Chapter 1

Introduction

1.1 Introduction

The business landscape in the 21st century has changed dynamically in terms of the technological complexity, consumer in-stability of demand due to shorter product lift cycle, explosion of knowledge, and increasing of the global competition. In this turbulent business environment, flexibility and ability to adapt the market change no longer depend on single business strategy. Most of the company core business is the manufacturing; the ability of the production to be more flexible and adapt the changing is the key factor to determine the total company flexible in launching any strategic.

The importance of manufacturing to adapt and being flexible to change with the customer demand cause the manufacturer evolve and experience growth in the manufacturing technology. Back in the 1800s until today, the production has go through various phases such as craft production, mass production, lean production, just-in-time (JIT) production, tiered production, dispersed production, and build-to-order production. All of this evolution and change of production basically is due to the messy changes in the demand market. In the 21st century of the business world, the productions have to change accordingly to the customer’s need and requirement.

In order to understand the significance of changes taking place in supply chain initiatives, it would be prudent to review the historical aspects of production and operation management activities. Basically, the production can divide into 4 important eras: - (Mentzer, 2001)

a) Early of 20th century

In this time of production, it was basically focused on quality. The production mode was the craft production
b) 1930s to 1940s
During this period of time, the cost of production was overriding factor. Mass production was dominant in this period of time.

c) 1980s
The combination of quality and cost become the critical factor of the production. Lean production was taking place in the production operation. Production was emphasizing on partnership.

d) 1990s and beyond
The key factor of the production seems to be flexible and the dominant production paradigm is likely to be Supply Chain Management

Beside the 4 periods as mention above, firms all over the world have been experiencing increasing national and international competition due to the globalization era and exploration of information technology age in this 21st century. The strategic alliances among firm have been growing. The production between firm (interfirm) and the need for supplier-manufacturing partnership became more important. Productions no longer look into their own firm in the business competition, but instead they need a strong support from their business partner such as suppliers to support their supply chain channel. Firms are looking to share out the production risk all among the members in the supply chain. The new era of business deal is no longer win-lose situation. New business deal is looking at the win-win situation among the manufacturers and the suppliers.

In this business environment, it demands great changes in business methods. It requires flexibility and capability to adapt to market change; business cannot rely on one single strategy. Due to the above issue, the manufacturing process also has evolved from the conventional production such as craft production, mass production, lean production during the 1800 to recent production innovation method such as JIT, Build to order, dispersed production and postponement production. The recent production operation management tool is the Supply Chain Management. Supply Chain Management tools and techniques are seen
as mechanisms that allows a firm to respond quickly and adapt to any change that might happen to the demand market.

The Supply Chain Management (SCM) is the systemic, strategic coordination of the traditional business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole (Mentzer, 2001). In the simple form, the SCM involves a flow of material, information, and finance within a network of customers, supplier, manufacturing and distributors.

1.2 Introduction of XYZ Technology (M) Sdn. Bhd.

XYZ Technology (M) Sdn. Bhd. is one of the 7 Japanese Electronics Manufacturer Company (EMC) operating along with another 3 sister companies in Malaysia; XYZ Electronics (M) Sdn. Bhd, XYZ Logistics (M) Sdn. Bhd. and XYZ (M) Sdn. Bhd.. In this research, the writer had chosen the XYZ Technology (M) Sdn. Bhd. as a case study.

XYZ Technology (M) Sdn. Bhd. is located in the Bangi Industrial Area, Selangor. The total land area is 148,775 sq meters and the build up as 73,338 sq meters. As of May 2000, the investment of the XYZ exceeded RM 1 billion and the employees numbered 6,289. (Refer to Attachment 3.1 – Corporate Profile)

A majority of the product is shipped out to overseas market. More than 55% of CTV product is shipped to Japan market while 58% of DVD product is shipped to the North American market.
1.3 Objective of the Research

The highly desirable result of the Supply Chain Management implementation is the cost reduction, but it is not the only one. Supply Chain Management integration also create other benefits such as extending a profits, increase market share, reduce waste, strengthens business competitiveness, and enhance the value of the company. In view of the above direct and indirect benefits created by the Supply Chain Management, many companies try to enhance the Supply Chain Management in the business operation, but how many companies can really enjoy successes like the Dell and Seven-Eleven Japan? Can Supply Chain Management be implemented in all types and sizes of industry? What is the business structure needed to implement Supply Chain Management? What is the actual contribution of the Supply Chain Management? This research paper will investigate all this issue.

The objectives of this research project paper as a below:


2. What is the achievement of SCM implementation strategy in the manufacturing industry especially in the XYZ Technology Sdn. Bhd. case.

3. To examine whether Supply Chain Management can be applied and implemented in all types of industries by using XYZ Technology Sdn. Bhd. as case reference.

