

Development of Enterprise Logistics Informatization and Its Application in Supply Chain Management

Yinlei Chen

Henan Finance University, Zhengzhou 451464, China.

Abstract: In recent years, under the background of rapid iteration of high and new technology, the continuous acceleration of information construction provides a good guarantee for the development of enterprises. Logistics information construction has become the core task of enterprise development. With the continuous improvement of people's living standards, the market begins to put forward higher requirements for the logistics information construction of enterprises. At the same time, logistics informatization is also of great significance to supply chain management. Therefore, in the current development, relevant enterprise managers should be clear about the problems existing in the development of logistics informatization construction, and be able to continuously optimize and improve the existing problems. At the same time, relevant personnel engaged in management work should clarify the application of enterprise logistics informatization in supply chain management, promote the efficient development of this management work, and meet the high requirements for enterprise supply chain management under the background of rapid social development. Therefore, to carry out the establishment and operation of supply chain, we must recognize the importance of supply chain management. This paper explores the development of enterprise logistics informatization and its application in supply chain management, in order to provide some references for the solution of enterprise development problems.

Keywords: Enterprise Logistics; Development of Informatization; Supply Chain Management; Application

Introduction

At present, China's logistics information construction has made great progress, but there is still a certain gap with developed countries. At present, China has formulated relevant policies to promote the development of logistics informatization. However, the ecological environment of large logistics has not been formed, all links can not be fully connected, the comprehensive transportation efficiency is relatively low, and informatization is still in the primary stage, which can not realize the synchronous operation of logistics and financial flow, resulting in the restriction of the development of logistics industry. Each logistics company cannot form a benign ecological environment, which limits the overall development of the logistics industry and has not yet formed the thinking mode of large logistics. The development of the logistics industry is affected. The information-based platform management also limits the logistics development. The logistics industry still has a large room for rise. It is necessary to constantly make internal adjustments to seek better development.

1. Content and Significance of Enterprise Logistics Informatization

1.1. Content

The lag of logistics informatization is easy to affect the development of enterprises, and the final growth is slow, which is difficult to meet the requirements of the market for efficient logistics. In the context of rapid technological change, informatization has affected the work deployment in various fields. On this premise, enterprises focus on the construction of information logistics, which can not only help the development, but also meet people's high requirements for the efficiency

of commodity distribution. In the traditional enterprise development, it is precisely because its distribution service can not meet the requirements of users, which leads to the continuous decline of market competitiveness and seriously affects the stable and rapid development of enterprises. The implementation of enterprise logistics informatization construction can effectively meet this demand, promote enterprises to take informatization as the basic technical premise in the process of carrying out logistics work, rely on the powerful computing power of computers to continuously optimize logistics distribution services, meet the high requirements of users for logistics work, and promote the prosperity and stability of society. At the same time, relevant management staff should deeply understand the important role of enterprise logistics informatization construction in the internal construction of enterprises and improving market competitiveness under the background of the continuous development of information construction, and be able to grasp its characteristics and advantages, so as to finally ensure that enterprises can keep pace with the times in the increasingly competitive business society.^[1]

1.2. Significance

First of all, the emergence of logistics informatization can minimize the cost of logistics and improve the operating efficiency of enterprises. Whether it is enterprise logistics or logistics enterprises, how to reasonably allocate their own logistics resources, how to optimize the workflow of logistics management, and how to reduce costs and improve benefits are all problems that enterprises must solve. The application of logistics informatization can urge enterprise managers to make the best choice of transportation route with the help of intelligent planning, and then formulate scientific and perfect working methods, and plan the transportation volume, demand and cost expenditure of logistics, so as to obtain ideal economic benefits.

Secondly, the emergence of logistics informatization can greatly improve the quality and efficiency of logistics delivery. The current logistics is not only the transportation of goods, but also the transmission of information. We need to realize that the application purpose of logistics informatization is not to reduce the consumption of manpower and save costs, but to improve the quality and efficiency of logistics delivery, so as to enhance the market competitiveness of enterprises. Logistics informatization is mainly composed of material purchase, sales, storage, transportation and other links, such as making purchase and sales plans, selecting appropriate suppliers, analyzing the actual needs of customers and so on. With the help of these activities, we can not only provide reference for decision-making, but also make full use of the existing resources of the enterprise, so as to realize the excavation of the internal potential of the enterprise and the construction of external favorable business factors.

