Apply Logistic Management on Vocation Training Center

HUA- LIN TSAI¹, CHUN-WEI LU², YU-HSIN CHANG³, WEI-CHIN LEE⁴

¹Department of Information Management

⁴Department of Tourism Management

¹Southern Taiwan University of Technology

^{2,3}Cheer & Share International Ltd

⁴Taiwan Shoufu University

¹No. 1, Nan-Tai Street, Yongkang Dist., Tainan City 710

TAIWAN

¹ kittyhl @gmail.com

²wini882003@yahoo.com.tw

³yuhsin81@mail.stut.edu.tw

⁴ chin1012@tsu.edu.tw

Abstract: - Logistics management and supply chain affect strategy of business. Usually, theories of logistic management and supply chain are applied on manufacture industries. Through logistics and supply chain literature review and team discussion, we realize that the supply chain and logistics management can be used on our vocational training center after model transferring. Therefore, we construct a new model to introduce and describe the distribution planning of our vocational training center that we plan to establish at the first of 2012. The new model that concerns about four sections-goods, knowledge acquirement, knowledge sharing network, and facilities, will be examined when operating the vocational training center. We will modify the new model into suitable for use in the center and expect it can be utilized to enhance our business operation.

Key-Words: -Logistics Management, Supply Chain, Value Chain, Strategy, Vocational Training Center

1 Introduction

Logistics management is very up-to-date in its handling of supply chain relationships and supplier networks. It provides a framework for managing the supply chain and then talks about the role of the Internet and implementation to achieve targets. It is strong on lead times, managing response times and the reduction of waste. According to McKinsey & Company [6], increasing complexity of products and services, increasing and increasingly volatile input prices (e.g., wages, fuel, etc.), and the availability of sophisticated supply chain management tools have influenced their supply chain strategies.

The sources of profit generators in firms constitute a firm's competitiveness. Logistics management plays an important role in transferring potential profits of firms. Firms are, in principle, functioning for maximizing profit. The application of their core values is the main method for prosperity.

Firms manage to create qualified products, get into right markets and acquire resources at the

lowest possible prices. Determining what products and services may interest customers most, recognizing the needs and wants of target markets and delivering them with satisfaction are crucial issues. This study focuses on how to apply logistics management and supply chain on our vocational training center.

2 Literature Review

2.1 Porter's Value Chain

According to Michael E. Porter's value chain (1985) [7], primary activities from inbound logistics, operation technologies, outbound logistics to services and support activities from infrastructure, human resource to technology are the values that exceed the cost of activities, thereby resulting in a profit margin. It provides for an efficient process that improves the timeliness of operations. The following drawing is of the value chain model.

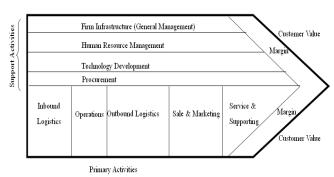


Fig.1 Michael E. Porter's Competitive Advantage Value Chain Model

Moreover, reduce by understanding, quantifying, and minimizing the costs could improve profits, release valuable resources, improve flexibility and encourage the development of mass customized services.

2.2 Logistics Management

Many scholars discussed logistics management and global logistics management. From our point of view, logistics management is a system of shifting profits cross countries. The scope of profit-shifting via an arbitrary use of transferring prices was sizeable [9] because of the on-going economic integration and the increasing volume of trade in intermediates.

A. Modares & M. Sepehri [1] study about Computer Aided Routing and Scheduling (CARS), they consider that comprehensive review of various types of practical situations. It is expected to become popular in industries with complicated supply chain requirements. They think that important features of CARS may be stated as follows:

- High flexibility to meet various logistics situations and clients needs.
- Powerful optimization algorithm to tackle complex problems effectively.
- Intuitive graphical user interface for effective analysis and improvement of results.
- Flexibility to integrate the users know how with the computational power of advanced optimization algorithms.

As their conclusion, CARS system can be used within an integrated supply chain planning system to optimize distribution operations. It can handle various logistics configurations and may be applied to any industry with minor customization.

