CHAPTER III

CASE STUDY AND METHODOLOGY OF STUDY

This chapter discusses on the case study and the research methodology used in this study. The case study use in this study as shown in Figure 1 is based on model proposed by Hellriegel and Slocum (9). The model begins with discussing the environment in which the company is operating at. Then it goes on to diagnose the organizational problem. Finally, a survey is carried out to gauge the effectiveness of the change process. The chapter concludes with a description of the statistical techniques used to analyze the data collected.

3.1 IDENTIFICATIONS OF THE ENVIRONMENT

XYZ faced its first major crisis on 1986/87 when a bad recession caused the company to earn less
Recognition of the need for change → Diagnosis of organization problem → Planning for change effort → Identification of change strategy → Implementation of change program → Feedback to measure change effectiveness

External Environment → Organization Climate

Systematic approach

profits. In 1988, steps were taken to improve on the company’s financial performance. The steps taken were:

a) reward staff according to their performance.
b) introducing management by objective to the management staff.
c) flatten the organizational structure to hasten decision making process.
d) cut down on the number of staff and increase the job size of the current staff (job enlargement).
e) reduce fixed and variable costs by cutting down on overtime and other expenses.

The step taken by the management had increased the productivity as the employees was very much task orientated. In 1991, the company set a new record for profit. The company believed that:

The goal of effective management is not to eliminate conflict, rather to create the right intensity of conflict so as to reap its functional benefits (10).
However, as the employees becomes too task orientated, the intensity of conflicts becomes out of control. As the results the following incidents occurs.

a) interdepartmental conflict: Interdepartmental conflict increases due to goal incompatibility. For example: the objective of the production is to maintain a low working capital while the sales need a healthy stock balance and very frequently stock out becomes a problem.

b) career progress: as the organizational structure was flatten, career progress in the company is perceived to be slower by the employees.

c) Due to reduction of fixed and variables cost, the company is not willing to upgrade the working condition. For example, the machine for manufacturing was not upgraded for the last 5 years.

d) Stress and burnout: As the results of downsizing particularly in the technical department and job enlargement, stress among employees is occurring. For example: The number of chemists in one business area were reduced from four to two persons.
In short the conflicts happens as there was no goal compatibility and the mechanism used to reduce the conflict through compromising and accommodating was weak. The downsizing, slow career development and the reduction of cost were the major factors why employees started leaving XYZ.

3.2 ORGANIZATIONAL CLIMATE

A study was conducted in February 1995 to determine the inter-organizations perception among employees in XYZ. The study was conducted by the XYZ world wide group and the data were analyzed by Survey Research of Malaysia (SRM)

The data obtained from SRM was interpreted using model adapted from Field and Abelson (11) (Refer Figure 2). The model proposed that the organizational climate is influenced by external environment, organization and management system and leadership and behavioral features.

From the data, seven dimensions were interpreted namely loyalty , reward , leadership , identity, espirit de corps,autonomy and employee development.
Figure 2: Organizational Climate Model

Adapted from: Field, R.H. and M.A. Albacon (1982), Climate A reconceptualization and proposed model, Human Relations, Vol.35 181-210
The first dimension concerns with the respondents' feeling of pride and loyalty towards the company. Results analyzed by SRM shows that only 50% of the employees were loyal to the company and two third of the employees were committed to the company.

The second dimension concerns with reward system. This factor identifies the employees' feeling of being adequately and fairly rewarded. Generally employees were not satisfied with their pay and benefits and career advancement.

The third dimensions concerns with leadership of XYZ. The leadership dimension clearly demonstrate that the managers in XYZ were too task and goal orientated. The manager in XYZ was perceived to be insensitive to subordinate feeling.

