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Research on the development path of logistics management innovation in e-commerce environment

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Abstract. The rise of e-commerce has caused changes in the development of logistics management, which is both an opportunity and a challenge for the logistics industry. This paper first describes the current problems faced by logistics management innovation, and then describes the characteristics of logistics development in the e-commerce environment, and then puts forward specific countermeasures for the innovation and development of logistics management under the e-commerce environment. Finally, the conclusion is drawn: with the development of e-commerce, the logistics industry will also keep pace with the pace and make substantive breakthrough under the management innovation.

1. Introduction

In recent years, e-commerce has been developing rapidly, and the network information technology that e-commerce relies on has become an important means for the development of logistics industry. However, there are still some problems in the domestic logistics industry, such as the imperfect infrastructure construction, the low level of informatization, the lack of professional talents, and the lack of standardized logistics distribution system and management system. The past logistics management mode obviously can not meet the needs of e-commerce under the new situation. Facing this new situation, logistics management must be innovated to get better development.

2. Problems faced by logistics management innovation

2.1. Infrastructure construction is not perfect

Although China's logistics industry has developed rapidly in recent years, compared with some developed countries, China's logistics infrastructure is still relatively backward, mainly reflected in communication facilities, cargo handling, storage and transportation, which restrict the further development of China's logistics industry. With the development of e-commerce, the speed of goods delivery has been improved, but the traditional logistics infrastructure can not meet the demand. In addition to the lack of necessary auxiliary facilities, repeated construction and poor compatibility of facilities will also affect the logistics efficiency and the use of infrastructure.

2.2. Low level of informatization

At present, the development of logistics management informatization in China is still relatively low, there are problems such as low comprehensive strength of information technology, late development

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and lack of national policy support. Informatization is a major direction of logistics management innovation. Operation information technology can realize cross regional, cross departmental and cross industry coordination and interaction, which is of great significance to the innovation and development of logistics industry. However, the low level of information technology in China's logistics management makes the operation of the logistics industry too dependent on manual work, which can not realize automation and intelligence.

2.3. Lack of professionals

Logistics management innovation needs talents with both professional knowledge and management knowledge. However, there is a lack of logistics management related professionals in China, which not only hinders the healthy development of logistics industry to a certain extent, but also reduces the quality of logistics management and service level. The development of modern logistics industry urgently needs professional logistics management talents. Although many domestic colleges and universities have set up logistics major, the number and quality of trained personnel can not meet the needs of the current social development.

2.4. Standardized logistics distribution system and management system has not yet formed

The logistics distribution system in China's e-commerce environment is not mature. The main reasons include the following three aspects: firstly, the network communication service and information consultation system in logistics distribution are not perfect. Secondly, many logistics enterprises have not yet implemented the Internet operation mode. At present, the most commonly used method is information transmission and intelligent control, but this is only at the written level. At present, many logistics companies are unable to provide users with objective and timely logistics management information. Finally, the standardized logistics management system has not yet formed, and there is a lack of unified evaluation standards. In addition, some companies blindly adopt foreign evaluation standards and ignore the specific situation of local logistics management. It hinders the acceptance of logistics chain and seriously affects the efficiency of logistics distribution.

2.5. The scale of enterprises is small, which is greatly affected by market risk.

In the competitive market economy environment, although there are many logistics companies in our country, there are no companies with real strength and scale effect. The main reason lies in the lack of sufficient funds and comprehensive management personnel, resulting in the current situation that there are many small and medium-sized logistics enterprises but few large-scale logistics enterprises. At the same time, because most of the logistics companies in China adopt the same mode, lack of innovation and repeat business forms, it is difficult to promote the development of many logistics companies. Because most logistics enterprises are small in scale and lack of funds, the corresponding enterprises are relatively weak in strength, insufficient in scale and few in service items, which are greatly affected by market risks.

