Research on Sharing Logistics Information Platform Model based on Computer Big data Technology

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Abstract. A few years ago, computer big data was still in the stage of concept speculation, but since the 13th five year plan outline pointed out that the national computer big data strategy should be implemented, the situation has changed greatly. The computer big data logistics information platform takes computer big data and Internet of things as the core support, integrates cloud computing, mobile Internet, artificial intelligence and other technologies to provide process visualization, dynamic tracking and integrated intelligent logistics services for relevant users. On this shared information platform, the relevant entities can realize real-time data exchange and information sharing, which greatly improves the operational efficiency of logistics integration of upstream and downstream enterprises in the supply chain, and promotes the development of local economy \textsuperscript{(1)}.

Keywords: Share, Logistics Information, Big Data Technology

1. Introduction

It accelerates the transformation of data thinking and promotes the intelligent transformation of logistics enterprises. American Business Management Master once said: enterprise management is an important embodiment of decision-making ability. Decision making runs through all aspects of enterprise management. An important decision is based on the effective integration of various information, and the information mainly comes from the collection of data. Each enterprise develops its own strengths around the information platform to realize complementary advantages, which not only promotes the development of big data logistics information platform, but also meets the interest needs of cooperative enterprises. (Figure 1, Figure 2)

Compared with traditional logistics, the operation process of shared logistics under the impact of big data is more dynamic and flexible. In addition to seizing the opportunities brought by the structural adjustment and business adjustment of the logistics industry, it is also necessary to rely on the advantages of emerging information technology to realize multi-source heterogeneous, real-time and interactive data. Sharing logistics information platform is based on multi-dimensional data joint analysis, and its core is to make multiple independent logistics information data systems seamless connection and transfer.
2. New characteristics of sharing logistics under the background of big data

The emergence of big data not only leads to the development of modern logistics and intelligent logistics, but also accelerates the emergence of new logistics models and accelerates the reorganization and integration among enterprises. The form of sharing logistics big data goes far beyond the five characteristics of traditional logistics big data (large volume, multiple types, fast speed, high value, real and accurate).

2.1. Multidimensional

Since logistics big data is a multi-dimensional data set, including three or more attributes, logistics information services are widely used in the logistics industry from a multidimensional perspective. For example, search word frequency data, carrying capacity statistics, real-time monitoring of multimedia data, warehousing information and geographic information, etc. through multi-dimensional data processing, logistics information services can be carried out from multiple paths, perspectives and levels to enhance the core competitiveness of logistics enterprises. Because logistics contains many links, and there are complex relationships between different links. Big data also grasps dynamic information from these complex interactions. Therefore, data sources of logistics platform are shared.

In the process of design, we not only need to analyze the information collection of logistics transportation process, but also pay attention to the collection of transportation related enterprises and related policy information, including order processing, storage information, distribution capacity, inventory data, capital operation ability, factory and warehouse location, intelligence information, etc.,
so as to make the logistics information more closely related to other information and better realize the capital Source integration is conducive to logistics enterprises to seize the opportunity in the competition.

2.2. Forecast
Logistics information big data technology analysis can not only capture dynamic information, but also forecast the demand of logistics services. For example, during the "double 11" activity in 2016, the number of e-commerce transaction orders reached 1.05 billion, an increase of 35% over the same period of last year. In the face of the increasing order volume year by year, the biggest driver of ensuring the quality of goods and services is logistics big data analysis. Before the "double 11" coming, "rookie alliance" uses big data technology to collect and analyze buyers shopping cart and favorite collection data, purchasing power, storage data and logistics carrying capacity. Through the analysis results, it forecasts market demand, and then reasonably controls inventory, coordinates transportation capacity and arranges transportation plan. (Figure 3)

3. Building logistics platform under the background of big data sharing
With the rapid development of information technology, the application value of big data not only affects peoples thinking pattern, changes the logistics operation mode, but also broadens the logistics management mode and optimizes the all-round logistics service experience. Based on the application functions of traditional logistics transportation, handling, storage and distribution, the application model of shared logistics platform is constructed by combining the operation mechanism and theoretical model of shared logistics platform, including six functions: information resource sharing, intelligent logistics, logistics transaction, real-time monitoring, decision analysis and management control, so as to realize users sharing of logistics resources and business restructuring. [5]
Using big data technology to realize logistics information resource sharing. Information about the trend of logistics industry, supply and demand, talent training, logistics park, logistics standards and other related information are released on the platform, providing users with rich and diversified information query services. At the same time, enterprises, banks, governments and other relevant units involved in logistics can realize the business of inquiry and quotation, government supervision, data exchange and information communication through data exchange technology, so as to improve the value density of data, reduce the blind spots of information, and improve the level of modern logistics informatization. In addition, in the whole process of logistics operation, a large number of logistics data will be generated, which can be used to analyze and judge the operation status of enterprises, so as to integrate the resources of logistics, capital flow and information flow, and optimize the service, so as to realize the complete symmetry of the information of both sides.

4. The role of big data sharing logistics platform

4.1. Using big data technology to realize logistics transaction personalization.
According to the customer's web browsing, shopping cart, purchase records and other data and information, the platform's engine and algorithm customize personalized recommendation for customers, eliminating the need for consumers to find the page, greatly improving the success rate of transactions. When customers intend to purchase, both sides of the transaction can communicate on the platform to realize the transaction behavior of data, visualization, online and offline collaboration. When customers intend to purchase, both sides of the transaction can communicate on the platform to realize the transaction behavior of data, visualization, online and offline collaboration. (Figure 4)

4.2. Using big data technology to achieve effective real-time monitoring
Through the real-time supervision of logistics enterprises and the setting of industry access standards, the government departments monitor the whole process of logistics links, and establish an efficient government supervision information system to provide policy information output for logistics enterprises. In addition, sensors connected to vehicles can generate a large number of environmental statistical data, and big data analysis technology is applied to perceive the logistics situation, such as temperature, vehicle condition, traffic condition, parking situation, etc. Setting up logistics security alarm can not only ensure the safety, but also analyze the monitoring index information through the computer to find out the reasons for the change, so as to better solve the problem. [6]

Figure 4. Convenient and quick platform model

4.3. Using big data technology to realize logistics assistant decision analysis
Through machine learning, the logistics information platform provides intelligent services for transportation route prediction, optimization and order matching, taking vehicle, route, weather, order and other factors into comprehensive consideration. In order to obtain the best warehouse address, the
data analysis of the target location, such as human flow, traffic condition, rent, distance of distribution location, etc., is combined with the warehouse demand. Through establishing the model to analyze the massive data, controlling the single variable to simulate the logistics scheme, thus finding the optimal scheme.

5. Conclusion
The development of big data technology has brought opportunities to the logistics industry. While summarizing the traditional operation experience, logistics industry managers must pay attention to the organic combination of sharing platform and emerging information technology to improve the sharing dimension. In depth, it should meet the personalized and differentiated needs of customers, develop the innovative mode of big data sharing information platform, and promote the change of data thinking of logistics enterprises.

Enterprises should pay attention to relevant talents. At present, there is a large talent gap, so we should adopt various ways to solve this problem. First, carry out school enterprise cooperation to cultivate needed talents by using colleges and universities; second, carry out various training activities to select relevant personnel from enterprises for training to relieve the pressure of talents; third, provide favourable treatment conditions to introduce and retain relevant talents; fourth, cooperate with professional teams to strengthen the construction of logistics information platform. The construction of logistics information platform is inseparable from the help of big data technology. The construction of big data logistics information platform is bound to promote the development of logistics industry.

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