1 relating to respondent characteristics and Part 2 relating to organizational change processes and outcomes.

Part 1 (Sections A – G) categorized respondents according to age, length of service, gender, position, education level, employment contract and company type.

Part 2 (Sections H – O) consisted of eight sections. With the exception of the first section (Section H), the others were scored on a 5-point Likert-type scale of 1-5, with 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. The first section (H) was scored using a categorization of change background and strategy. The eight sections in Part 2 are discussed as follows:

- *Section H - Change Background and Strategy:* This section investigated the particular change strategy used by the organization based on Dunphy and Stace's (1990) situational model of organizational change. Subjects were required to choose between the four types of change described earlier, namely fine tuning, incremental adjustment, modular transformation and corporate transformation.
- *Section I – Visioning:* This section contained 11 statements pertaining to visioning and investigated:
 - (a) the degree to which a quality 'vision' was designed and articulated by top management;

(b) the detail of design; and

(c) the clarity and depth of perception of the vision, for example through clear timetables or achievement of various targets

- *Section J – Leadership and Management Practice:* This section comprised 15 statements that dealt with the development of a critical mass of top level support for the change and the actions by this critical mass to initiate and manage the change process.
- *Section K – Resources:* The 4 statements in this section investigated the degree to which the change process was supported through appropriate financial, human and training resources and management support.
- *Section L – Motivation and Rewards:* This section investigated the motivation of respondents in adapting to the change and rewards used to support change, as measured by the 12 items on the scale.
- *Section M – Structuring for Change:* This section, consisting of 9 items related to specific change structures which may have been devised to manage the change process such as steering committees, task forces and teams, a transition manager and transition coordinators and a transition network.
- *Section N – Communication:* The “Communication” section (consisting of 12 statements) investigated the extent to which various communication approaches were used to manage the change process and the perceived effectiveness of each of these approaches.

- *Section O – Change Outcome-Perceived Effectiveness of the Change:*
The 10 statements in this final section allowed respondents to record their perceptions of tangible gains achieved through the change effort.

A preliminary pilot test was carried out on a few selected individuals before the actual survey was conducted. This was done to gauge the overall level of understanding (in terms of the subject matter, concepts, instructions and language) of potential respondents. The final questionnaire was fine-tuned based on feedback from the pilot test.

3.3 SAMPLING DESIGN

This section describes the sample, sample size and data collection procedures.

3.3.1 Sample

The targeted sample size was approximately 140. 238 questionnaires were distributed with the hope of obtaining at least 140 usable responses for analysis.

3.3.2 Data Collection

This study employed the non-probability sampling technique in which a combination of convenience, quota and purposive sampling were used. The questionnaire was distributed to 17 locally incorporated organizations confined within the Federal Territory Kuala Lumpur and Selangor, Malaysia. The breakdown of the organizations is as follows:

Table 3.1: Organizations included in the study

Organization	Industry / Core Business
1	Aviation & Aerospace / Transport
2	Banking & Finance / Commercial Banking
3	Banking & Finance / Commercial Banking
4	Banking & Finance / Commercial Banking
5	Oil & Gas / Petrochemical
6	Communications & Multimedia / Telecommunications
7	Information Technology / Computer Hardware/Software/Solutions
8	Communications & Multimedia / Telecommunications
9	Communications & Multimedia / Telecommunications
10	Infrastructure / Construction & Power Generation
11	Investment (Statutory Body)
12	Taxation (Statutory Body)
13	Insurance / Life Insurance
14	Banking & Finance / Commercial Banking
15	Consulting / External Auditing
16	Insurance / Life Insurance
17	Education / Tertiary Education

Each organization was provided with 14 questionnaires and coded envelopes so that the completed surveys could be returned through an organizational contact to the researcher. Each organization was required to distribute the 14 questionnaires equally to two categories of employees, namely managerial and non-managerial (executive/officer level). This strategy reflected the need to capture responses from two different and distinct levels of employees in the organization. In addition, the questionnaires were distributed to

organizations in various industries that were known to have undergone recent organizational change.

A total of 193 responses were obtained from 17 organizations, giving an average of 11.4 responses per organization and an overall response rate of 81.1 per cent. The lowest number of responses from any one organization was 7 and the highest was 14 with only 5 organizations having fewer than 10 responses. With the exception of one organization, the others had relatively balanced responses from both levels of employees (managerial and non-managerial) in the organization. All the 193 responses were used for the analysis of the study.

3.4 DATA ANALYSIS TECHNIQUES

The survey data was analyzed using Statistical Package for Social Sciences (SPSS) version 10.05. The data analysis consisted of five major parts, namely:

- Summarization of the general characteristics of respondents (in terms of demographics). *Frequency counts* were used to analyze these data.
- Evaluation of the research hypotheses, i.e. the correlation between the change processes identified and change outcomes / perceived effectiveness of the change. *Correlation analysis* was performed to test the hypotheses.
- Examination of change processes and outcomes that discriminate between different employee demographics, e.g. position in organization (managerial or non-managerial), years of service, and age. The *T-Test* and *ANOVA* procedure were used for this purpose.

- Measurement of the linear association between the dependent variable (change outcome / effectiveness) and independent variables (change processes). *Multiple regression* was used to investigate the effect on the independent variables on the dependent variable.

3.4.1 Limitations of the Sampling Procedure

The study was confined to organizations situated in Kuala Lumpur and Selangor and in which the researcher had a contact person. As such, a high percentage of the organizations identified came from similar industries. It would have been more desirable to have a good mixture of organizations from very dissimilar industries.

The dimensions identified by the researcher (change processes) to include in the study may not be sufficient to describe effective organizational change. Therefore, there could have been other factors that invariably result in the perceived effectiveness of organizational change which were not included in the study.

Questionnaires were only distributed across two categories of employees, i.e. managerial and non-managerial (executive/officer level). Other categories of employees (e.g. senior management, non-executive, operational, technical support, administrative support, etc. were not included. Due to the limited scope of the study, a wider range of organizational respondents was not possible.

Finally, although clear instructions were provided in the questionnaire, respondents might differ in their interpretation and understanding of the questions due to the fact that they come from organizations of different sizes, thus have a different understanding

of organizational change. In addition, feedback provided by respondents indicated that the language used might have been a little difficult to understand. This was probably due the lower level of English language proficiency among Malaysians as compared to Westerners.