

# **Supply chain management and logistics distribution management measures under e-commerce environment**

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**Abstract:** In the era of Internet information, the development of my country's national economy is inseparable from e-commerce platforms. Supply chain management and logistics distribution management are important contents that promote the development of my country's industrial economy. The production and operation models of enterprises in different industries need to be equipped with a more complete supply chain service system, as well as logistics and distribution management functions. In the e-commerce environment, the development of refined management of supply chain logistics management requires the establishment of an informatization supervision mechanism to further improve the infrastructure construction environment of logistics and distribution.

## **1. Introduction**

Under the leadership of the Internet + industry model, all enterprises need to develop innovative supply chain models, combine e-commerce platforms with logistics distribution channels, and create a good logistics transportation environment. Production and operation enterprises need to be equipped with supply chain-related resource systems, cooperate with informatization supervision measures, make full use of market resources and Internet information resources, and enhance their core competitiveness. According to the current development status of my country's logistics industry, further in-depth research is needed from the two levels of supply chain management and logistics distribution management.

## **2. Problems in supply chain and logistics distribution management in the e-commerce environment**

### **2.1 The logistics sharing mechanism is not sound**

The unsound logistics sharing mechanism is one of the important issues that seriously affects the production and operation mode of enterprises. Many companies need to market products on the production line to customers, but at the level of supply chain management, the logistics sharing mechanism still has an imperfect problem. In order to avoid unfair competition, most manufacturers choose not to disclose the content of product data, but in the process of supply chain management, there will be problems with different information and data standards<sup>[1]</sup>. The unsound logistics sharing mechanism is mainly reflected in the incomplete service items in the supply chain and logistics distribution process. Many customers cannot choose the best solution through a clear data comparison process. Internet e-commerce companies need to rely on the relevant logistics distribution data information in the e-commerce platform, but there are still many problems in the logistics sharing mechanism. Production and operation enterprises need to change their thinking, coordinate the development of supply chain management mode and logistics distribution management mode, and further improve the current situation of logistics sharing.

### **2.2 Unmatched logistics and distribution information infrastructure**

Incomplete logistics and distribution information infrastructure will seriously affect the efficiency of enterprises in providing logistics services. Many e-commerce platforms need to be accurately connected with the enterprise supply chain management, but the logistics distribution information infrastructure is generally unmatched, and the intelligent supply chain management model is not coordinated with the logistics distribution system. Many companies are not adapted to the change in the roles of suppliers and distributors, and are unclear about the core objectives of logistics distribution management services. Many production enterprises have not established an information-based logistics distribution management mechanism, and cannot process a large amount of data information in the Internet e-commerce platform in a timely manner<sup>[2]</sup>. Incomplete logistics and distribution information infrastructure will seriously affect the development direction and economic benefits of production-oriented enterprises. The logistics and distribution information infrastructure of most enterprises is not perfect, unable to realize data and intelligent warehousing functions, and cannot realize high-quality management of product and service information in the supply chain. It is a very common phenomenon that the infrastructure of logistics and distribution information is not matched, and it is also the main factor that affects the production and operation of enterprises and the management of the supply chain.

### **2.3 Lack of informatization supervision**

The lack of informatization supervision is the main reason for the chaos in the supply chain and logistics management in the e-commerce environment. At the level of enterprise supply chain management, cost is a key factor affecting the efficiency of logistics and distribution management. In the e-commerce platform, a large amount of data and information can be generated every day, but the lack of effective informatization supervision measures cannot realize the scientific and intelligent supply chain logistics management content. The enterprise supply chain management model and the logistics distribution management model are restricted. The main reason is that the cost of logistics transportation is relatively high, and the dynamic balance between cost and expenditure cannot be achieved. The lack of informatization supervision has exacerbated many problems in enterprise supply chain management and logistics distribution management, and will also increase logistics and distribution costs, which is very unfavorable to the economic output of enterprises. The development model of each industry needs to be equipped with regulatory measures. Informatization regulatory measures are an important foundation for further improving the management of Internet e-commerce, and they are also the key to the logistics management of the supply chain of e-commerce enterprises.

