

A CASE STUDY FOR GLOBAL SUPPLY CHAIN MANAGEMENT IN VIETNAM

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ABSTRACT

Global Supply Chain Management (GSCM) has become an important strategy to assist businesses improve their competitiveness. A global supply chain not only needs to face the problems of information flow, but also needs to face problems of products flow. More and more businesses are considering using an integrated concept for improving processes of information and materials from the upstream and downstream of business and between different countries or areas. In this paper, a study of global supply chain, the authors went to Ho Chi Minh City in Vietnam to visit a company, to interview its president and observe the warehouse of products. The results of the interview revealed many problems within the company and also in its upstream and downstream. The problems of upstream are about the products flow of suppliers, because different suppliers use different ordering processes, and thus the company is controlling its processes of export and quality by different systems. Therefore, the challenge for the company is how to manage the flow of products from different manufacturers at the same time.

Keywords: Global supply chain management; Small and medium enterprise; Vietnam, and international cooperation of industry and university.

INTRODUCTION

Global Supply Chain Management (GSCM) has been become an important strategy to assist business in thinking how to quickly improve their competitiveness. In a global supply chain, a business not only needs to face problems of information flow, but also needs to face problems

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of products flow. More and more businesses are considering using an integrated concept for improving processes of information and materials from the upstream and downstream of business between different countries or areas.

The problem of global supply chain management is very difficult to understand and management, because the processes of information and materials in a global supply chain of business are very complex: they include the scope of business to business and business to customers. Therefore how to assist a business to define the problems of global supply chain management is an important task.

To understand how a real company manages its global supply chain, we had an opportunity to contact a small and medium enterprise in Vietnam, the company belonging to a Taiwanese owner, located in Ho Chi Minh City since 2001. The company focuses on international import trading in motors and other products. These products are from Taiwan and other countries. For example, the company buys motors from the TECO group in Taiwan, and buys motors from Siemens in Germany. The company, as an agency, sells these products in Ho Chi Minh City and other cities in Vietnam.

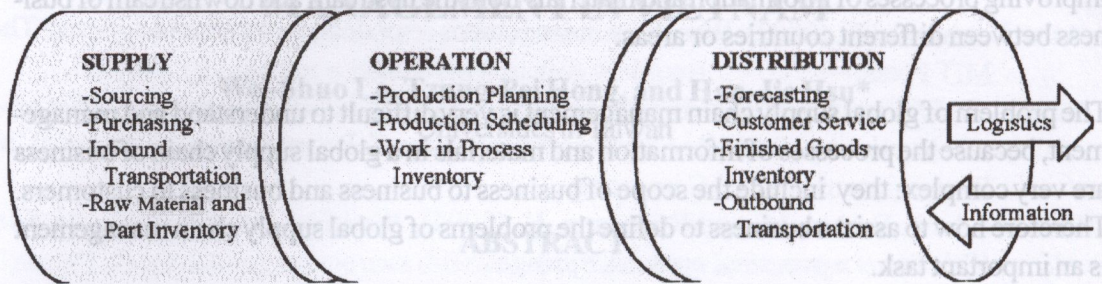
The interview revealed many problems, not only within the company itself, but also in its upstream and downstream. The problems of upstream are about the products flow of suppliers, because different suppliers have different order submitting processes. Thus, the company is controlling its processes of export and quality through different systems. Therefore, the challenge for the company is how to manage the flow of products from different manufacturers at the same time.

The purpose of this research is to understand the problems of global supply chain management in a real small and medium enterprise in Vietnam, and through interview to identify problems in its operations processes. The contributions of this research is that it can be seen as an international cooperation model between industry and university. It can also assist this Taiwanese company in Vietnam to use the concept of global supply chain to improve its competitiveness.

PROBLEMS OF A SUPPLY CHAIN

The Vietnamese university could provide input to the company's experience of business. Logistics usually play an important role in a supply chain. Logistics can be divided into two types: inbound logistics and outbound. Inbound logistic represents a purchase process for a company's raw material, and outbound logistic represents a distribution process of products. Copacino defined the problems appearing in logistics as an integrated pipeline [4], which is shown in Figure 1.

Figure 1: The problems appearing in logistics as an integrated pipeline



In Figure 1, there are three main activities - supply, operation, and distribution. They are described as follows.

- **Supply:** It includes the tasks of sourcing, purchasing, inbound-transportation, raw material and past inventory.
- **Operation:** It is the business processes themselves, and includes production planning, production scheduling, and work in process inventory.
- **Distribution:** It focuses on satisfying the requirements of customers. The tasks include forecasting, customer service, finished goods inventory, warehousing, and outbound transportation.