2.3 Supply Chain

A supply chain consists of three types of entities: the customer, the producer, and the supplier. Agile manufacturing is a natural development from the original concept of "lean manufacturing." In lean manufacturing, the emphasis is on the elimination of waste, where the philosophical emphasis is similar to that of SCM. The requirement for organizations and facilities to become more flexible and responsive to customers led to the concept of "agile" manufacturing as differentiated from the "lean" organization [4, 5]. This requirement for manufacturing to be able to respond to unique demands moves the balance back to the situation prior to the introduction of lean production, where manufacturing have to respond to whatever pressures are imposed upon it, at the risk of compromising on cost, speed, and quality. Therefore, agility should not only be based on responsiveness and flexibility, but also on the cost and quality of goods and services [2]. The extended supply chain includes customers' customers and suppliers' suppliers. Supply chain management oversees and optimizes the processes of acquiring inputs from suppliers (purchasing), converting those inputs into a final product (production), and delivering those products – or outputs - to customers (fulfillment).

A supply chain can be defined as an integrated process consisting of a number of various business entities, including suppliers, manufacturers, distributors and retailers. They work together in an effort to acquire raw materials, convert them into specified final products and deliver these final products to retailers [3].

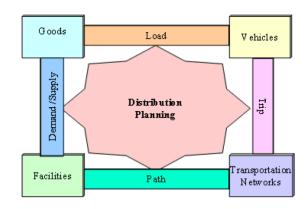


Fig.2 A. Modares & M. Sepehri's Distribution Planning Model

2.4 Problem Extraction

Most of academic study about supply chain, logistics management, and value chain of manufacture industries and lack of studies about

applying these theories on vocational training centers. However, the classic theories explain the process of manufacturers from up-stream to downstream should be utilized on service industries like vocational training centers because of the relations among centers, customers, and suppliers are critical issues same as manufacture industries.

3 Taiwan TrainQuali System

Stages of developing business education and training include planning, design, implementation, verification, results evaluation. This process has been promoted in Taiwan to raise the standard of training quality in Taiwan (Taiwan TrainQuali System TTQS). TTQS provides a framework of training quality: Plan, Design, Do, Review and Outcome. By following this sequence, the training center can design and create a high quality training program and develop a system of performance evaluation. And this framework has been developed as a scoring tool called PDDRO training quality scorecard. Each item has two to four indices. Training, quality can be estimated by using this scoring system so as to identify the level of quality. The highest level of platinum is equivalent to ISO10015 (ISO10015 ISO9000 is the only organization to regulate the training of human resources in the standard).

Vocational Training Council in Taiwan offer the training programs to institutions, including national associations, city and county occupational unions, the National Vocational Federation of Trade Unions and other units. The qualified organization once pass the certain standard set by the Vocational Training Council, they are allowed to apply for the appraisal and get the approval to run the courses subsided by the government. [8]

We plan that since 2012 apply for TTQS counseling assessment, licenses and apply for the Vocational Training Council priority projects for this year, as well will be able to participate in tenders in October, the application program in 2013 to mark the case of the operation.

4 Methodology and Model

Through logistics and supply chain literature review and team discussion, we realize that the supply chain and logistics management can be used on our vocational training center after model transferring. Therefore, we construct a new model to introduce and describe the distribution planning of our vocational training center that we plan to establish at the first of 2012. The new model will be examined when operating the vocational training center.

4.1 Model Construction

Under the circumstances of the economic globalization and the varied environments, firms must face and overcome both internal and external environment challenges. The distribution planning model of the vocational training center is as below:

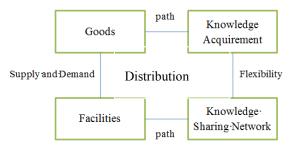


Fig. 3 Distribution Planning of Our Vocational Training Center

Goods, knowledge acquirement, knowledge sharing network, and facilities are concerned about both internal and external environments. They are identified as follows:

- 1. Goods include books, courses, speech, certifications, etc., categorized under training quality.
- 2. Knowledge acquirement includes innovation and creation of knowledge, skills, and technologies, which influence to improve the firm's competitiveness.
- 3. Knowledge sharing network contains supportive activities of Porter's value chain.
- 4. Facilities include strong capabilities in research, optimistic outlook for the future development and customers' needs.

The four sections connect to each other. Goods and facilities concern about supply and demand. Moreover, knowledge acquirement and knowledge sharing network are connected and the relations must be adjust; therefore, "flexibility" is placed between two of them.

5 Conclusion

Many scholars point out their study results and model about supply chain, logistics management, and competitiveness. Based on these theories, this research creates a new demarcation on integrate the theories and models for business operation. Utilizing innovation and creation to connect the four section of the model is an important issue for our center.

6 The Limitations of this Study

Strategy for business operation includes three factors-categories, resources and networks. Categories include markets, business activities (value chains), landforms and scales of businesses. In this study, the market and the characteristics of Taiwan society are not explained clearly, and it will be studied on our further researches.

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