Chapter 3

RESEARCH METHODOLOGY

This study may be considered as part of action research in the studies of OD. Action research is the process of systematically collecting research data about an ongoing system relative to some objective, goal, or need of that system; feeding these data back into the system; taking actions by altering selected variables within the system based both on the data and on hypotheses; and evaluating the results of actions by collecting more data (French and Bell, 1999, pp.130). As this study aims at measuring the degree of persistency in organisational changes or the level of organisational institutionalisation through it's employees' evaluation, and the results will then be feeding back to the organisation for further improvement of changes initiatives, it is well fitting the action research's definition.

3.1 Selection of measures

The measures of degree of organisational changes institutionalisation are based on Cummings and Worley's institutionalisation framework (figure 1) and the modified model (Omar, 2002) (figure 5). The framework is further translated into measurable questions for each aspect to be answered by respondents. Appendix 14 shows the complete set of questionnaires developed by Omar employed in this study. Comparisons of questionnaires developed by Omar and Cummings and Worley's institutionalisation framework can be seen in Appendix 15. In general, all the questions in the questionnaires were employed in this study except for questions 5 and 6 that concern unionisation. The rational is that there is no union movement in the organisation studied. The definitions of all the key dimensions and sub-dimensions in the model are elaborate in the following section.

3.1.1 Organisation characteristics

Referring to figure 5, there are three key dimensions of an organisation that are affecting intervention characteristics and institutionalisation processes.

* **Congruence**

    The degree to which its members perceive an intervention as being in harmony with organisation's managerial philosophy, strategy, and structure, its current environment, and other changes taking place. The more an intervention is congruent with these dimensions, the higher the probability that it will be institutionalised. Congruence will be able to facilitate persistence by making it easier to gain member commitment to the intervention (Cumming and Worley, 2001, pp.188)

Figure 5: Mohd Yusof Omar Institutionalisation Framework
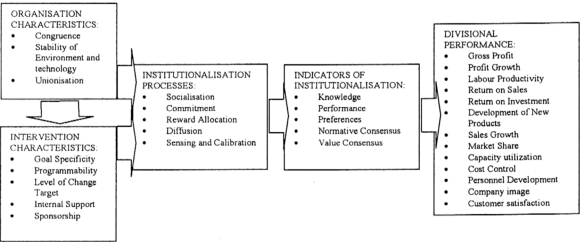
Source: Mohammad, Yusof Bin Omar (2002), *Unpublished Manuscript*, University of Malaya, Kuala Lumpur

* **Stability of environment and technology**

    This dimension involves the degree to which the environment and technology of the organisation are changing. According to Zucker (1987), unless the changes are dealt with directly by the change program, it may be difficult to achieve long-term intervention stability.

* **Unionisation**

In unionised settings, diffusion of interventions will most likely be more difficult. This is even worse if the changes affecting union contract issues. For instance, a union contract may make it difficult to combine several job classifications into one, as under job enrichment program, increase of task variety may be needed. However, under certain circumstances, unions can be a powerful force for introducing change, especially when there is a good relationship between union and management (Cummings and Worley, 2001, pp.189).

3.1.2 Intervention characteristics

The following features can affect institutionalisation processes:

- **Goal Specificity**

  Involving the extent to which intervention goals are specific rather than broad. Specificity of goals helps direct socialising activities to particular behaviours required implementing the intervention. It also helps operationalising new behaviours so that rewards can be linked clearly to them (Cummings and Worley, 2001, pp.189).

- **Programmability**

  This feature involves the degree to which changes can be programmed or the extent to which the different intervention characteristics can be specified clearly in advance to enable socialisation, commitment, and reward allocation (Mohrman and Cummings, 1989)

- **Level of Change Target**

  This feature concerns the extent to which the change target is the total organisation, rather than a department or small work group. Each level of organisation is expected to have facilitators. Departmental change is susceptible to countervailing forces from others in the organisation. This can lower its ability to impact organisation effectiveness. However, according to Meyerson and Martin (1987) this does not preclude institutionalising the change within a department that successfully insulates itself from the rest of the organisation. It often manifests itself as a sub-culture within the organisation.

- **Internal Support**

This feature refers to the degree to which there is an internal support system guiding the change process. Internal support, typically provided by an internal consultant, may gain commitment for the changes and help organisation members implement them. External consultant may also provide support on a temporary basis especially during early stage of implementation. The major difference between the two is internal consultant will normally assists members relate to other organisational units, resolve conflicts, and legitimise the change activities, while external consultant will normally provide expertise on organisational design and trains members to implement the design (Cummings and Worley, 2001, pp.190).