Information flows in the direction of distribution to operation and then supply. Logistics flows in the direction of supply to operation and then distribution. These three activities form an integrated architecture for a supply chain, and should be considered together.

Electronic processing is a key factor in a business. Business processes include much information, which should be efficiently and effectively delivered to managers. Managers can then use the information to help make decisions. If the information cannot be quickly delivered, the managers may not make a decision in time and may cause a great loss of business.

Therefore, a small and medium enterprise needs to know how to use an information system to contact their suppliers upstream and their customers downstream. It is an important issue, because the company will deal with suppliers or customers from different countries, and information and logistics will be across different nations because of multiple and complex international networks.

QUESTIONS FOR INTERVIEW

In this section we consider some questions which will assist us to understand which problems are important in a business for managing its global supply chain:

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- The supply chain. To understand the supply chain can help us to know the network of a global supply chain, and progress to draw a picture of global supply chain as soon as possible.
- Problems of global supply chain. We use the three areas of supply chain from Figure 1 as a check list to identify problems in the supply chain, so that the business can then learn how to solve these problems and improve their capability in the globalization context.

a. SUPPLY

- Sourcing: which source can be used?
- Purchasing: which products will be purchased?
- Inbound Transportation: which method will be used for inbound transportation?
- Raw Material and Part Inventory: how to conduct these?

b. OPERATION

- Production Planning: how to plan for production?
- Production Scheduling: how to schedule for production?
- Work in Process Inventory: how to manage this ?

c. DISTRIBUTION

- Forecasting: how to forecast, and which method or system will be used?
- Customer Service: how to do this well?
- Finished Goods Inventory: how to manage this?
- Outbound Transportation: which method will be used for outbound transportation?

CASE STUDY

Motivation

To understand how a business faces the problems of a global supply chain, we had an opportunity for an international cooperation project between industry and university. When we visited Vietnam we were able to contact a local Vietnamese university and a Taiwanese company. The Vietnamese university could provide input to the company's experience of business administration, technologies, and new management knowledge. Additionally, the Taiwanese company hopes the interview will enable us to understand the state of its business administration in Vietnam, and to assist them in improving their capability. We could also tell the Taiwanese company in Vietnam where to find good local employees with technical capability. The relationships and processes we shown below (Figure 2):

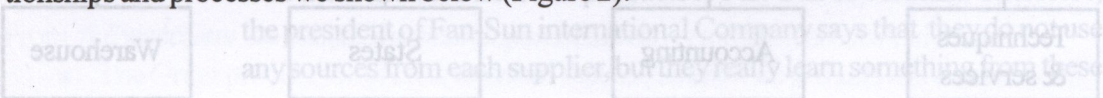
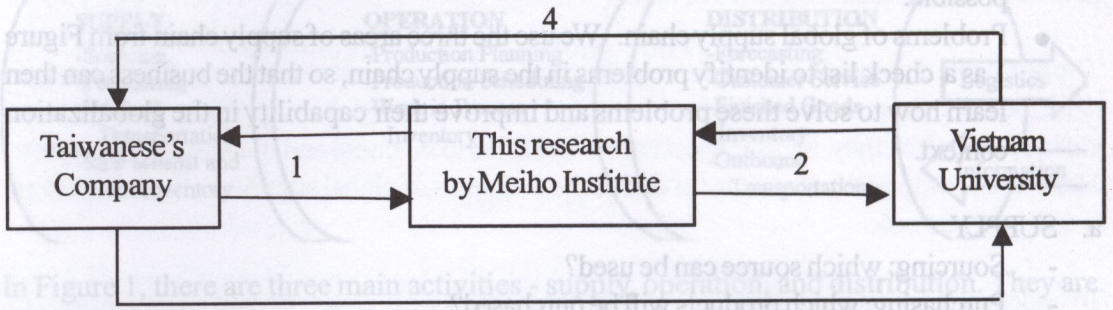


Figure 2: The relationships and processes in this international cooperation project by Meiho Institute

