

# Optimization of Logistics Inventory Management in Enterprises from the Supply Chain Perspective

Xiuhua Jiang \*

School of Economics and Management, Southwest Petroleum University, Chengdu, China

\*Corresponding Author: Xiuhua Jiang

## ABSTRACT

For enterprise logistics inventory management, it also brings greater challenges and opportunities. The traditional enterprise logistics inventory management is relatively decentralized and independent, so from this point of view, it is difficult to achieve overall economic benefits in the process of operation. So, from this point of view, under the perspective of the supply chain, through the continuous optimization and integration of the enterprise's logistics inventory, so as to improve the quality and efficiency of its warehousing, to meet the actual needs of the enterprise, which is also a prerequisite and basis for improving the core competitiveness of modern enterprises in the fierce market competition. This paper describes the current situation of inventory management in logistics enterprises, analyses the inventory management problems of logistics enterprises, and puts forward the management path under the supply chain perspective, with a view to promoting and improving the development of enterprise inventory management under the supply chain management environment.

## KEYWORDS

Supply chain; Corporate logistics; Inventory management; Optimization analysis

## 1. INTRODUCTION

Over the years, our country's market economy is developing more and more rapidly social individual enterprises are facing more and more different market changes, the market competition is more intense. In this era, enterprises must continuously optimize logistics inventory management to solve all the problems in logistics inventory management. That is to say, in the perspective of the specific supply chain, in the logistics enterprise, it is possible to increase its overall efficiency by continuously reducing the cost of inventory. From this point of view, inventory management is the core part of the enterprise's daily operation and management, and nowadays it has also aroused great attention from the logistics industry, and for many enterprises, it is also the content of the key work. Based on the perspective of supply chain, the enterprise can reduce the cost of transport through the reasonable and efficient management and management measures, reduce the share of the assets occupied by the enterprise as well as realize the zero inventory, and subsequently help the enterprise to improve the capital The utilization rate of the enterprise has a very positive significance for the continuous development of the enterprise in the fierce market competition. Therefore, the establishment of inventory levels suitable for the development of enterprises and the maintenance of a certain inventory turnover rate can ensure that enterprises achieve better production and operation results.

In the enterprise specific production process, inventory management mainly includes production workshop raw materials, parts supply demand and semi-finished products production quantity control, warehouse management will affect the performance of the sales department and purchasing

department procurement plan. How to achieve in the case of guaranteeing to meet the production plan to improve inventory utilization, reduce inventory costs and thus promote the improvement of the operating efficiency of manufacturing enterprises is a major issue faced by many manufacturing enterprises in inventory management. At present, many enterprises still use inventory management methods based on traditional experience and rules, for the implementation of dynamic tracking of inventory changes, it is difficult to adapt to changes in market demand. At the same time, some enterprises in order to pursue short-term economic benefits, often reserve too much inventory to cope with uncertainties, increasing operating costs and risks. In the end, the various shortcomings prompted enterprises to further strengthen the importance of inventory management, and according to the current situation to study and improve.

## **2. RELEVANT CONCEPTS**

### **2.1. Supply Chain Overview**

Supply chain is a unity formed by information network, which can integrate all business flows including consumers, and is not only a chain connecting suppliers, manufacturers and consumers, but also a value-added chain. Supply chain management is a kind of integrated management ideas and management methods, from the strategic and tactical level, the optimization of the enterprise's operating processes, but also on the suppliers, manufacturers and retailers of business efficiency integration, to ensure the smooth implementation of the production and sale of goods.

The characteristics of supply chain management, the first is the difference in scope, supply chain management can directly extend the management to the supply chain; to achieve cross-organizational boundary management, the scope of management is more extensive, involving more content. The second is the difference in objectives, in the traditional logistics inventory management, the emphasis is on reducing enterprise costs, improve enterprise economic efficiency, supply chain management is concerned about the improvement of user satisfaction, to achieve the overall competitive advantage of the supply chain in which the enterprise is located as well as the improvement of efficiency. Third, the difference in methodology, the traditional management model is generally production as the core, the limitations are large, supply chain management can pull the industry demand growth, in improving the level of service at the same time, to achieve effective control of costs.

### **2.2. Overview of Enterprise Logistics Management**

Enterprises in logistics management, many activities are not able to produce economic value, but enterprises can not be exempted from this part of the activities, enterprises can reduce such activities through logistics management to help enterprises enhance their competitiveness. Enterprise logistics contains many links, including supply logistics and production logistics is very important, the enterprise should coordinate the supply logistics, production logistics and sales logistics of the relationship between the three, to achieve the integration of logistics management.

