



SAVONIA



LOGISTICS DISTRIBUTION IN E-COMMERCE ENVIRONMENT

+

SHUANG YUE

Bachelor's Thesis

Field of Study Technology, Communication and Transport			
Degree Programme Degree Programme in Industrial Engineering and Management			
Author(s) SHUANG YUE			
Title of Thesis logistic distribution in e-commerce environment			
Date	10.06.2019	Pages/Appendices	29
Supervisor(s) Pertti Varis, Tiina Salli			
Client Organization /Partners			
<p>Abstract</p> <p>Recently, with the development of E-commerce, it has been speeding into every corner of society, people are enjoying convenient e-commerce also encounter some problems. Logistics distribution, however, as the end part of e-commerce, due to its development level, still cannot meet the requirement of e-commerce development, it seriously limits the development of the e-commerce.</p> <p>The goal of this thesis was to research logistic distribution in e-commerce environment in order to find the characteristics of logistics distribution in e-commerce environment, realize the relationship between them and know the effect of e-commerce on logistics distribution. Finally, the problems of logistics distribution found under e-commerce environment were and solutions were given.</p>			
Keywords Logistics distribution, Electronic commerce (e-commerce)			

1	Introduction.....	4
1.1	Research Background and Basis.....	4
1.2	The Purpose of Research.....	4
1.3	Implementation of Thesis.....	5
1.4	Current Status of Logistics Distribution in E-commerce Environment.....	5
2	Logistics Distribution in E-commerce Environment.....	6
2.1	E-commerce.....	6
2.2	The Basic Characteristics of E-commerce.....	8
2.3	Logistics Distribution.....	9
2.3.1	Logistics Distribution Forms.....	10
2.3.2	The Function Factors of Logistics Distribution.....	10
2.4	E-commerce and Logistics Distribution.....	11
2.4.1	The Relationship between E-commerce and Logistics Distribution.....	11
2.4.2	The Current Stituation of Logistics in E-commerce Environment.....	13
2.4.3	The Characteristics of Logistics Distribution in E-commerce Environment.....	15
2.4.4	The Requirements of E-commerce Development on Logistics Distribution.....	17
2.4.5	The Change of Logistics Model Caused by the development of E-commerce.....	19
3	Main Problems and Strategies of Logistics Distribution in the E-commerce Environment.....	21
3.1	The Main Problems of Logistics Distribution in E-commerce Environment.....	21
3.2	The Strategies of Logistics Distribution development in E-commerce Environment.....	24
4	Conclusions	27
5	Reference.....	28

1 INTRODUCTION

1.1 Research Background and Basis

With the speedy development of the internet informatization, the electronic commerce (e-commerce) activities occur more and more frequently in our lives. It is changing our life-style and it has been speeding into every corner of society. Therefore, a lot of businesses from e-commerce activities are quickly implemented by online payment tools on the internet. There are such as Amazon, Alibaba, ebay, Sears. etc. They create tens of thousands of dollars every year. What's more, there are still many companies that are changing and opening up new businesses in e-commerce. However, people are enjoying convenient e-commerce, and encountering many problems of logistics distribution, as the end part of e-commerce, the development level of logistics distribution still cannot satisfy with the individual and various requirement of e-commerce development, but seriously limit the e-commerce's development.

What's more, in today's increasingly accelerated globalization, e-commerce has become more and more important and unneglected in today's complex global economy. So in this e-commerce environment, logistic distribution also become important and plays an unusual role. They affect each other.

As a result, the whole development level of the logistics distribution in China is still not high, and the development modes are relatively extensive. How to find the problems and deal with those, has become a problem that every logistics enterprise must face.

1.2 The Purpose of the Research

With the rapid development of world economic information, e-commerce is also being developed quickly and efficiently. With the gradually mature on the development of information technology, E-commerce has become one of the directions of global business development in the future. However, traditional logistics distribution as the end part of e-commerce has been unable to satisfy the requirement of e-commerce because of its various drawbacks. Therefore, this thesis analyzes the characteristics of logistics distribution in an e-commerce environment and in view of the separation of material flow and business flow as a key feature of e-commerce, to find and develop the right logistics model and to explain the influence of E-commerce and put forward some trusted countermeasures in the process.

1.3 Implementation of Thesis

This thesis mainly starts from the concept, classification, and characteristics of E-commerce briefly introduces the basic functions of E-commerce, analyses the research situation and development status of E-commerce.

This thesis report will use the literature research method to draw some theoretical basis to obtain some of the views of the text, and through data analysis (data statistics, variation, and trends) It analyzes the characteristics of logistics distribution in e-commerce environment. Moreover, I also use analytic induction to analyse the existing theoretical literature. Some cases from logistics companies, and explains the important influence of E-commerce on the development of logistics distribution. Finally, I have summarized what effective strategies can be implemented for logistics distribution in E-commerce environment.