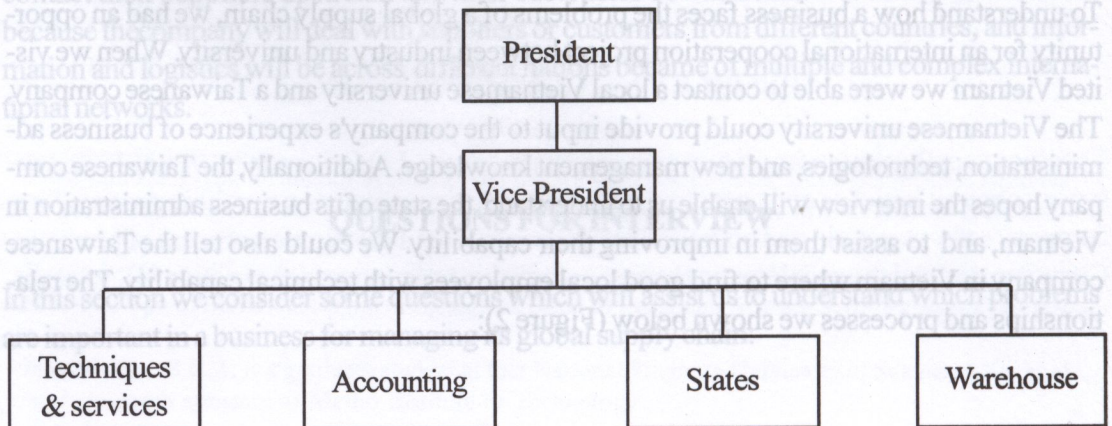


- Step 1. Research created by Meiho Institute through contact with a Taiwanese Company in Vietnam (interview)
- Step 2. Contact with a University in Vietnam (with technology capability)
- Step 3. The Taiwanese Company contacts the Vietnam University directly
- Step 4. The Vietnam University's response to the Taiwanese Company's requirements

Introduction to the Taiwanese's Company

Fan-Sun international Company is a trading company, located in Ho Chi Minh City in Vietnam since 2001. It belongs to the industry of commerce and electronics. Their main products for sale are motors and pumps, and they have 50 ~ 80 employees who are almost all Vietnamese except the president and vice president who are Taiwanese. Although, the president of company is Taiwanese, he has been living and working in Ho Chi Minh City for 20 years. He hopes that the Vietnamese employees can be trained in professional technologies, customer management, and languages, and continue their education.. The Organization Structure for Fan-Sun international Company is shown below in Figure3:

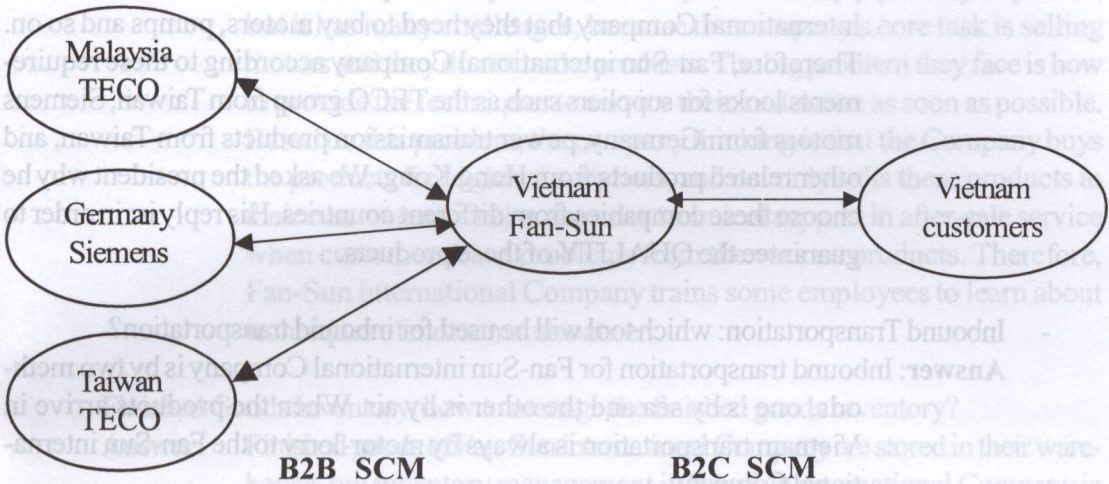
Figure 3: Organization framework for Fan-Sun international Company



The Supply Chain

Fan-Sun international Company buys motors from the TECO group from Taiwan, and buys motors from Siemens from Germany, and then Fan-Sun international company, as an agency, sells these products to Ho Chi Minh City and other cities in Vietnam. Their supply chain is shown below:

Figure 3: The Supply Chain



PROBLEMS OF GLOBAL SUPPLY CHAIN

We use three areas of supply chain as a checklist to identify problems in the supply chain. Then the business can learn how to solve these problems and improve their globalization capability. The Interview with Fan-Sun international Company is described below:

a. SUPPLY

- Sourcing: which source can be used?

