# Research on Realization Mechanism of Logistics Agility Based on Supply Chain Integration

#### Xia Yu

Guangdong University of Science & Technology, Dongguan, Guangdong, 523083, China 151493047@qq.com

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**Abstract:** Since the beginning of 1980, China's market environment has undergone a very big change. On the basis of supply chain integration, the realization of logistics agility is one of the realistic conditions that enterprises must meet when achieving maximum value. In essence, whether an enterprise can achieve logistics agility on the basis of supply chain integration can be determined by three factors: the response speed of the enterprise to the customer demand, the efficiency of the enterprise to the time planning, and the synchronization of the enterprise to the supply chain. The extent of the operation. In this paper, the author first elaborates on the related concepts of supply chain integration and logistics agility, and then explains the realization principle of 3 logistics agilitation based on supply chain integration, hoping for the integration based on supply chain. The realization of logistics agility has a certain positive impact.

# 1. Introduction

The ultimate goal of the company in the development stage is to maximize the interests of the company to meet its own development and the needs of corporate shareholders. While pursuing value maximization, enterprises must achieve integration and agility in both supply chain and logistics. Based on this background, this paper gives a detailed explanation of supply chain integration and logistics agility, hoping to contribute to the realization of China's logistics agility based on supply chain integration.

# 2. Brief introduction of supply chain integration and logistics agility

## 2.1 Overview of supply chain integration

Supply chain refers to the process from the beginning of product design and production, through the control of the company's capital, information, logistics and other aspects, the production of the products to the target customers of the terminal. The supply chain not only refers to the company's delivery of products, funds, information or materials to customers, but also the value-added of the company, such as services, attitudes, values and so on. Therefore, based on the customer's target value, the unified management of the company's logistics has become an important trend of modern enterprise development management. In the development process of enterprise supply chain integration, logistics management has changed from product-oriented to current customer-oriented, and this process has been running for a long time. It can be said that in the beginning, the development of the supply chain of enterprises is for the sales demand of products. But after the development, the development of the enterprise supply chain is to achieve the needs of customers. In fact, the value of the business is as important as the needs of the customer. It is not advisable to abandon the value of the enterprise in order to meet the needs of the customers. It is also not advisable to abandon the customer's demand experience in order to satisfy the value of the enterprise. If the current enterprise can perfectly balance the customer value with the enterprise value, then the driving force of the customer value will be perfectly integrated with the driving force of the enterprise value. This integration can be played in the process of the supply chain integration of the enterprise. Very large positive effect.

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#### 2.2 Brief description of logistics agility

Logistics agility is a general term for an adjustable state of the entire enterprise or part of the enterprise in the logistics management process. There are four basic principles for logistics agility: constructing virtual partnerships, emphasizing the knowledge and skills of employees, preparing for change, and delivering value to customers quickly. Logistics agility is a strategic and comprehensive adjustment and response process to the structural changes of the company's logistics. To achieve the agility of logistics, enterprises must have two essential capabilities.<sup>[1]</sup> The first capability is that enterprises can quickly integrate their market resources in a short period of time. The second capability is that enterprises must be able to continuously develop internal potential. Only by having the above two capabilities can an enterprise maintain efficient operation in the process of logistics management and actively cooperate with all levels of staff, so that logistics can be agile and create more value for the enterprise.

## 3. Characteristics of supply chain integration

## 3.1 Agility

The integration of supply chain has the characteristics of agility. The agility of supply chain integration can not only ensure the standardization of business processes, but also ensure the flexibility of organizational structure. In addition, the agility of supply chain integration can also have a positive impact on the inside and outside the enterprise. For the internal enterprise, agility can effectively improve production and comprehensive quality management of the company's products. For the outside of the enterprise, agility can regulate the process of the company's partners, reduce the cost of logistics, and increase the value of the enterprise. For an enterprise, upstream is a supplier or other partnership, and downstream is an end customer, retailer or distributor. If the enterprise's supply chain is agile, then the upstream and downstream of the enterprise can form a unified whole, and then seamlessly connect, the supply chain of the enterprise will be more complete.

#### 3.2 Systematic

The systematic nature of supply chain integration means that all nodes, such as all suppliers, sellers or retail customers, are regarded as a complete system. The supply chain management of enterprises is the core strength of this system. When all of these nodes constitute a system, it can avoid the emergence of traditional enterprises that only pay attention to their own factors and ignore the influence of other external factors on the internal management of the enterprise, which leads to the process of production, sales and sales of the enterprise. There is a disconnection.

## 3.3 Strategic

Supply chain integration emphasizes that enterprises must have a sense of strategic management. On the basis of overcoming the pressure of the traditional management model, enterprises are now trying to form a win-win situation in the process of operation. It can be said that the competition between enterprises and enterprises has been different from the previous ones. Now it is the competition between the supply chain system and the supply chain system of enterprises. Under the model of supply chain integration, enterprises will no longer have a "big but complete" or "small but complete" situation. [2] Figure 1 is a schematic diagram of the phased strategic planning of SF Logistics.