1.4 Current Status of Logistics Distribution in E-commerce Environment

Recently, with the steady growth of global e-commerce, logistics as the end part of e-commerce has become an important part of the international economic system. And modern logistics is not only the outcome of the economic globalization but also an important service that promotes economic globalization.

In the 21st century, due to the high-speed and universal network on developing countries such as Europe and the United States and so on, the network has become a part of their lives. Entering the informatization early, The economic conditions and the large netizens have built a good internet environment for the rapid development of e-commerce in Europe and the United States and so on. In addition, Europe and the United States generally implement credit card consumption systems and establish complete credit guarantees. The system solves the problem of online payment for e-commerce. The fast development of e-commerce has promoted a fairly complete and formal logistics distribution system in Europe and America. In recent years, the emergence of large third-party logistics enterprises has also improved the logistics distribution network. The traditional logistics has expanded with economic development begin logistics was built and developed in China. The logistics maintain a relatively rapid growth rate, the logistics system is continuously improved, and logistics are also increasingly mature and standardized. But with fast development and expansion of the informatization under modern e-commerce environment, the development of the traditional logistics distribution cannot still satisfy the requirement of e-commerce development, and it has faced enormous challenges, what's more, the requirement of e-commerce development set off the transformation of the traditional logistics distribution.

2 Logistics Distribution in E-commerce Environment

2.1 E-commerce

E-commerce is the activity of buying or selling products on online services or over the internet. With the rapid development of e-commerce, it not only includes the main connotation of shopping but also includes ancillary services such as logistics distribution. E-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, internet marketing, online transaction processing, electronic data interchange(EDI), inventory management system, and automated data collection systems. [1]

In this process, the information technology used includes Internet, Extranet, E-mail, database, electronic directory and mobile phone.

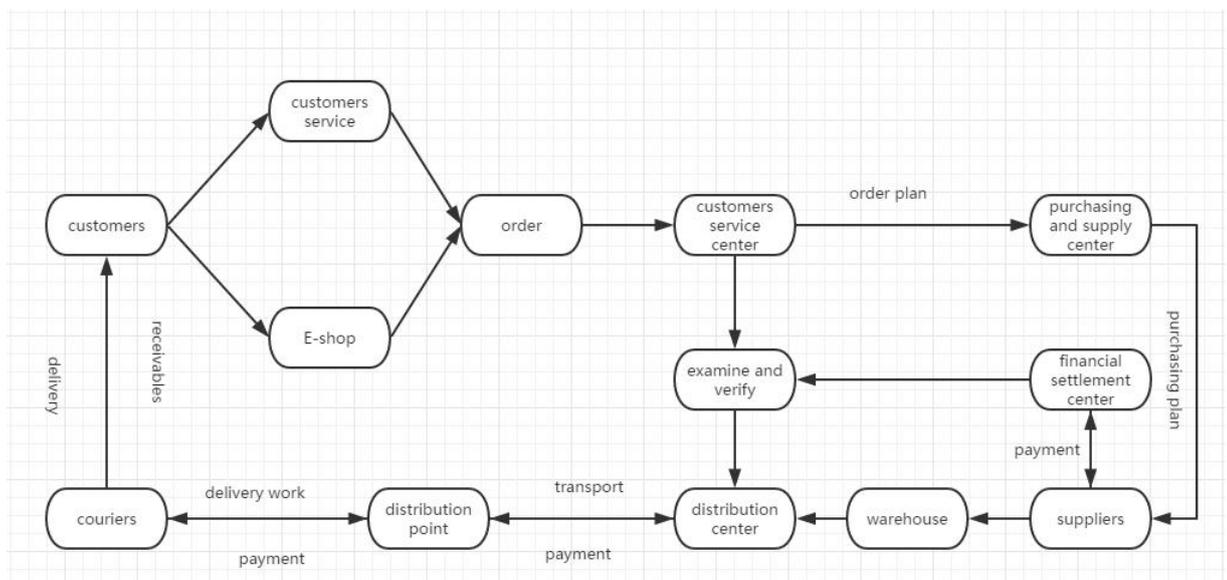


Figure .1 BUSINESS FLOW CHART OF E-COMMERCE

Modern E-commerce typically uses the world wide web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchases of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services. [2]

There are three areas of e-commerce: online retailing, electric markets, and online auctions. E commerce is supported by electronic business. [3]

Now, China's research on e-commerce is increasing and its scope of application is expanding. The application of e-commerce in China's market is becoming more and more extensive. Its forms mainly include BtoC, BtoB and CtoC.



Figure.2 China's E-commerce Transaction volume

2.2 The Basic Characteristics of E-Commerce

(1) Increased efficiency of transactions

Because overall commercial transaction becomes more standardized on the internet, It greatly reduces transaction time and makes the whole transaction process faster and more convenient.

(2) Transactions become more transparent and open

Transactions are carried out from the negotiation of transactions, the process of signing contracts to payment of goods on the network. It's easy to check every message in the fast information transfer process while preventing the fast circulation of fake information.