2. Application of Enterprise Logistics Informatization in Supply Chain

Management

Through the development of supply chain technology, it can provide better information for the development of supply chain technology. Because the supply chain management covers a wide range, there are not only the connections between enterprises, but also the connections between enterprises. The use of information technology can better clarify the development objectives of enterprises, and combined with the development power of enterprises, enterprises can have advantages in market competition. Because information technology has a wide range of applications, including not only communication technology, but also microelectronic technology. For example, bar code technology appeared first, which can provide accurate data support for its supply chain management.

2.1. Radio Frequency Technology

Radio frequency technology uses radio waves to realize communication on a non-contact basis. Through the use of electronic data exchange, it can provide accurate information and data support for its enterprises in the process of supply

chain management, reduce the investment of human and material resources, achieve better results, and promote the stable development of enterprises. Because supply chain management is a new concept of enterprise logistics, in which its supply chain management can be implemented into the whole enterprise logistics management through the use of information technology. In the links of raw material procurement and assembly, the logistics and information flow can be defined, controlled and coordinated by computer in time. Supply chain management under enterprise logistics informatization can reduce its cost and better provide customers with corresponding services, which is also a major method for enterprises to compete in the market.^[2]

2.2. Artificial Intelligence Technology

In the current context of rapid development, artificial intelligence technology has been applied to various fields, but also plays a very important role in promoting. Therefore, in the process of enterprise logistics supply chain management, relevant management staff should clarify the important impact of the application of artificial intelligence technology on work efficiency and quality, so as to implement the application and lay a good technical foundation for the efficient development of enterprise logistics work.

Low processing efficiency of special commodities and difficult to meet the needs of users is a problem often encountered by enterprises in supply chain management. The application of artificial intelligence technology in logistics informatization can effectively solve this problem. In the traditional supply chain management, due to the high requirements for manpower and work accuracy, the labor cost is too high and the economic benefit is low. The application of artificial intelligence computer can promote the computer to effectively replace manpower, and ensure the accurate development of work, which provides great convenience for the processing of specific goods in enterprise supply chain management. Therefore, we should clarify the positive impact of information-based artificial intelligence technology on logistics information construction, so as to ensure that this work can be carried out efficiently and meet the high requirements of supply chain management for its technology update. At the same time, enterprises should deeply understand the important impact of supply chain management on enterprise development, and constantly strengthen the construction of logistics informatization. Moreover, relevant managers should also improve their own ideological understanding, effectively apply artificial intelligence technology to supply chain management, ensure the improvement of work efficiency, and lay a good foundation for enterprise development.

With the help of artificial intelligence technology, supply chain management can ensure the efficiency of supply chain management, take information as support, realize the manual control of logistics transportation, and determine the transportation planning and arrangement according to the date of goods. The expert system can also capture and manage logistics information, provide effective data, and ensure that the supply chain can realize relevant functions. With the help of the change of communication mode, information can be transmitted faster. In general, communication technology is mainly used in management and transportation. With the help of network platform, understanding the transportation of goods and real-time monitoring of goods can ensure the final management effect of supply chain.^[3]

2.3. Barcode Scanner

The delivery and warehousing of goods has high requirements for the ability of enterprise supply chain management. However, in the process of this work, due to its high requirements for labor intensity and great difficulty in organization and management, it is easy to lead to low work efficiency and difficult to meet the requirements of normal work of the supply chain. Therefore, enterprises should attach great importance to technological innovation and optimization to ensure good technical support for goods in and out of the warehouse, and finally ensure the orderly development of follow-up work. In the work of goods in and out of the warehouse, the application of barcode and scanner in logistics information construction can effectively meet its work requirements, ensure the high efficiency and high quality guarantee in the process of work, and lay a good prerequisite and foundation for the efficient development of this work. By labeling the bar code on the outer package

of goods, scanning the bar code with a scanner in the process of warehousing and warehousing, and transmitting the relevant data information to the computer in real time, the problem of missing parts can be avoided and the work efficiency can be effectively improved. At the same time, the application of this method can reduce human investment and effectively optimize the cost control of enterprises.