4. How can the SMI (small and medium industry) in Malaysia adopt the Supply Chain Management taking XYZ Technology Sdn. Bhd. as the benchmark.
1.4 Research Methodology

In order to achieve the above objectives, the writer has chosen to do mainly on secondary data such as library research. Information will be gathered from previous study, journals, book reference, the conference report and various publications from the library and Internet.

On the second part in the research, the writer has chosen to perform a field observation, company data collection and interview with the related party in the SCM flow. First of all, the writer has interviewed Mr. K, the Head of Department (HOD) of Production Planning that is coordinating the total Supply Chain Management in XYZ Technology Sdn. Bhd. He had write up the total concept of the Supply Chain Management in XYZ Technology Sdn. Bhd. Base on his advice and guidance, the writer start to investigate and interview the other related department such as procurement, production and material control.

He began with the strategy that XYZ Technology Sdn. Bhd. had implemented in the downstream operation in Supply Chain Management. Base on Mr. K’s explanation, the writer was able to elaborate more clearly on the downstream operation.

After getting a total concept of Supply Chain Management in XYZ Technology Sdn. Bhd., the writer had proceeded to get information on the upstream operation. With the help from the Ms. E (procurement manager), the writer was able to getting sufficient information to analyze the upstream operation in XYZ Technology Sdn. Bhd.

The writer also investigated the internal operation by interviewing Mr. R who is assistant HOD of the production department. Mr. R had explained to the writer about the activities that production had carried out to support the Supply Chain Management.
On the final part, the writer had performed an observation on the material flow of the XYZ Technology Sdn. Bhd. operation. From the observation on the material flow, the writer was able to understand about the JIT and VMI operation that are indirectly supporting the implementation of the Supply Chain Management.

1.5 Scope of the study

For this research purpose, the scope of the study will look into the compress cycle time issue.

In the normal supply channel, the material flow has to go through a few echelons. This is same as the operation of XYZ Technology (M) Sdn. Bhd. before the implementation of Supply Chain Management. During the implementation of Supply Chain Management in XYZ Technology (M) Sdn. Bhd., emphasis was placed on the reduction of echelons of material flow by the implementation of compress cycle operation.

The compress cycle operation is the key issue that the writer will look into in this research. The writer will analyze the Supply Chain Management strategies that XYZ Technology (M) Sdn. Bhd. adopt to compress the cycle time.
1.6 Significance of the study

In view of the importance of the Supply Chain Management in the current globalization economy to determine the survival of the company in the business, the writer believe this research will helping the XYZ Technology (M) Sdn. Bhd. to examine their competitive advantages in the new world globalization. The writer also hope this research would provide important reference for the Malaysian SMI company in below issue:

- a) Increase the competitive advantage of the company in the domestic and international business by fully utilizes the current limited source such as raw material and human resource.
- b) Reduce the Manufacturing Fix Cost (MFC) such as raw material, labor and production floor by doing outsourcing operation.
- c) Balance up the pressure of the increasing cost due to government imposed intervention by looking the market place in globally.
- d) Create a new way of the company modernization in organization and production by having a new technology of production such as block assembly operation.
- e) In line with the government's direction to create a high technology of the manufacturing operation.

1.7 Limitation of the study

During the site research, the writer faced some difficulty to access the company data due to business secret issue and most of the information is in the financial data that cannot reflect the operation performance. Beside that, the writer can use the previous study as reference due to dearth of the similar case studies in Malaysia.
Beside the data management issue, the writer also facing a difficulties due to inconsistency of XYZ Technology (M) Sdn. Bhd. direction in setting Supply Chain Management target and direction.

1.8 Expectation of the research

The writer expects the research information of XYZ Technology (M) Sdn. Bhd to provide a good benchmark to the SMI companies in Malaysia if they intend to implement the Supply Chain Management in their company operations.

Besides that, the writer hopes that this research will spawn more research in this area. This would create better understanding on the Supply Chain Management for those companies that desire to implement the Supply Chain Management.

1.9 Organization of The Study

This study focuses on the Supply Chain Management activities that been carried out at XYZ Technology (M) Sdn. Bhd. In order to get a better picture of the study, the writer has divided the research to 2 part; Part 1, examining the activities of Supply Chain Management in XYZ Technology (M) Sdn. Bhd. Part 2, perform analysis of competitive and value creation by using Porter’s 5 Forces and Value Chain Model.

Chapter 1 cover the introduction, how and why the study been carried out.

Chapter 2 giving a definition of supply chain management in detail and what is the previous research of supply chain management.

Chapter 3 introduces XYZ Technology (M) Sdn. Bhd. and the supply chain management activities that had been carried out in this company.
Chapter 4 summarize the supply chain management performance in XYZ Technology (M) Sdn. Bhd. In chapter 4, the writer also using Porter’s 5 Forces and Value Chain Model to analyze the company competitiveness and value creation related to supply chain management.

Chapter 5 concludes the research finding and recommendations.