

Research on Third Party Logistics Management Mode and Information System Based on Cloud Platform Mode

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Abstract: Logistics enterprise management is usually managed by information system, which can realize information sharing among customers, logistics enterprises and suppliers, and has great influence on the development of logistics enterprises. With the continuous expansion of economic globalization, the rapid development of high technology and the emergence of third-party logistics with logistics service as its core business, logistics resources have been rationally allocated, and the core competitiveness of manufacturers and logistics providers has also been enhanced. They don't belong to the supply chain of logistics products, but are the third party of transportation, but they serve the supply chain of production films by providing a series of systematic logistics services. The emergence of third-party logistics under cloud computing platform is not only to improve the service level, but also to provide users with better resources through computer system. This paper will analyze and study the third party logistics management mode and its information system based on cloud platform mode, so as to bring certain positive influence for its development.

1. Introduction

With the development of social economy, in the market operation, some manufacturing enterprises usually take the way of contracting logistics business to third-party logistics enterprises, so as to reduce their business burden, so as to have more time to invest in the work of improving comprehensive competitiveness [1]. The third party logistics, starting from the customer's own needs, optimizes and improves the enterprise logistics resources in the supply chain through a series of intermediate links, and has the management characteristics of reducing costs and improving efficiency [2]. The emergence of the third party logistics is to improve the efficiency of logistics and serve the logistics. It aims to rationally allocate logistics resources and enhance the core competitiveness of logistics providers and goods manufacturers. The third-party logistics management system based on cloud computing can improve the service level and management quality of logistics providers and goods manufacturers, and make the work more efficient and practical [3]. At present, informatization is an inevitable trend for third-party logistics. Efficient management of informatization and information integration to provide differentiated and innovative services are the expected development modes of third-party logistics. It is a very appropriate choice for third-party logistics to use cloud to realize informatization [4]. In order to improve the core competitiveness of logistics suppliers and manufacturers, it is necessary to optimize and improve the supply chain, control the resource cost reasonably and improve the work efficiency.

In the process of market operation, some manufacturing enterprises will contract logistics business to third-party logistics enterprises, thus dispersing their own business pressure and paying more attention to improving their market competitiveness. With the development of social economy and the great influence of Internet on us, the level of logistics informationization can no longer meet the development needs of modern market economy, and it is worth considering that goods should be delivered to consumers quickly [5]. The third-party logistics enterprise is an enterprise that manages, controls and provides logistics services for external customers. They don't belong to the supply chain of logistics products, but are the third party of transportation, but they serve the supply chain of production films by providing a series of systematic logistics services. Third-party logistics plays a connecting role in all aspects of manufacturing and production, and plays a management role of business process coordination and arrangement, which plays a very important role in the normal

operation of enterprises [6]. In order to improve the informationization ability and service level of the third-party logistics enterprises, it is particularly important to develop and use an efficient, accurate and practical management information system [7]. This paper will analyze and study the third-party logistics management mode and its information system based on cloud platform mode, so as to bring certain positive influence to its development.

2. Analysis and Design of Third Party Logistics Management System

2.1 Demand Analysis of Logistics Management System

With the development and popularization of information technology, China's logistics industry is gradually moving towards the direction of modernization, thus establishing the corresponding credit physical information system, in order to continuously improve the work efficiency and service quality of the logistics industry. To develop a good system, it is necessary to analyze the needs of users. Only by fully understanding the actual needs of users can we capture the actual value of the system and complete the basic functions of the system. In the logistics information management system, the contract management module is closely related to other modules, and is also the core module of the system [8]. It provides settlement criteria for receivables and receivables of each business. In the event of an accident, claims can also be settled according to the provisions of the contract. From the perspective of business requirements, the system can be divided into front-end customer part and background management part. The system can list the tips for the problems that users often encounter in the process of using, and even help them solve the problems in time, so as to let the users understand and use it as soon as possible. From the perspective of business requirements, the third-party logistics management system can be divided into front-end customer service part and background management part. The core data processing is in the background management, including customer information management, warehouse goods management, transportation management, order management, financial management [9].

When a large number of users visit the website concurrently, the system needs to respond within the time satisfied by the user and provide the service required by the user, which is likely to cause the whole server to run abnormally or crash instantly. Therefore, the high reliability of system software is particularly important. As shown in Figure 1 is the conceptual model of cloud platform mode and urban third party logistics system.

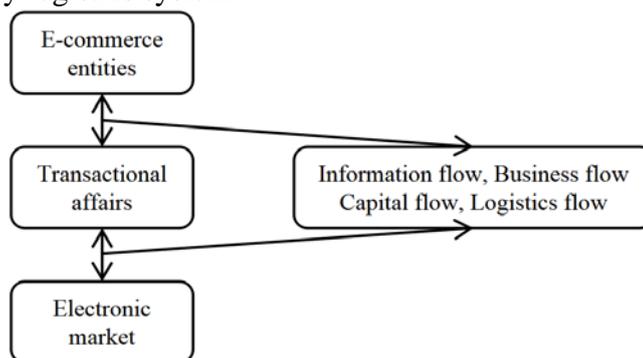


Fig.1 Cloud Platform Model and Conceptual Model of Urban Third-Party Logistics System

In actual operation, logistics enterprises, suppliers and customers will sign contracts in written form. However, due to the influence of historical customs and other aspects, the content and form of contract signing are generally inconsistent. Therefore, it is necessary to establish a standardized contract management system. With the rapid development of high-tech technology, the developed management system should be in a leading position for a certain period of time, keep the advanced nature in the software life cycle, and fully meet the requirements of processing information and data in the logistics process. In order to establish a perfect third-party logistics information management system, the corresponding enterprises need to actively use advanced information technologies such as the Internet and EDI, and then effectively connect the business outlets of the third-party logistics

enterprises through specific network platforms, so as to realize systematic management and bring a certain positive impact on the development of the third-party logistics enterprises.