The forth dimension measures on the identity of the company. Employees were proud to be associated with XYZ as the company produces quality product, market leader and a technologically progressive company. In conclusion, the employees' were proud to be associated with XYZ.
The dimension of espíritu de corps measures work procedures and effectiveness, quality system, process and work value, working relationship and working atmosphere. On the work procedures and effectiveness, workers thinks that the workflow and procedures of this company is inefficient. The feeling of distrust and disrespect among employees were high. In addition, the employees perceived that the morale of the employees were low. The workers strongly agreed that the working condition, equipment need to be change to create a healthier and safer working environment. Despite all the negative feedback from the employees, the employees still thinks that the relationship between workers and their bosses is good.

The dimensions of autonomy explores the extent to which the employees' perceived that their working environment gives them opportunity for self expression, self control and to use individual freedom to make decisions and to take responsibility. This dimension was regarded as
very crucial in integrating the individual with the organization. The report reported by SRM(4) shows that respondents perceived that their working environment does not allow for individual autonomy as only 31% of employees perceived that communications at all levels are open, honest, and direct. Therefore, the communication within XYZ was ineffective and the staff felt that the management was not sincere in informing the staff on certain company's matters. Interdepartmental communications is weak as the staff do not know what is happening in other departments.

The final dimension measures on how the employees viewed the company in terms of career development, training, and personal development. The results obtained from SRM indicated that the employees were not happy with their job development as they felt that they were no opportunities for personal growth and development in the company.
Results interpreted from data obtained from SRM on XYZ’s employees' also showed that in terms of length of service, employees' who had worked for 3 to 5 years were the most dissatisfied workers. They scored the lowest in terms of working environment, employee development, remuneration, low element of trust to the company and they felt that the managers in XYZ was too task orientated.

For the level of appointment, employees' in the technical department were the most dissatisfied and the most disloyal to the company. They perceived that there were not treated with trust and respect.

They also perceived that the culture of the company was low. Less than 30% of the technical staff thinks that there was an atmosphere of trust within the company and people were not treated with respect.
3.3 DIAGNOSIS OF ORGANIZATIONAL PROBLEM

Based on the survey feedbacks, systematic approach (9) were implemented by the management of XYZ to improve on the perception of employees' towards XYZ. The systematic approach includes structural changes, technological changes and changes through people.

The structural changes introduces change through new system of change, decision making, work flow, rules and regulations. Based on the survey feedbacks team system, multi-tasking, MRPII and the ISO9001 were implemented.

Team system

The team system was introduced by the company as a pilot project in 1993. In 1995, the team system was introduced to all the employees in XYZ. In
the team system, jobs were designed for the groups rather than the individuals. Therefore the objective and the reward was depended on the success of the group and not the individual. Example: when manufacturing the XYZ product, the whole team is responsible for a complete set of tasks such as issuing raw material, milling, filling and testing. The group itself decides who will perform each task and therefore can be considered as very autonomous. The reward is depended on the volume of production and the percentage of reject. This concept will enhance the productivity as well as reducing conflict and increase the commitment of employees to the company, increase working relationship, working atmosphere. In short empowerment takes place in such a setting.

To overcome interteam conflict, ISO 9001 procedures and the MRP II (manufacturing resources planning) were implemented.
MRP II and ISO 9000

The company had achieved ISO 9001 certification in Jan 1995 and the MRP II Class A award in Dec 1995. The ISO 9001 achievement would enable a total company involvement in identifying the basic discipline and specified the procedures to ensure that the products delivered to the customers met the customers' requirements. Therefore, it helps in improving employees' perception over cooperations and communications among departments. The procedures would enhance better interdepartmental cooperation to complete certain tasks so as to provide total customer satisfaction to the customers.

MRP II was implemented to enhance interdepartment cooperation and communication. MRP II is a common sense way to plan and implement what needs to be done in support of the business operations.
Technological Approach

To overcome production congestion and to improve on the working condition, XYZ had relocated half of the production capacity to Nilai in 1995. The existing plant layout was modified to improve on the ventilation and the safety and health aspects.

Two new laboratories were constructed to overcome on the space congestion. Besides that new equipments were purchased.