- **Sponsorship**

  This feature concerns the presence of a powerful sponsor who can initiate, allocate and legitimise resources for the intervention. It must be coming from levels in the organisation superior enough to control appropriate resources and they must have power to nurture the intervention and ensure that it remains viable (Cummings and Worley, 2001, pp.190).

3.1.3 Institutionalisation processes

Framework in figure 2 shows five institutionalisation processes that may directly affect the degree to which OD interventions are institutionalised.

- **Socialisation**

  This aspect concerns the transmission of information about belief, preferences, norms, and values with respect to the intervention. Implementation of OD interventions generally involves considerable learning and experimentation, so a continual process of socialisation is needed to promote persistence of the change program. According to Zucker (1977), transmission of information about the intervention helps bring new members onboard and allows participants to reaffirm the beliefs, norms, and values underlying the intervention.

- **Commitment**

This includes initial commitment as well as recommitment over time to the program. It binds people to behaviours associated with the intervention. It also allows people to select the necessary behaviours freely, explicitly, and publicly. These conditions may promote stability of the new behaviours. Commitment should derive from several organisational levels, including the employees directly involved and the middle and upper level managers who can support the intervention (Cummings and Worley, 2001, pp.191).

- **Reward Allocation**

Intervention programs always require linking rewards to the new behaviours. It can enhance the persistence of interventions in two ways. First, a combination of intrinsic and extrinsic rewards can reinforce new behaviours. Intrinsic rewards are derived from the opportunities for challenge, development, and accomplishment found in the work. Providing extrinsic rewards, like financial rewards for increased contributions, can further reinforce this behaviour.

Second, new behaviours will persist to the extent that employees perceive rewards as equitable. When new behaviours are fairly compensated, members are likely to preferences for those behaviours (Cummings and Worley, 2001, pp.191).

- **Diffusion**

This aspect refers to the process of transferring interventions from one system to another. It facilitates institutionalisation by providing a wider organisational base to support the new behaviours. Many interventions fail to persist because they run against the values and norms of the larger organisation. Diffusion of the intervention to other units reduces this counter implementation force. It tends to lock in behaviours by providing normative consensus from other parts of the organisation (Cummings and Worley, 2001, pp.191).

- **Sensing and Calibration**

This aspect involves detecting deviations from desired intervention behaviours and taking corrective action. Institutionalised behaviours invariably encounter destabilising forces, such as changes in the

environment, new technologies, and pressures from other departments to nullify changes. These factors cause some variation in performances, preferences, norms, and values. To detect this variation and take corrective actions, organisation must have sensing mechanism. Sensing mechanisms like feedback implementation, provide valuable information about deviations occurrence (Cummings and Worley, 2001, pp.189).

3.1.4 Indicators of institutionalisation

Institutionalisation reflects degrees of persistence of an intervention. As shown in figure 2, there are five indicators of the extent of an intervention's persistence. The extent to which the following factors are present indicates the degree of institutionalisation.

- **Knowledge**

    This aspect involves the extent to which organisation members have knowledge of the behaviours associated with an intervention. It is especially concerned with whether members know enough to perform the behaviours and to recognise the consequences of that performance (Cummings and Worley, 2001, pp.192).

- **Performance**

    This aspect concerns the degree to which intervention behaviours are performed. It can be measured by counting the proportion of relevant people performing the desired behaviours. It can also be measured by observing the frequency with which the new behaviours are performed (Cummings and Worley, 2001, pp.192).

- **Preferences**

    This aspect concerns the degree to which organisation members privately accept the changes. Private acceptance is usually reflected in people's positive attitudes toward the changes and it can be measured by the direction and intensity of those attitudes across the members receiving the intervention (Cummings and Worley, 2001, pp.192).

- **Normative Consensus**

This aspect focuses on the extent to which people agree about the appropriateness of the organisational changes. This indicator of institutionalisation reflects how fully changes have become part of the normative structure of organisation. Changes persist to the degree members feel that they should support them (Cummings and Worley, 2001, pp.192).

- **Value Consensus**

    This aspect concerns social consensus on values relevant to organisational changes. Values are beliefs about how people ought or ought not to behave. They are abstractions from more specific norms (Cummings and Worley, 2001, pp.192-193).

All the five indicators were used to assess the level of institutionalisation of an OD intervention. The more the indicator are present, the higher the degree of institutionalisation.