Enterprise logistics management is mainly referring to the enterprise on the unified procurement of materials, distribution and deployment, in order to achieve the purpose of resource optimization, enterprise logistics, each link is very important, due to the complexity of logistics management, simple links will have a negative impact on the results, and will affect the consumer's sense of use, a direct impact on the competitiveness of the enterprise's market. Enterprise logistics can help their own logistics management through third-party logistics to reduce the occurrence of errors in the work. The main work of the third-party logistics is to help enterprise logistics to reduce inventory, reduce capital consumption, accelerate capital turnover, and improve work efficiency.

### **3. PROBLEMS OF ENTERPRISE LOGISTICS INVENTORY MANAGEMENT UNDER THE PERSPECTIVE OF SUPPLY CHAIN**

#### **3.1. Insufficient Knowledge of Modernized Inventory Management Concepts in Enterprises**

The concept of modern inventory management refers to a management concept that makes comprehensive consideration of market demand, product characteristics, supply chain cooperation and other aspects, and uses information technology and modern management methods to improve inventory management efficiency and supply chain coordination. However, many enterprises still adhere to the traditional manufacturing industry based on experience and rules of inventory management methods, the use of traditional "safety stock" or "rule of thumb", ignoring the important role of warehouse management, that the use of the warehouse is to assist with the operation of other departments. Neglecting the other links related to it, failing to scientifically formulate inventory management strategies based on market demand, product characteristics, supplier capacity, logistics costs and other factors, resulting in inventory management is difficult to achieve the optimal state. At the same time, some enterprises lack of real-time grasp of the entire supply chain situation, resulting in insufficient coordination between inventory management and supply chain management, long inventory turnover time, a large amount of waste of raw materials and other issues.

It is worth noting that the current enterprise inventory management personnel generally lower education, the ability to accept and understand the emerging knowledge is poor, coupled with the complexity of the enterprises of the types of raw materials and spare parts, the number of uneven, resulting in inefficient management personnel; enterprises lack of inventory management personnel training, warehouse information technology construction and information technology management is subject to the quality of the inventory management personnel can not be done to keep abreast of the times, and to some extent, also increase the cost of enterprise operations. It also increases the operating cost of the enterprise.

#### **3.2. Lack of a Scientific Inventory Management System**

The lack of a scientific management system makes it difficult to achieve refined and scientific inventory management, and untimely communication between various departments leads to contradictions between the procurement plan and production plan, which in turn affects the operational efficiency and profitability of the enterprise. Although most enterprises can implement the classification and management of raw materials, semi-finished products and other materials, due to the unscientific inventory management system, it is difficult to understand the supply chain demand and inventory levels in a timely manner, and it is not possible to accurately budget the number of raw materials to be purchased, which leads to stagnation of products or backlog of inventory, resulting in cost overruns, and affecting the overall production activities of the enterprise. In some enterprises, due to the lack of management system and insufficient communication, there are cases of out-of-stock of raw materials and semi-finished products, which leads to the inability to complete the production plan on time, thus affecting the normal production and supply of the enterprise's products.

#### **3.3. Data Security Issues**

The arrival of the information age, making logistics enterprises in the process of development, more and more extensive application of big data technology, the same technology also has a lot of advantages, but for logistics enterprises to protect the information security management work, there are certain challenges. Generally speaking, under the supply chain, the information data of logistics enterprises will encounter great difficulties in the process of management. Due to the secrecy and development of big data technology, it is difficult to accurately measure the situation of data loss in

the enterprise, and there is also the fact that the enterprise has not formed a clear demand in this aspect of the data demand, resulting in the overall data security is relatively low. In addition, due to the lack of certain attention to data security management and preventive awareness of the enterprise, so the overall management technology level and capacity can not be effectively improved, resulting in the enterprise internal data security is not guaranteed.

### **3.4. Lack of Expertise**

The vast majority of staff engaged in logistics management positions, basically from other ordinary positions directly transferred, or transferred over. They themselves lack the quality and ability for logistics management. So that in the process of inventory commodities, and did not carry out strict supervision and management on the whole, the lack of necessary work experience. In this way, it leads to the process of work can not grasp the specific ways and steps, resulting in the entire management of the information data can not be timely feedback, in this way, it also limits the development of enterprises in the logistics inventory management, the same will appear a lot of small errors. The reason for these reasons is because of the lack of professional logistics management personnel within the enterprise, the existing management personnel have no way to high quality and high efficiency to manage the supply chain.