People

A number of actions were done to change the people attitude. Action taken involved communications meeting among managerial and non-managerial staff. The non-managerial staff were also briefed on the development of the company.
3.4 IMPLEMENTING AND FOLLOWING THE PROCESS

The method used requires that the change be sustained over a period of time. The outcomes of a change process depend to a considerable extent on the degree to which the management of XYZ views the social influences in the working environment as well as to reinforce the learned behaviour during and after the development. The problem of deciding when the change process depends upon the trend in improvement over a period of time.

In this study, the changes were measured one year after the first survey. The purpose is to measures the effectiveness of the implementation of change.
3.5 METHODOLOGY OF THE STUDY

3.5.1 Sampling

The respondents in this study were fifty two employees from the technical department since their score on the perceptions of climatic dimensions is the lowest among all the level of appointment.

3.5.2 Procedure

The respondents were assembled in their respective lab. They were informed of the nature and purpose of the study, the general background of the research and the confidentiality of their responses.

Each respondents was requested to complete a forty four item questionnaire of which were modified items from studies done by Litwin and Stringer. A three points Likert type scale ranging from "disagree" to "agree" was utilized.
3.5.3 Analysis

The data collected was analyzed using the SPSS programme. The data analysis procedures used in this study were described below.

The "frequency" subprogramme was used to provide an overview of the respondents' demographic backgrounds such as the means values and the percentile values.

The subscription FACTOR from the SPSS (statistical package for the social sciences) (Nie, Bent and Hull) (12) was used to identify the factor structure which was most representative of the data from the organizational climate questionnaire. Identical statistical analysis was employed by La Follete and Sims (6) and Raja Azimah and June Poon (3).

The thirty nine items that measure climate were factor analyzed via principal component analysis (PC) and only components with eigenvalues 1.0 or greater were retained to be rotated by the varimax procedures.
PC model was used in this study as the objective of this work involved summarization of most of the original information into a minimum number of factor for prediction purposes. Each prediction (factor) was then rotated to maintain the correlation between factors is arbitrarily determine as zero.

Resultants factors with loading higher than 0.3 were than submitted to reliability examinations using SPSS subprograms "RELIABILITY VARIABLES". Reliability refers to the consistency and stability of a score from a measurement scale. It was imperative to subject the constructs to a reliability test because if the measurement instrument is not reliable, it can in no way be valid. Thus, validity of results is not possible unless reliability is first demonstrated.

In this work, the "internal consistency" method was used to assess the reliability scales and Cronbach's alpha was calculated by the SPSS
programme. Cronbach's alpha is the mean reliability coefficient for all the possible ways of splitting a set of items into half. Nunnally's guidelines (13) on the necessary value of alpha are as follow:-

<table>
<thead>
<tr>
<th>Usage</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>exploratory research</td>
<td>0.5-0.6</td>
</tr>
<tr>
<td>basic research</td>
<td>0.8</td>
</tr>
<tr>
<td>applied research</td>
<td>&gt;0.9</td>
</tr>
</tbody>
</table>

For this study which is exploratory in nature, a minimum value of alpha of 0.5 is adopted.

For items under each resultant factor category, a distribution of responses by scale of agreement were also generated.

CHI SQUARE is also performed to determine whether the two variables are independent or not. In this study, it was assumed that, for significance, the alpha value must be less than 0.05. This was the probability of making Type I error, i.e.
the probability of rejecting the null hypothesis when the null hypothesis is true. The confidence level was therefore 95 percent. The observed significance value calculated from the sample was then compared to the alpha value. If the observed significance value was less than the alpha value of 0.05, the null hypothesis would be rejected and the conclusion would be that the variables were related (vice-versa).

CROSSTABULATION is also performed to look into the relationship of the age, rank, year of service against various items in the questionnaires. Crosstabulation is a technique used for analysing results by groups, categories and classes. Its purpose is to allow the inspection and comparison of differences among group using percentages.