

Chapter 3

RESEARCH METHODOLOGY

In the previous chapter it was concluded that the major motives for formation of a Joint Venture are influenced by the partner needs. From the needs highlighted by Beamish (1989), one can evaluate the role of the partners in a Joint Venture.

In the study conducted by Abdul Razak (1979), it has been pointed out that the foreign partner enjoyed high degree of management and control in the operations of the JV. It has been also highlighted that although transfer of technology has taken place, but the same is limited due to the ineptitude of the local partner. The study also states that only 10 per cent of the JV were involved in conducting R&D activity. Moreover in most cases the foreign partners control the export activities. These serve as a basis for us to ponder, whether the domestic partners have been able to assimilate knowledge and have benefited from entering into Joint Venture partnerships. In case they have been successful then how have their role changed in the venture. The next section outlines the key objectives of the research and lays down the initial hypothesis that will be tested by the research study.

3.1 OBJECTIVE OF THE RESEARCH

The main objective of the study is to analyze the changes in roles of the domestic partners' in a Joint Venture. In any Joint Venture, both the foreign and domestic partners have certain needs, which prompt them into entering JV agreements. The needs of the partners change with experience and learning.

The research study intends to evaluate the changes in the roles of domestic partner in Joint Ventures operating in the electronics-manufacturing sector. The study attempts to analyze the changes that have occurred in the traditional role of domestic partner.

This study also has three secondary objectives. Firstly it seeks to analyze the underlying motives of domestic and foreign partners who enter into Joint Venture partnership.

The second objective is to establish the gains accrued to the domestic partner in terms of knowledge both technical and managerial, transfer of technology and financial dependence on foreign partners in Joint Ventures operating in Malaysia.

To establish the benefits accrued to the domestic partners, four key aspects will be explored. These are :

- Technical Knowledge gained by the domestic partner
- Managerial Knowledge gained by the domestic partner
- Financial dependence of domestic partner on foreign counterpart
- Market Access (to foreign markets) gained by the domestic partner

Finally the study also intends to explore the future roles of the domestic partners and to evaluate whether they have been able to independently run their business operation. These future roles are worth evaluating in wake of two important developments that have taken place recently. The first is the formation of World Trade Organization (WTO) and the second is setting up of Multimedia Super Corridor (MSC) in Malaysia. These are important developments, which can not be ignored in contemporary business world.

Lastly the paper will suggest policy recommendations for strengthening the role of domestic partners in the Joint Venture.

3.2 KEY HYPOTHESIS FOR THE STUDY

The key hypothesis of the study is that local partners are used merely as a conduit to fulfill the local government regulations and to gain easy access to the booming local and regional markets by their foreign counterparts.

The other hypothesis to be tested by the study is to establish that local partners have not gained substantially in terms of transfer of technical knowledge, which can enable them to become self sufficient. The gains accrued are more in terms of managerial knowledge and financial independence of the organization.

3.3 SELECTION OF MEASURES

This section outlines the measures used for the research to evaluate our hypothesis.

3.3.1 Time Frame Used for Data Gathering

Since we are evaluating the changes in the role of domestic partners in the Joint Venture, we have to gather data pertaining to different time frame. Therefore information or data relevant to three time frames was gathered. This study collected all data in the following time frame :

- a. At the time of formation of the Joint Venture
- b. At Present
- c. In future (where future is defined as 2 – 5 years time frame)

Collection of all relevant data at these three distinct time frames will enable us to analyze and evaluate the changes in the role of the domestic partners.

3.3.2 Selection of Constructs

In order to test our hypothesis, a questionnaire (refer to Appendix III) was developed which had eleven sections. These are categorized as follows:

1. Firms Characteristics
2. Motives of entering into JV (at formation for both domestic and foreign partner)
3. Contribution of partners (at formation, present and future)
 - Contribution of foreign partner to JV
 - Contribution of domestic partner in JV
4. Transfer of Technology (at formation, present and future)
 - State of product and process technology
 - Reasons for change in use of technology
 - Access to technology from external sources
 - State of manufacturing in JV (In-depth, assembly or screw driver)
5. Research & Development Activity (At formation, present and future)
 - Nature of R&D activity
 - Staffing for R&D department
 - Contribution (or lack of contribution) of foreign partner
6. Human Resource Development (at formation, present and future)
 - Type of training program