Answer: The strategy for supplier management in Fan-Sun international Company is only a buy-sell relationships. Suppliers provide their products for Fan-Sun international Company to choose, the Company decides which products it would like to buy. The company submits its orders to suppliers, who then deliver Fan-Sun's products to Fan-Sun of Vietnam. Therefore, the president of Fan-Sun international Company says that they do not use any sources from each supplier, but they really learn something from these

international suppliers such as management's methods or how to use information systems to improve their competitiveness.

- Purchasing: which products will be purchased?

Answer: Vietnam is a very special country, because the requirements of goods are from customers, who then push the stores or agency to purchase these goods. The agency according to these requirements of suppliers, then buy these goods. Fan-Sun international Company also follows this model to purchase their products when local companies or customers tell Fan-Sun International Company that they need to buy motors, pumps and so on. Therefore, Fan-Sun international Company according to these requirements looks for suppliers such as the TECO group from Taiwan, Siemens motors from Germany, power transmission products from Taiwan, and other related products from Hong Kong. We asked the president why he choose these companies from different countries. His reply is: in order to guarantee the QUALITY of these products.

- Inbound Transportation: which tool will be used for inbound transportation?

Answer: Inbound transportation for Fan-Sun international Company is by two methods, one is by sea and the other is by air. When the products arrive in Vietnam transportation is always by motor-lorry to the Fan-Sun international Company.

- Raw Material and Part Inventory: how to conduct raw material and parts inventories?

Answer: Fan-Sun international Company does not need any raw material, but in their warehouse are some inventories of parts, these inventories being used for after-service parts as a service for their customers. However, to maintain this service Fan-Sun international Company has to spend more money to store these parts and to manage them.

b. OPERATION

- Production Planning: how to planning for production?

Answer: Fan-Sun international Company is a sales company, therefore there is no need for production planning. Fan-Sun international Company outsource to manufacturers of upstream.

- Production Scheduling: how to schedule for production?

Answer: Same as above.

- Work in Process Inventory: how to manage the work in process inventory?

Answer: There is no work in process inventory.

c. DISTRIBUTION

- Forecasting: how to forecast and which method or system will be used?

Answer: The Fan-Sun International Company has no information system or method to forecast their market. This is very difficult to do, the main reason being that the company is a small / medium enterprise, they do not employ an information manager to assist the company to do this task.

- Customer Service: how to do customer service?

Answer: Customer service by Fan-Sun international Company is very important, but it has many challenges, because the company's core task is selling motors and they do not make products. The big problem they face is how to provide the techniques to service their customers as soon as possible. Based on this problem, the company thinking is that the Company buys the products from global suppliers, and not only sells these products to their customers, but also provides technical support in after-sale service when customers have problems from the various products. Therefore, Fan-Sun international Company trains some employees to learn about techniques of motor maintenance.

- Finished Goods Inventory: how to manage the finished goods inventory?

Answer: Finished goods of Fan-Sun international Company are stored in their warehouse, but inventory management in Fan-Sun international Company is difficult to do because these finished goods are from different countries such as Taiwan, Germany, Hong Kong and so on. When Fan-Sun international Company receives these products from each international supplier, these products are all put into the same area for storage (one warehouse), and only paper records are used to record what is there. If the company wants update these records it has to do it on paper.

- Outbound Transportation: which methods will be used for outbound transportation

Answer: Outbound transportation for Fan-Sun international Company uses only one method, that is to use vehicles to deliver their products to each customer. Sometime, some customers will go to Fan-Sun international Company directly by motorcycle, as these customers find them readily available.

CONCLUSIONS

From the interview we can draw some conclusions.

- The Order process is not clear for each supplier. Suppliers provide different ordering

systems. This situation means that although each order process is different for Fan-Sun international Company to follow, but Fan-Sun international Company can use these opportunities for contacting them and learning how to develop order systems so that it can more easily manage these global suppliers.

- There is no production-sales information system to connect the Departments of accounting, inventory management and sales. The employees use traditional method to record, manage, and control, and therefore their data is always kept on paper. This data usually cannot be effectively analyzed automatically, and it is also difficult to check for errors.
- Opportunities for international cooperation of industry and university Our contribution to this study is also related to international cooperation of industry and university, especially for the concept of global supply chain management, provide the local university with techniques and support on information system design and electronic engineering, and recruit employees with technical skills from Ho Chi Minh University of Industry.

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