## **4. OPTIMIZATION COUNTERMEASURES FOR ENTERPRISE LOGISTICS INVENTORY MANAGEMENT UNDER THE PERSPECTIVE OF SUPPLY CHAIN**

### **4.1. Increased Focus on Logistics Management**

Enterprises want to do a good job in the new era of logistics inventory management work, it must be from the top management, all the way down to the grassroots workers, from top to bottom, also set up on the logistics management of this work to form a correct perception. In the process of carrying out daily management work, do not feel that this management work is not important, to treat this work in a formalistic style. Must be the right mindset and work attitude and behaviour, to face the work of logistics management, to fully demonstrate their own talent and potential, in the work of logistics management to give full play to. In recent years, with the rapid development of social and economic, scientific and technological levels continue to improve as well as enterprise production and management pressures, challenges and so on continue to increase, if the enterprise does not pay attention to logistics management, it is very difficult to win the fierce competition in the market survival and development opportunities. Therefore, enterprises must attach great importance to logistics management, through the establishment of a sound management system and management, through the reform of management, so that the quality of the enterprise's logistics services to continue to improve, thereby reducing the cost of production, so that the company to obtain greater profits.

### **4.2. Optimizing the Organizational Structure of Stockpiles**

Logistics inventory management under the perspective of the supply chain, the need to break the original functional division of labour, in accordance with the operating procedures and related tasks for the recombination of functional management into a process management, the deletion of some unnecessary activities, the merger of the work content at the same time to simplify the process of creating a flat organizational structure, in order to improve the overall resilience of the system. Specifically, it is necessary to promote changes in business processes between manufacturers and suppliers, provide more scientific technical support for business processes, change the internal business processes and logistics management organizational forms, based on the overall operational needs of the supply chain, the complete elimination of possible organizational barriers, the spirit of

win-win cooperation embodied in the creation of a scientific inventory management organizational structure, and to eliminate problems of inventory management in the supply chain from the source. Inventory management problems from the source to eliminate, to protect the implementation of enterprise inventory management.

### **4.3. Establishment of Big Data Security Management System**

If enterprises want to achieve the desired goals in the process of protecting inventory management data, they must establish a unified big data security management system, through the layered establishment, layered protection, to achieve the effect of the platform capabilities and applications, to strengthen a variety of technical means, to start from the data life cycle or inventory management business data collection, storage, and so on at all stages, to increase the network of big data security propaganda. So that employees within the enterprise can establish the necessary security awareness, and effectively deal with a variety of information risks in the enterprise inventory logistics management. In addition, enterprises also need to timely rectification, or as far as possible to eliminate some of the security risks of data leakage, clear their own main obligations and responsibilities, as far as possible, the big data security system, carried out in the data analysis, processing of each link, to ensure the maximum degree of data authenticity and reliability, and to promote the enhancement of the enterprise network data security capabilities.

### **4.4. Improve the Overall Quality of Treasury Staff**

Change the traditional inventory management concept of management personnel, the formation of supply chain inventory management overall awareness, the most critical is to reflect the supply chain inventory management ideas in the specific decision-making, different positions in the implementation of the staff in the process of its implementation will be truly in place. Establishment of supply chain inventory management staff assessment mechanism, in order to ensure that the different decisions into the supply chain under the premise of the relevant assessment of employees in different positions, due to the staff's professionalism and comprehension of the different levels, through the punishment and reward mechanism to regulate the operation of employees to ensure that the specific implementation of the process and the decision-making process does not have a large discrepancy between the programs.

## **5. SUMMARY**

Inventory has become a long-term problem plaguing the development of logistics enterprises, research and analysis of inventory issues of great practical significance. The impact of inventory on the role of the whole logistics should not be ignored, too high inventory will take up too much money, so that the efficiency of the enterprise logistics operation is reduced, and inventory is too low will make the enterprise in the face of unexpected orders in short supply, so that the enterprise suffers losses. Scientific inventory management is a solid foundation and important guarantee for high-quality, modern enterprises, enterprises need to establish an efficient information transfer system to achieve the distribution of information in the supply chain nodes in real time to accurately grasp the information, promote the coordination and operation of the entire supply chain, and ultimately achieve the optimization of inventory management. In addition, for the entire supply chain to develop a reasonable inventory strategy, enterprises need to be based on the supply chain upstream and downstream, as well as logistics and production cycle and other factors, to develop a corresponding inventory strategy, and then solve the inventory management problem. To sum up, in the future supply chain management, enterprises need to pay more attention to information sharing, overall efficiency improvement and inventory strategy optimization, to further improve the efficiency of supply chain inventory management, so as to achieve the optimization of supply chain inventory management.

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