- Level of training program
7. Export Marketing Activity (at formation, present and future)
 - Level of export activity
 - Partners role in export marketing
 - Major regions for export
 - Responsibility of export
 - Opportunities and threats to exports due to formation of GATT and other economic zones
 8. Management and Control of JV (at formation, present and future)
 - Management and control of major functions like R&D, Finance, Purchasing, Manufacturing, Marketing, Human Resource, Industrial Relations, Public Relations
 - Level of Autonomy provided to JV for these functions
 9. Dependence on Foreign Partner for Financial Needs
 10. Level of Autonomy for JV (at formation, present and future)
 11. Others Aspects
 - Partners strengths and weaknesses
 - Areas of conflicts
 - Gains of domestic partner from participation in JV
 - Capability of domestic partner to run JV operations independently
 - Impact of MSC on JV and plans of JVs for joining the same

Items 2 and 3 are developed to evaluate the changes in roles of the domestic partner. Whereas the remaining items as listed are used to evaluate the gains made by the domestic partners in terms of transfer of technology; knowledge assimilation in terms of - technical, managerial and financial aspects. Management and control section evaluates the level of control of domestic partners in JV, which will help in analyzing whether the domestic partners are capable of running the operations independently.

3.4 RESEARCH INSTRUMENT

This study is based on a face to face in-depth interviews conducted by the researcher with fourteen JVs in the electronics-manufacturing sector. Primary data was collected using personal interviews of top executives of the selected

companies involved in Joint Ventures operating in Malaysia's electronics manufacturing sector.

3.5 SCOPE OF THE RESEARCH SURVEY

Although the scope of study ideally desires representative respondents from all over the nation, but due to time and monetary constraints the study is restricted to the key Joint Ventures operating in the industrial areas of Kuala Lumpur, Petaling Jaya and Klang Valley.

Due to monetary and time constraints the study was focussed only on companies operating in the Klang valley namely Banting, Kuala Lumpur, Petaling Jaya, Rawang, Subang Jaya and Shah Alam.

3.6 SAMPLING DESIGN

The research was conducted using both primary and secondary data. Secondary data was obtained from the Ministry of Trade and Industry (MITI) and Malaysian Industrial Development Authority (MIDA).

3.6.1 Source of Secondary Data

MITI defines Joint Ventures as Joint Ventures Foreign Owned (JVF), Joint Ventures 50–50 and Joint Ventures Malaysian Owned (JVM), depending on equity participation of Malaysian partner being less than, equal to or more than 50 per cent respectively. MITI's Internet homepage gives a list of all wholly owned subsidiaries, and Joint Ventures - Foreign or Malaysian owned operating in Malaysia's electrical and electronics sector. As of 31st December 1995 there were 246 – wholly owned subsidiaries, 94 – Joint Ventures Foreign Owned (JVF), 2 – Joint Ventures 50-50 and 49 Joint Ventures Malaysian Owned.

Since the study is focussed on evaluating the role of domestic partners in Joint Ventures, the study concentrated on both JVMs and JVFs. This was necessary to understand the venture specific differences between Malaysian and Foreign owned Joint Ventures.

3.6.2 Size of Sample Survey

Appendix I lists the JVMs registered with MITI as on 31st December 1995 (based on MIDA's 1995 survey). There are 49 companies with Malaysian ownership less than 50 per cent. Two companies are 50–50 partnerships. Out

of 49 JVM's, 21 are operating in consumer electronics, 19 in electronic components and 9 in the industrial electronics.

Appendix II gives the list of 94 JVs registered with MITI. These are also extracted from MITI's Internet homepage. There are 74 JVF in electronic component, 20 in consumer electronics and only 4 in industrial electronics sub-sector. It would be worth highlighting here that many of the Joint Ventures in this category are defined as JVFs, but the equity of the foreign partner is listed as 100 per cent.

Both these lists were used as the starting point for identifying the companies for the research survey. Two companies covered in the survey are not listed in MIDA's list, because they were formed after the list was compiled.

3.6.3 Sample Selection Procedure

The short listing criteria for the selection of target companies was based on the following:

- The company must be a Joint Venture (Malaysian or Foreign Owned). Although this was relaxed to include Joint Ventures, which have been recently converted into Malaysian wholly owned subsidiary.
- The company must be in the electronics manufacturing sector (in either consumer electronics, electronic component or industrial electronics sub-sector)
- The company must be approximately two years old.