## **3. Supply chain and logistics distribution management optimization measures under e-commerce environment**

### **3.1 Improve informatization data sharing mechanism**

Further improve the information-based data sharing mechanism, solve the problem of data islands in the field of e-commerce, and promote data exchange and sharing in the process of supply chain management and logistics distribution and transportation management. However, in the special e-commerce environment, enterprises still need to encrypt key data information to minimize network security risks. They can adopt an end-to-end data transmission mode to report relevant production and operation data to the network management platform. To improve the information-based data sharing mechanism, it is also necessary to deploy the key content of logistics distribution and transportation management and supply chain management systems in a timely manner to jointly maintain and ensure the security of information and data. To improve the information-based data sharing mechanism, not only need to store multi-source heterogeneous production and operation data types and unstructured data in the cloud, but also need to use big data technology and data exchange and sharing technology, through the gradual deployment of different security and confidentiality algorithms, further improve the supply chain logistics management

system under the e-commerce environment.

### **3.2 Strengthen infrastructure construction**

Strengthening the construction of infrastructure is the key content of promoting the innovative development of business in the e-commerce platform, and it is also an important foundation for promoting the coordinated development of e-commerce and logistics systems. The main goal of strengthening infrastructure construction is to shorten the difference between regions, effectively improve the efficiency of supply chain management, and enhance the capacity of logistics distribution and transportation. Strengthening infrastructure construction requires not only improvements at the hardware level, but also the deployment of software application resources. Many production and operation enterprises need to strengthen product supply and marketing capabilities at the management level of the supply chain, but they still need to scientifically deploy resource coordination methods. Strengthening the construction of infrastructure can promote the innovation and reform of logistics, transportation and distribution. It can also further improve the internal management capabilities of the enterprise and gradually form a virtuous circle system. To strengthen infrastructure construction, it is also necessary to pay full attention to the information exchange between e-commerce enterprises, and to use information technology scientifically, rationally and efficiently to reduce the problem of resource asymmetry and the incoordination of cost-value ratios.

### **3.3 Innovative supply chain and logistics distribution management mode**

Innovating the supply chain and logistics distribution management model requires data as a driving force to strengthen the construction of a business management system in an e-commerce environment. Many production and operation enterprises need to implement innovation and reform work from the two levels of material resources and human resources. Innovative development model requires companies to proceed from different fields and technologies, further improve the integration model of production and education, carry out innovative design of existing talents and products, and further enhance innovative R&D capabilities. Both supply chain management and logistics distribution management content require good environmental support, reasonable resource allocation, and enhancement of enterprise innovation and R&D capabilities. Many suppliers and distributors need to improve the supply chain management system from the perspective of enterprise management, from product R&D and design to innovative reform of marketing methods, and coordinate with the logistics distribution and transportation mode to further deepen and consolidate the e-commerce business environment. Innovating the supply chain and logistics distribution management model, it is also necessary to further improve the construction of a professional talent team.

## **4. Conclusion**

Production and operation enterprises need to be equipped with supply chain-related resource systems, cooperate with informatization supervision measures, make full use of market resources and Internet information resources, and enhance their core competitiveness. The production and operation models of enterprises in the same industry need to be equipped with a more complete supply chain service system, as well as logistics and distribution management functions. In the special e-commerce environment, enterprises still need to encrypt key data information to minimize network security risks. They can adopt an end-to-end data transmission mode to report relevant production and operation data to the network management platform.

## **References**

[1] Jiang Zou, Yujia Chen. Research on optimizing the e-commerce supply chain system of agricultural products for small and medium-sized enterprises [J]. Enterprise Technology and

Development, no.12, pp.116-120, 2020.

[2] Fan Zou. Optimization of enterprise logistics and supply chain management under e-commerce environment [J]. Investment and Cooperation, no.06, pp.102-104, 2020.