3. Problems of Enterprise Logistics Management Informatization

3.1. The Traditional Logistics Management Thought is Serious, and the

Innovation Consciousness of Logistics Management Informatization is

Weak

At present, most logistics enterprises adopt traditional management methods and lack of innovation in logistics management informatization. Even if some enterprises adopt logistics management informatization, they are based on the original traditional business, lack of modern and standardized logistics management informatization standards, and lack of informatization and fast management mode for product production, supply, sales, storage and transportation. The lack of innovation in logistics management informatization leads to the non-standard standard of logistics informatization system, the difficulty of forming a strict system in the process of logistics, the frequent problems in the supply chain between logistics and the lack of information sharing. The insufficient application of logistics informatization technology has resulted in the waste of a large number of investment resources, increased the cost of logistics management and transaction costs, and reduced the market competitiveness of enterprises. The weak awareness of logistics management informatization is also reflected in the following aspects. With the gradual development of informatization in modern logistics, few enterprises still separate the logistics management informatization department from the enterprise and become an independent department. Logistics management informatization only depends on the whole unit, and there is no special person responsible for the whole informatization process, the informatization of logistics management has no planning and design, and the role of informatization in modern logistics management is still limited.^[4]

3.2. Lack of Institutional System

In the development of enterprises, a perfect system is an important prerequisite to ensure the efficient and stable development of employees' work. But, from the perspective of today's enterprise logistics work, due to the relevant managers' failure to pay attention to the implementation and improvement of the management system, there are problems of lack of management or inadequate implementation of management work in the process of work development, which seriously hinders the stability and development of the enterprise. In the process of enterprise logistics work, the management of staff is an important prerequisite and foundation. However, due to the rapid development of enterprise logistics informatization, the establishment and improvement of management system can not be synchronized with it, resulting in the lag of enterprise logistics work, which is difficult to meet the high requirements of enterprise development for internal management. Therefore, in the current process of enterprise logistics work, relevant management staff should improve their ideological cognition, clearly recognize that a perfect management system is the basis of informatization, and integrate this consciousness into work practice to promote the improvement of enterprise management level and meet the high requirements of enterprise development for logistics work.

3.3. Low Professional Level of Employees

The informatization process of enterprise logistics is limited by the professional level of employees, so that employees will inevitably have problems in the process of operation. It is not only necessary for employees to understand the basic

application operation, but also to flexibly use the informatization system. In addition, enterprises have not standardized the work requirements for data collection and sorting in time, which can easily lead to data loss and errors. Once this situation is more serious, logistics informatization will not help enterprises develop.

4. Strategies to Solve the Problems in the Construction of Enterprise

Logistics Informatization

4.1. Attaching Importance to Logistics Management Informatization

At present, the theory and technology of enterprise logistics are gradually improving in the process of applying information technology, so we should pay more attention to logistics information management. In the process of building informatization, enterprises should be able to update and reform their management according to their own actual characteristics and future development goals, so as to better improve the level of logistics informatization management and make their development strategy better penetrate into all departments of the enterprise. In the process of building the management system, the enterprise must carry out on the basis of its own actual situation to ensure that its management system meets the future development needs of the enterprise, and can also make rational use of corresponding information technology resources to help the enterprise better establish internal and external information systems and use information technology to optimize the development of enterprise logistics, So that enterprises can obtain more ideal economic benefits under limited resources.