3. Characteristics of logistics development

3.1. Informatization

Informatization is not only reflected in commodity selection and electronic payment, but also fully reflected in the whole logistics process. Large logistics companies usually set up information processing centers to accept orders from all over the country. The establishment of information processing center can timely understand the needs of customers without waiting for customers to place orders. Through the information system, customers can clearly understand the exact time and place of goods arrival, so that the consignees, storage companies and transportation companies can make timely, rapid and accurate preparations for the arrival of goods. Through the information processing center, sales feedback can also be obtained from retailers. A good information system can realize the digitization of logistics information expression, the mechanization of information processing, the



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automation of information search, the systematization of information management, the networking of information transmission and the personalization of information query.

3.2. Humanization

The development of modern logistics is characterized by humanization, which requires enterprises to adapt to the changes of e-commerce environment, circulation environment and consumption environment, and operate according to the needs of customers. The production activities of enterprises need to be carried out according to the actual needs of customers and the market, and the production time also presents a trend of rapid development. The development of e-commerce has changed the demand from large batch to targeted small batch, personalized and rapid development is the future development trend.

3.3. Science and technology

With the rapid development of e-commerce and the need of humanized development, both consignees, storage companies and transportation companies need to understand the status of goods in real time. Therefore, logistics enterprises need to use modern high technology to exchange a large amount of data in their e-commerce activities. Through mobile, portable data terminals or global positioning system (GPS) signal receiver to collect location information, and store or transmit the obtained data to logistics e-commerce server, and use geographic information system (GIS) and global positioning system (GPS) to transmit cargo transportation information, and use radio frequency and bar code technology to reflect cargo information.

4. Countermeasures of logistics management innovation and development in e-commerce environment

4.1. Strengthening the cultivation and introduction of professional talents

With the progress of science and technology and the trend of economic globalization, there is a demand for logistics professional management talents in the e-commerce environment. High quality logistics management personnel is an important guarantee to ensure customer service quality, logistics operation efficiency and enterprise competitiveness. In terms of personnel training, we can use the government, universities, scientific research institutes to train logistics talents under the new situation of e-commerce, so that the front-line logistics practitioners and managers can update their logistics professional knowledge through training. Logistics enterprises can also introduce advanced technology and talents, learn advanced technology and management concepts from abroad, or send talents interested in e-commerce logistics to train abroad, strengthen the introduction of advanced management concepts, and constantly improve the level of logistics management innovation. The introduction and learning of modern logistics management concepts and methods can quickly reverse the backward situation of low production capacity, low efficiency and low service level in domestic transportation market. First of all, we must strictly manage the qualification of logistics service companies; secondly, we should take the large and medium-sized transport companies as the leading, market-oriented, and develop on the road of large-scale, intensive and professional operation. Finally, it is necessary to break the regional boundaries and establish a national service network.

4.2. Improve infrastructure construction

Infrastructure construction is the premise of logistics management innovation and development. If enterprises want to have long-term development, improving infrastructure construction is a necessary way. Logistics management is not only the transportation of goods in the traditional sense, but also the distribution and storage of goods. Therefore, in order to better promote the development of logistics enterprises, it is necessary to increase the investment in logistics facilities on the basis of some logistics infrastructure construction and according to the new requirements of logistics management in e-commerce environment.



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4.3. Strengthen legislation and perfect laws and regulations

In order to better promote the development of logistics management, the government needs to improve the corresponding laws and regulations, strengthen the management and control of the logistics industry in the e-commerce environment, and eliminate various obstacles between different regions. In recent years, due to the lack of coordination and management confusion of government functional departments, the logistics industry management in different regions of China is different, and even some regions have artificially set up policy protection and restrictions to protect and support local logistics enterprises. Therefore, the logistics industry is difficult to get rapid development. As a powerful weapon to strengthen logistics, communication and cooperation between enterprises is an important way to promote the national logistics integration.

5. Conclusion

To sum up, because of the influence of e-commerce, the development of logistics in China presents the characteristics of informatization, humanization and technology. Although there are some problems in the development of China's logistics industry, as long as the cultivation and introduction of professionals are strengthened, infrastructure construction is gradually strengthened, and laws and regulations are gradually improved, the logistics industry still has a good development prospect.

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