Initially around 40 companies were identified for the survey through the list published by MIDA. After the initial contact over phone it was found that many of the companies, especially the JVs with 100% foreign equity were wholly owned subsidiary of the foreign partner and hence they did not meet our research study criteria. In the second stage 27 companies that fulfilled our research criteria were short listed and approached for interview. Finally only fourteen companies agreed for the interview. The profile of the companies surveyed for the research is given in table 3.1.

Due to financial year ending in December, representatives of many companies contacted were not available for the interview. In some cases the concerned individuals were on annual leave. The interviews were conducted

Table 3.1 : Profile of Companies Surveyed for the Research Study

Sno.	Electronic Sub-sector	Type of Industry	Local Partner's Race	Country of Foreign Partner	Local Equity	Foreign Equity	Year of Formation	No. Of Years in Operation	Products Manufactured	Designation of Interviewee
A. Joint Ventures Malaysian Owned										
1.	Component	Export Oriented	Chinese	Singapore	76%	24%	1988	9	Plastic Casing for Remote Control Units & Assembly	CEO
2.	Component	Export Oriented	Bumiputra	Hong Kong	80%	20%	1989	8	Wire Leads for Diodes	Plant Manager
3.	Consumer	Export Oriented	Chinese	Korea	76%	24%	1990	7	Assembly of Audio – Video and Electrical Products	Marketing Manager
4.	Consumer	Export Oriented	Chinese	Taiwan	51%	49%	1989	8	Car Audio Systems	HR Manager
5.	Industrial	Import Substitution	Bumiputra	New Zealand	51%	49%	1996	1	DC Power Supplies, UPS Systems for Telecom Sector	CEO / GM
6.	Industrial	Import Substitution	Bumiputra	Japan	65%	35%	1972	25	Telecom Related Products, Switching Exchange, Phones	Senior GM
7.	Industrial	Import Substitution	Bumiputra	Sweden	70%	30%	1965	32	Telecom Related Products	Service Manager
8.	Industrial	Import Substitution	Bumiputra	Finland	60%	40%	1993	4	Telecom Related Products, Switching Exchanges	HR Manager
B. Joint Venture Foreign Owned										
1.	Component	Export Oriented	Chinese	Australia	30%	70%	1989	8	Printed Circuit Boards, Electrical Bulbs	CEO
2.	Component	Export Oriented	Bumiputra	Japan	30%	70%	1988	9	Transformers for Electronics and Electrical Industry	Admin Manager
3.	Component	Export Oriented	Bumiputra	Japan	30%	70%	1974	23	Semiconductor ICs, Transistors	Assistant Manager
4.	Consumer	Export Oriented	Chinese	Hong Kong	30%	70%	1990	7	Cordless Telephones, Answering Machines	GM
5.	Consumer	Import Substitution	Bumiputra	Japan	35%	65%	1966	31	Color TV, VCR, Vacuum Cleaner, Microwave Oven	HR Manager
6.	Industrial	Import Substitution	Bumiputra	India	40%	60%	1995	2	Information Technology Products for Industries	Country Manager

in person by the researcher over a period of one month during November and December 1997.

3.6.4 Guarantee of Confidentiality

The participants were ensured that complete confidentiality will be maintained with respect to company specific information. This was necessitated due to the sensitive nature of our topic. Often such sensitive topics, a "halo effect" is introduced a bias to the data. This effect tend to make the JV relationship appear more positive than might, in fact be the case. This was well reflected in responses to certain specific questions pertaining to problems between JV partners. Past studies conducted by Killing (1971) and IFC (1996) showed that there was high level of conflicts between the partners.

Despite the fact that most joint ventures have problems of various kinds, our survey showed that there were no major problems between the partners. This can be attributed to the fact that the interviewees did not want to openly discuss these specific problems. Although some of them did come out with very candid responses about their reservations towards the other partner of the JV. In any case the purpose of the study was not to discuss in detail the problems between partners.

3.6.5 Sources Of Bias

A major cause of bias could arise from the fact that all persons interviewed were from the Joint Venture company itself and hence they may not have been able to convey accurately some of the real problems faced by the individual partners. But it is felt that since all except one respondent were locals, their responses were quite similar to the responses of the local partners. It is assumed that essentially there may not be major differences in perspective and thinking of the local partner.