4.2. Giving Play to the Leading Position of the Government

Logistics informatization construction is a long-term systematic project. As a part of public resource construction, it involves many departments and requires huge investment, so it needs the support of the government. The government plays a leading role in the process of logistics information construction. It should give full play to its role of macro management, make full planning and coordination of various tasks with the help of network technology, and carry out the reform of logistics industry by issuing strong policies. Government agencies should first formulate clear prediction plans and implement effective programs against the background of development goals, form a clear development plan, take the logistics information construction as an important part of the development of the national economy, pay attention to the value of information networking, strengthen the construction of information platform system, develop new platform structure and provide financial support. At the same time, social institutions should be encouraged to increase investment in the logistics industry. Government departments strengthen coordination and cooperation with industry associations and obtain strong support through cooperation with them. At present, the industry that has achieved remarkable results is the procurement federation. The cooperation between the procurement federation and China's logistics industry has gradually accelerated the process of industry informatization. In addition, we can also investigate specific successful cases and corresponding promotion and introduction work, clarify the current problems, understand our own advantages, form a standardized standard template and implement various predetermined schemes.

4.3. Strengthen Staff Training

At present, enterprises generally encounter the problem of low ability level of employees in the process of logistics information construction, which affects the sustainable development of enterprises. Therefore, enterprises should pay attention to strengthening the training of employees to promote them to fully absorb and apply relevant information technology while participating in logistics work, so as to lay a good premise and foundation for the rapid development of information technology. Relevant management staff should clearly recognize the significance of employee training to the construction of enterprise logistics informatization and the sustainable development of enterprises, so as to continuously

implement this deployment, ensure that employees can effectively apply information technology in the working process, and meet the high requirements for the improvement of the ability of enterprise employees under the background of rapid development. In daily work, there are many platforms that can learn relevant technologies. Enterprises should provide employees with opportunities for self-learning. At the same time, there are many resources on the Internet that can be used for absorption and integration to form internal training resources.

4.4. Strengthen the Construction of Information Platform

At present, enterprises have taken a number of feasible measures to promote the construction of logistics public information platform, and have preliminarily realized market-oriented operation and the coordination of industry associations. For logistics public information platform, multiple principles need to be followed in system construction to ensure that the information platform is more convenient, mutually beneficial and complete. First of all, we should deepen our understanding of the importance of logistics information construction. Logistics information construction is closely related to the modernization of logistics enterprises, and is directly related to the operation quality and efficiency of the national economy. China's logistics industry is still in the primary stage of development, its own application level is relatively low, and it lacks the necessary logistics information technology as support. The high cost of logistics transportation and the lack of professional technology lead to low overall efficiency. Therefore, we should consider the limitations of enterprise logistics development from the strategic dimension and strengthen the cognition of the importance of logistics informatization. Secondly, we should also improve the level of logistics information construction. Logistics information construction needs to start from three dimensions. First, we need to do a good job in docking with the customer information system, so as to form a complete supply chain, create a more efficient and convenient platform, and take informatization as a key tool to improve the overall competitiveness and ensure the more efficient development of the supply chain. Second, we also need to ensure the smooth collection and exchange of information and data, optimize and integrate internal resources, ensure the standardization of processes, and reduce the cost of the whole link. Third, we also need to do a good job in the processing and mining of information, constantly optimize the existing policies, and transform information into knowledge as the theoretical basis for policy-making. At present, China has formed a complete link of information system management, including financial management, warehouse management, order management and transportation management, but the specific level of the project still has some room for improvement.^[5]

Conclusion

In a word, supply chain management can fully cover the external logistics transportation work and internal logistics management work of the enterprise, which provides an important boost for the rapid development of the enterprise. As an important tool of supply chain management, information technology plays a more and more important role in today's supply chain system and provides an important tool guarantee for the development of logistics.

References

- [1] Hu YQ. Analysis and countermeasures of logistics cost in China's manufacturing industry under the condition of informatization. *Electronic Commerce*, 2020 (12): 12-13.
- [2] Wang K. Research on the construction of third party logistics enterprise information system under the background of new infrastructure construction. *Journal of Hechi University*, 2021,41(1):71-77.
- [3] Yang ZM. Research on problems and countermeasures of enterprise logistics management informatization. *China Logistics & Purchasing*, 2020(20):42-43.
- [4] Zhou FM. Analysis on the logistics management strategy of small and medium-sized enterprises based on Internet thinking. *China Logistics & Purchasing*, 2020(19):67-68.
- [5] Lin DY. Development of enterprise logistics informatization and its application in supply chain management. *Modern Marketing*, 2020(11):44-45