Omar had further developed the 'Institutionalisation Framework' for more practical use where questionnaires were constructed based on the framework with relevant questions measuring each dimensions and items. A new dimension; 'Divisional Performance' was added into the framework (refer to figure 2). Items measuring the dimension like market share, profit growth, labour productivity, return on sales, return on investment, development of new products, sales growth, capacity utilisation, cost control, personnel development, company image, and customer satisfaction were introduced under the new dimension. The purpose of this newly introduced dimension is to measure the actual divisional performance in the organisation and compare it with institutionalisation indicators, which is reflecting the level of institutionalisation organisation wide. It is important to find out whether level of institutionalisation in an organisation will have effects on its divisional performance.

3.2   Design of questionnaire

As shown in appendix 15, questions 1 to 37 in part B were constructed based on dimensions suggested by institutionalisation framework. However

part C, concerns with the divisional performance were added to measure the overall actual performance of the organisation.

3.3   Type of scale

A scale may be defined as any series of items, which are progressively arranged according to value or magnitude into which an item can be placed according to its quantification (Zikmund, 2000, pp.336). This study employs interval scale, which is developed into seven point's likert attitude rating scales.

Attitudes are viewed as and enduring disposition to consistently respond in a given manner to various aspects of the world, including persons, events, and objects (Zikmund, 2000, pp.357). Likert scale is a measure of attitudes from very positive to very negative designed to allow respondents to indicate how strongly they agree or disagree with constructed statements toward the attitudinal object. In this study, respondents are asked to rate their degree of agreement on each statements across seven points ranges from very positive to very negative toward the attitudinal object. The seven alternatives are: strongly disagree, disagree, slightly disagree, neutral, slightly agree, agree and strongly agree. Respondents are also asked to rate from 'not satisfactory at all' to 'extremely outstanding' at the final part of questionnaires about level of divisional performance.

3.4   Sampling design

Sampling is the process of using a small number of items or parts of a larger population to make conclusions about the whole population. Sampling method employed in this study is non-probability purposive judgemental sampling. Non-probability sampling is a sampling technique in which units of the sample are selected on the basis of personal judgement or convenience. Judgemental sampling is a non-probability sampling technique in which a researcher selects the sample based upon some appropriate characteristics of sample members (Zikmund, 2000, pp.428).

Total population for this study is 170 employees of the company. The major criteria for sample selection are as follows,

i. Position of the person in the company. This is a crucial criteria as the higher a person's level is in an organisation, the ability of him/ her to effect the policy making and policy enforcement is greater. Hence, this study should strive to cover all the employees of supervisory level and above.

ii. Educational level. In order to answer the questionnaires effectively with minimum biases, respondents are required to posses certain level of cognitive understanding and hence educational background is crucial. In general, a minimum of SRP/PMR level is required for organisation members to qualify as respondent to this study.

Based on the above criteria, the researcher had decided that all the employees holding position of technician and above and part of operators with SRP/PMR level of education will be selected as respondents. 120 out of total 170 employees (70% of population) were identified to be respondents for the study. This is in accordance to generalised scientific guideline for sample size decision, where according to the generalisation, a good decision for sample size to represent a total population of 170 is 118 (Sekaran, 2003, pp.293-294).

3.5   Data collection procedure

Two types of data were collected for the study – primary data and secondary data. Primary data were collected through direct interviews with organisation members assisted by structured questionnaires. The researcher is himself part of the organisation member, stays in the organisation for more than four years. The researcher knows all the respondents. The data were collected on September 2002 to February 2003, which marks the milestone of company's two years mergers (the mergers were taken effect on September 2000).

Data collections were done in a less formal environment, where researcher will meet up with targeted respondent during break time. Researcher will then expressed his intention of conducting a study on the company for academic purposes and let the targeted respondent to decide whether to participate or not. If the answer is positive, researcher will ask the

question one by one based on the questionnaire with necessary explanation. Answer will then be recorded in answer sheet for further analysis.

As about half of the respondents were from operator level with academic qualification of SRP/PMR, they are generally having difficulty in understanding the questionnaire. Under such circumstances, the researcher will have to explain with some elaboration question-by-question in language they understand well especially in Bahasa Melayu.

In general, respondents from lower rank were more responsive and co-operative compared to respondents of higher ranks. Lower rank respondents were more willing to talk and share their opinions openly.

Secondary data were collected by searching through books, articles, journals, company databases and so on via libraries, internet and company online databases.

3.6   Data analysis techniques

Data collected were analysed using Statistical Package for Social Sciences (SPSS) for windows version 11. Mean scores for each aspect and items are determined. Higher scores reflect higher level of agreement respondent has on that item, hence, contributing to higher level of successfulness in institutionalisation process. Other statistical tools like simple frequency analysis, reliability analysis, correlation analysis, one-way ANOVA test, were also employed to determine significance level of relationships between dimensions in 'institutionalisation framework'.