Another bias could have been introduced by the fact that the study may have failed to capture some different responses from the JVs operating outside the Klang Valley. Although it is quite unlikely that locational differences will be existing as far as the role of partners in a JV are concerned. It is the opinion of the researcher that the responses may not have differed drastically from other partners located outside Klang valley.

Incomplete information about certain aspects of the Joint Venture could introduce another source of bias, especially as many interviewees may not be aware of some aspects at the time of formation of the JVs. In our survey there were three JVs that were established two decades earlier. It is possible that the respondents may not have been able to accurately portray the information sought by the research. Although it should be highlighted that the persons interviewed had been working with the organization for over five years. Lastly it is felt that the current currency and economic crisis being faced by the South East Asian region, including Malaysia¹ may have influenced some of the responses of the interviewee's. This is more likely to be in the case of responses for future roles and prospects of domestic partners in the Joint Venture.

3.7 DATA COLLECTION METHOD

A pre-prepared questionnaire (refer to Appendix III) was used as a guide for the interview and comments were noted down immediately. On an average the interviews lasted around one hour fifteen minutes. Most of the questions asked were open-ended. Care was taken to clarify the interviewee's viewpoint before actual comments were noted down.

3.7.1 Profile Of Companies Surveyed

Out of fourteen JVs interviewed, eight were JVMs whereas six were JVF's. In order to get a fair representation of various segments in the electronics sub-sector, five companies each were interviewed from the electronic components and industrial electronics sub-sector, whereas the remaining four companies were from the consumer electronics sub-sector. Table 3.1 gives a profile of the companies surveyed. There were four JVMs in the industrial electronics, and two JVMs in the consumer electronics and electronic component sub-sectors each, whereas the remaining were three, two and one JVF each from the component, consumer and industrial sub-sectors.

¹ All major currencies of the South East Asian countries crashed from around 17 per cent to 100 per cent (Singapore and Indonesia respectively) during July to December 1997. The floating of the Thai Bhat on July 2 1997, whose effects were later felt by all the neighboring countries, triggered this crisis.

In case of nine companies the local partner was a Bumiputra investor, whereas in five companies, Chinese investors owned the local equity. The country profile of foreign partners in Joint Ventures covered in the sample, were non-specific and covered countries from Australasia and Europe. In most cases interviews of senior executive were conducted, who were working with the company for a reasonable amount of time, which was necessary to solicit accurate responses.

On an average the companies interviewed were Joint Ventures, which were formed approximately 12.4 years ago. The oldest JV was formed 32 years ago, whereas the youngest was formed in early 1996.

3.8 DATA ANALYSIS TECHNIQUE

Since our survey involves only 14 companies and is based on an in-depth interview, no specific data analysis technique is employed to analyze the data. The analysis of the data is more on a qualitative basis. The same is covered in detail in the chapter 4 and chapter 5.

The data was analyzed after categorization in the following major sections:

1. Motives for foreign partner to form the JV – at formation
2. Role of domestic partner in JV – at formation, present and in future
3. Management and Control of JV – at formation, present and in future
4. Transfer of Technology in JV – at formation, present and in future
 - Status of product and process technology
 - Level of manufacturing
 - Access to new technology from external sources
 - Conflicts with respect to access to technology
5. Research and Development in JV – at formation, present and in future
 - Nature of R&D activity
 - Reasons for R&D activity
 - Nationality of R&D manager
6. Dependence on foreign partner for Raw Material – at formation, present and future
7. Dependence on foreign partner for finance needs
8. Export Marketing activity from JV – at formation, present and future

9. Human Resource Development activity in JV – at formation, present and future
10. Level of Autonomy for JV – at formation, present and future
11. Domestic Partners ability to run business independently – Present and future

The analysis of the data is conducted on three time phases i.e. at the time of formation of the JV, at present and in future.

In order to come up with sub-sector and venture (Malaysian or foreign owned) specific policy recommendations, the data was analyzed for companies in the electronic component, consumer electronics and industrial electronics sub-sector separately. Moreover data of the JVMs and JVs in each sector is analyzed individually to bring out the inherent sector and venture specific findings.

The findings of the research are covered in detail in Chapter 4 and 5. Chapter 4 covers the status of the above mentioned constructs of the research findings for the time frame – at formation and present.

Whereas, chapter 5 covers the status of various aspects in future.