2.2 The Functional Structure Design of the System

In the treatment of quality accidents, the corresponding data should be viewed through the interface of transportation quality, and the quality should be evaluated and analyzed. Finally, the customer should be contacted to discuss the treatment plan, and the defective products with quality problems should be properly handled. In logistics operation, some samples can be made in advance as quality reference, and the quality of logistics operation can be evaluated regularly, which can not only significantly improve the quality of logistics service, but also greatly reduce the probability of customer complaints. Usually, in order to realize a complete software structure, developers need to divide complex business functions into small function implementations, and determine which modules the system software contains and their connections according to the decomposed function modules. Logistics enterprises usually calculate the quantity of transportation and storage in years, in which expenditure insurance refers to the envelope price negotiated with insurance companies, and income insurance refers to the income obtained from vehicle transportation and warehouse cargo insurance. In order to realize a complete management system, it is necessary to divide complex business functions into small function realizations with the idea of modularization, and determine the hierarchical structure and the relationship between each module according to the divided function modules.

3. Development Measures of Third Party Logistics Information Management System

3.1 Government Provides Policy Support

In order to promote the rapid development of third-party logistics information management, the government should actively provide policy support for it, increase the supply of supporting facilities, launch targeted support plans, and formulate activity systems. The design principle of logistics system has always followed the transparency of each part of operation, and its main design purpose is to effectively improve the efficiency of logistics activities and the processing speed of logistics information. The quality of logistics system directly affects the cooperative relationship between users and manufacturers. In order to make the third-party logistics enterprises get greater development, the government can give them some help from three aspects, namely, the supply of supporting facilities, the corresponding support plan and the formulation of activity system [10]. The general suggestions for the development of logistics industry are as follows: relative supporting policies, supply of supporting facilities and formulation of activity system. The government's supportive policies for the logistics industry are conducive to the orderly and internationalized process of the logistics industry. The government's support for the third-party logistics industry will promote the sustainable development of the industry, and it will also enable China's logistics industry to embark on a systematic and standardized road. Therefore, the government should formulate a series of development plans related to the logistics industry, so that the functions of various departments in the government can be brought into full play.

With the rapid development of science and technology, system development has been in a leading position. On the premise of data accuracy and cost control, advanced and advantageous technology products should be adopted as much as possible to avoid time leakage and ensure data security. In order to realize the normal operation of logistics enterprises, they need to absorb more investment funds through various channels to provide financial power for their own development. In view of this situation, the government can formulate bank loan regulations for logistics enterprises and provide government support according to the development needs of the logistics industry [11]. In order to make the third-party logistics develop continuously and stably, the related enterprises should continuously broaden the financing channels, so as to obtain a large amount of financial support, thus promoting the development of enterprises. Therefore, according to the development needs of the industry, the government can formulate targeted bank loan regulations for

logistics enterprises, and actively support third-party logistics enterprises in terms of policies.

3.2 Strengthen Cooperation with Related Enterprises

If anything wants to get sustainable development, it needs continuous innovation. The third-party logistics enterprises are also the same. In order to implement the innovation strategy, we can make full use of the information technology of credit as the main way, and make use of the advantages of the large number of small and medium-sized enterprises, and build a new network logistics organization. In these logistics enterprises, especially the small and medium-sized third-party logistics enterprises, they need to cooperate, coordinate and alliance with other enterprises, so as to improve their market competitiveness and promote their further development. China's current third-party logistics industry has the shortcomings of small scale and single service items, and the same industry is increasingly fierce and disorderly in the market competition [12]. Therefore, the government should formulate scientific and reasonable policies according to the current development of logistics industry. Third party logistics enterprises can establish a network logistics organization through modern information technology and the characteristics of small and medium-sized third-party logistics enterprises, such as large number and wide popularization range. Not only that, in terms of logistics services, related enterprises should also actively innovate in this regard, fully understand the actual needs of customers, learn from foreign advanced management experience and related technologies, and provide better logistics services for customers. From the overall point of view of the logistics industry, small and medium-sized enterprises should strengthen the cooperation with other enterprises to gradually enhance their market competitiveness, stand firm in the fierce competition, and realize the sound and rapid development of enterprises.

4. Conclusions

Due to the development trend of economic globalization, networking and specialization, China's third-party logistics system should continue to develop and innovate. With the development of science and technology, the information age has come, and all walks of life in society are actively integrating with new information technology to realize their own development. Third-party logistics management is no exception. We should make full use of information technology, establish and improve logistics information management platform, and make China's logistics industry embark on a systematic and standardized road. In order to promote the rapid development of third-party logistics information management, the government should actively provide policy support for it, increase the supply of supporting facilities, launch targeted support plans, and formulate activity systems. Third-party logistics enterprises can create a networked logistics organization through modern information technology, taking advantage of the large number and wide popularization of small and medium-sized third-party logistics enterprises. From the perspective of logistics industry as a whole, small and medium-sized enterprises should strengthen cooperation with other enterprises, so as to gradually enhance their market competitiveness, gain a firm foothold in the fierce competition, and achieve sound and rapid development of enterprises.

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