Figure 1. SF Logistics Strategic Planning

#### 3.4 Demand orientation

Regardless of the type of business, it is often desirable to get the highest value at the lowest cost. However, in the traditional enterprises of the past, because of various restrictions, such as the limitations of the national economic system or the limitations of the market economy, these enterprises often ignore the real needs of customers and have no way to win the trust of customers. After the implementation of the supply chain integration process, many companies have recognized this problem. They began to adjust in the three aspects of pre-sales, sales and after-sales, and take the customer's needs as the goal of the company's product development, and try to tailor the customer. Many enterprise products are not optimal, but they allow customers to make peace of mind choices. Therefore, supply chain integration does not mean that the product should be optimized, but the customer demand should be maximized, so that the company can achieve permanent growth.

# 4. Principles for the realization of logistics agility based on supply chain integration

## 4.1 Control cost principle

The costs incurred in the logistics process are caused by the process of supporting the logistics. In general, the cost of logistics includes the cost of order processing, the cost of warehousing and inventory management, the cost of information circulation, the cost of transportation and distribution, and the cost of customer service. The process of logistics agility is the process of reducing logistics costs. This process is not isolated, but can be achieved by focusing on multiple cost links. In the process of logistics, the main measures taken by enterprises are low-speed transportation and distribution arrangements and high-security inventory settings. This operation mode is to achieve the lowest cost control with low speed and high inventory. This kind of link can provide a good arrangement for the cost of the logistics company, which can prevent some human losses and improve the efficiency of product delivery.

#### 4.2 Principle of Information Unification

The so-called principle of information unification means that the logistics process of an enterprise fully considers the problems of efficiency, cost and time. On a certain time basis, improve the efficiency of transportation, control the cost of the enterprise, coordinate the relationship between the various links, and make the logistics process more smooth. Therefore, the principle of information agility for logistics agility is the principle of achieving coordinated, unified and rational operation of all links. Figure 2 is a schematic diagram of information transfer in the information age.



Figure 2. Information Age

## 4.3 Customer's highest principle

Regardless of the type of business, customer-based targeted strategies are increasingly being valued and valued by business managers. Many companies are now committed to providing customers with personalized services to maximize the benefits of their products. In the principle of logistics agility, the highest customer principle is a very important principle, and the customer experience is the basis for enterprise development. Only when the company's products meet the customer's needs can it bring the greatest benefits and value to the company, so that the company has enough time and energy to deal

with the cost and logistics management issues. At the same time, it should be noted that the highest customer principle does not mean that the company must meet the customer's needs unconditionally, but should make adjustments as much as possible according to the actual needs of the market and customers, in the cost, efficiency and supply chain links. The best arrangement.

## 4.4 Quick response principle

The so-called rapid response principle means that when a customer makes a certain evaluation of the product or shows dissatisfaction, the enterprise must be able to satisfy the customer's needs as quickly as possible or solve the customer's questions. However, people tend to ignore a detail.<sup>[4]</sup> Quick response is sometimes not the best measure, and the reaction time should be just right. The speed to meet the requirements of the enterprise and to solve the customer's problems is essentially the best.

# 5. Logistics agile realization based on supply chain integration

#### **5.1 Improve the logistics evaluation system**

For a company, the number of customers is generally very large, and each customer's needs may be different. Therefore, when a company faces many different types of customers, this requires them to have a comprehensive evaluation system. For different customers and different requirements, companies can respond quickly based on this evaluation system. Enterprises can solve customer problems in the shortest time, improve the logistics efficiency of enterprises, and expand the production volume of enterprises.

## 5.2 Improve the synchronization ability of the logistics process

A company's supply chain is usually linked to the supply chain between a number of other companies, and the internal activities between them or the related operations of the logistics supply usually affect each other. If an enterprise's internal business or activities are linked to the management of other companies, the competitiveness and profitability of the enterprise will be strengthened to a certain extent.<sup>[5]</sup> Therefore, the synchronization capability of an enterprise supply chain can affect the operational norms and stability of enterprise logistics.

#### 5.3 Improve the ability to judge customer needs

In the past, in the process of information communication, many companies will find that the actual needs of customers want to be completely solved, usually takes a long time. The era of logistics agility is also an information age. To achieve logistics agility, we must be able to have an accurate judgment of customer needs. By improving the ability to judge customer needs, the company can improve the quality of after-sales service in the shortest time, meet the individualized requirements of customers, and improve customer satisfaction.

#### 6. Conclusion

All in all, companies wanting to achieve logistics agility based on supply chain integration must follow the implementation principles mentioned above. In the follow-up study, the author will continue to search for and research other examples of logistics agile realization based on supply chain integration, and accelerate the realization speed of logistics agility in China's supply chain integration.

## References

- [1] Xu Zhangyi. Research on the realization mechanism of logistics agility based on supply chain integration [D]; Huazhong University of Science and Technology; 2004
- [2] Zhang Jie. Empirical Study on the Integration Model of Chinese Manufacturing Buyer Supply Chain Partners [D]; University of International Business and Economics; 2007
- [3] Wang Hui.Research on lean supply logistics mode of manufacturing enterprises in the

environment of supply chain integration[D]; Chongqing University; 2013

- [4] Nie Zhijian. Research on supply chain integration of group manufacturing enterprises [D]; Tianjin University; 2004
- [5] Hu Guohua. To comply with the tide of supply chain integration [N]; Modern Logistics News; 2014