

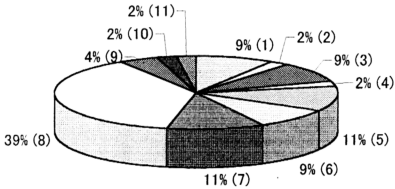
## 4.0 Research Methodology

In order to examine the hypothesis mentioned in the former chapter I developed the questionnaire on the basis of the past research and literature. Specifically I focused on the manufacturer due to the following three reasons. First, the manufacturing sector was the leading industry in Malaysia. Second, the manufacturing was thought to have been exposed to foreign technology and management style than other industries. Companies in this sector had more possibility that they consider the importance of knowledge/information to gain competitiveness. Third, the manufacturing sector consisted of Malaysian and foreign companies. For instance, most of Japanese direct investment was related to the manufacturing. Foreign companies must arrange their management system to fit the local requirement, but I thought they had some difference from Malaysian companies. In addition, I concentrated on the big company. I defined the big company in Malaysia as ones that had more than one hundred employees. This was because Knowledge management was a new study field and small or middle companies might not be aware of its importance and not implement anything. Big companies usually face the problem of coordination or integration due to its size, which enhances the necessity of liaison function. Liaison definitely exchanges and transforms the information and knowledge between different entities. In Malaysia there was no legal or authorized definition of big company, but usually it was often described in terms of paid-in capital. In other countries the definition of the company size can be described as the number of employees or/and the paid-in capital. For example, Japanese big manufacturers are defined as the ones

having more than 300 employees, while in Hong Kong it is 100 employees. I focused the number of employees because the number of employees was thought to affect more directly to the necessity of liaison function than paid-in capital. Lastly, I focused the Kuala Lumpur and Selangor because they represented about half of Malaysian manufacturer within the listed companies of Federation of Malaysian Manufacturers and I could conduct interview if necessary.

The addresses of the mentioned-above sampling frame were extracted from "FMM Directory 2000: Malaysian Industries 31<sup>st</sup> edition" published by Federation of Malaysian Manufacturers. Initially I extracted all manufacturers that suited the above conditions (485 companies), and then I chose 388 companies at random base. I asked one senior or higher manager who managed one functional section such as marketing, sales, design, production etc for the cooperation of the survey because they have the responsibility to take care of the total performance of the firm. The number of sample data that finally collected was 45 (11.6 %). Final sample profile is described below. Diagram 4-1 illustrates the sample profile in terms of the industry. Categorization of industries referred to that of FMM. 'Machinery, Electrical Apparatus and Electrical Appliance' had the biggest share (39%, 17 samples) followed by 'Rubber and Plastic' and 'Iron and Metal products' (11%, 5 samples). Third tier group included 'Food, Beverage and Tobacco,' 'Textile, Apparel and Footware' and 'Glass and Non-Metallic Mineral products' (9%, 4 samples).

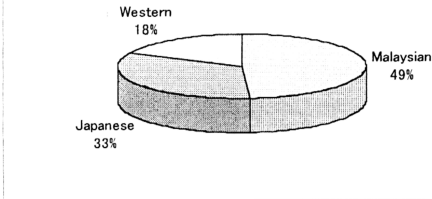
Diagram 4-1 Sample Profile (Industry)



- Food, Beverage and Tobacco (1)
- Textile, Apparel and Footware (2)
- Chemical products (3)
- Petroleum and Coal products (4)
- Ruber and Plastic products (5)
- Glass and Non-Metalic Mineral Products (6)
- Iron and Metal products (7)
- Machinery, Electrical Apparatus, Electrical Appliances (8)
- Transport equipment (9)
- Professional, Scientific and Measuring equipment (10)
- Others (11)

Diagram 4-2 shows the sample profile in terms of nationality of the company. The nationality was decided by the nationality of the major shareholders if the firm was a joint venture from different countries. Malaysian companies shared 49% (22 samples) out of 45 samples followed by Japanese companies (33%, 15 samples). The rest 18% was Western companies (8 samples).

Diagram4-2 Sample Profile (Nationality)



The developed questionnaire (APPENDIX 1) comprised 4 sections except the question about the correspondent's reference. All questions except that of the correspondent reference used 5-point scales to measure the degree of agreement or frequency. Section 1 asked about the knowledge management system that the employees of the firm used when they try to find, access, receive, create, and internalise the necessary information and knowledge. Correspondents were required to answer the frequency of usage of each item. Their implementation with electronic method was also questioned. Section 2 asked the level of agreement to the description about the organizational issues such as adaptability, innovation, organizational structure, vision, management system, and corporate culture. Section 3 questioned the level of agreement to the sentence about how much the firm had enhanced the knowledge cycle. Section 4 was about the company itself such as annual turnover and its environment.