(3) Lower transaction costs

Its concrete manifestations are as follows:

- A. Reducing the waste of a lot of expenses caused by advertising and printing products in common ways.
- B. Some enterprises can apply the intranet to engage in business activities, thereby improving the efficiency of information transmission within the internet, reducing a lot of time, thereby reducing the cost of management.
- C. The network can enable the buyers and sellers to exchange and communicate information in real time, make the production and sale of zero inventory possible gradually, and then reduce the inventory cost of goods to zero.

2.3 Logistics Distribution

Logistics distribution includes a wide range of activities. These all focus on achieving efficient distribution and movement of finished products. This takes goods from the end of a production line to reach consumers.

Aside from that, it provides a wide set of optimization methodologies and tools. These are all used in three main areas that include warehouse management, order fulfilment and transportation management. [4]

Logistics distribution is a modern way of circulation, it is positioned to provide services for e-commerce customers. According to the characteristics of e-commerce, unified information management and scheduling is implemented for a whole logistics distribution system. What's more, according to the requirements of the user's order, tally work is carried out at the logistics base, and the goods will be matched. Finally, to delivery to the consignee. Logistics Warehousing and Distribution Service have developed into the core industry link of China's E-commerce.

2.3.1 Logistics distribution forms

- 1) According to the types and quantities of distribution commodities; it is divided into Multi-variety, less batch distribution; less variety, large-scale distribution; complete distribution.
- 2) According to distribution time and quantity; it is divided into Timed distribution; Quantitative distribution; Timed quantitative distribution; Timed quantitative fixed-point distribution; Real-time distribution.
- 3) According to distribution by location and organizer; it is divided into Distribution centre distribution; Distribution point distribution; Warehouse distribution; Store distribution; Production enterprise distribution.
- 4) According to the distribution of service object division; it is divided into the enterprise to enterprise distribution; enterprise internal distribution; enterprise to consumer distribution.
- 5) Other forms of distribution; such as common distribution and integrated distribution.

2.3.2 The Function Factors of Logistics Distribution

- (1) Stock up. It is the preparatory work or basic work of logistics distribution, which includes collecting supply, ordering or purchasing goods, collecting goods, purchasing goods and related quality inspection, settlement, handover and so on.
- (2) Storage. Distribution reserve is the resource guarantee of distribution in the light of the demand for distribution operation in a certain period. This type of reserve has a large quantity and a perfect reserve structure. Depending on the supply and arrival of goods, we can determine the structure and quantity of turnover reserve and insurance reserve in a planned way. Another form of storage is temporary storage, which is a small amount of storage preparation made in tallying yard according to sorting and distribution requirements on the specific delivery day. Because the total storage benefit depends on the total storage, the temporary storage quantity will only affect the convenience of work, but not the total storage benefit, so the quantity control is not strict.
- (3) Sorting and distribution. Sorting and distribution are the necessary extensions for various distribution enterprises to compete and improve their own economic benefits when delivering goods. Therefore, it is also the inevitable requirement for delivery to develop into advanced forms. Sorting and distribution will greatly improve the level of delivery service, so sorting and distribution is an important factor to measure the level of the whole distribution system.
- (4) Assembly and transportation. It can greatly improve the delivery level and reduce the delivery cost by loading and delivering. Distribution transportation is a short-distance, small-scale and High-quota mode of transportation. However, the more difficult work is how to find the best route in the complex urban traffic routes, how to make the matching and effective collocation of routes, etc.
- (5) The final service. In the process of transferring the ready-made goods to the users, the inconsistency of coordination often leads to the failure of delivery. Therefore, choosing the appropriate place, mode and time of unloading are conducive to the successful completion of the transfer work, and the effective and convenient handling of relevant procedures and the completion of settlement.

2.4 E-commerce and Logistics Distribution

2.4.1 The Relationship between E-commerce and Logistics Distribution

As an emerging business activity, E-commerce has the characteristics of high efficiency, individuality, cost point, all-weather, global and so on. Logistics distribution is an end part of e-commerce, with the rapid development of e-commerce, it also drives the development of logistics distribution. At the same time, it puts forward higher requirements for logistics distribution. In general, e-commerce and logistics distribution are manifested in such aspects, Firstly, e-commerce promotes the improvement of logistics infrastructure. The high efficiency and global characteristics of e-commerce require that logistics distribution must also achieve this goal. Secondly, e-commerce promotes the progress of logistics technology. The level of logistics technology is an important factor to realize the efficiency of logistics. To establish an efficient logistics system adapted to the operation of e-commerce and speed up the improvement of logistics technology plays an important role.

Logistics distribution is an important part of the e-commerce system. Logistics distribution constitutes a complete e-commerce activity. Logistics distribution is the support and foundation and guarantee of e-commerce activities, and also the key to the practice of e-commerce. The realization of logistics distribution also realizes the value of e-commerce. The advantages and disadvantages of logistics distribution and its efficiency directly restrict the normal development of e-commerce.

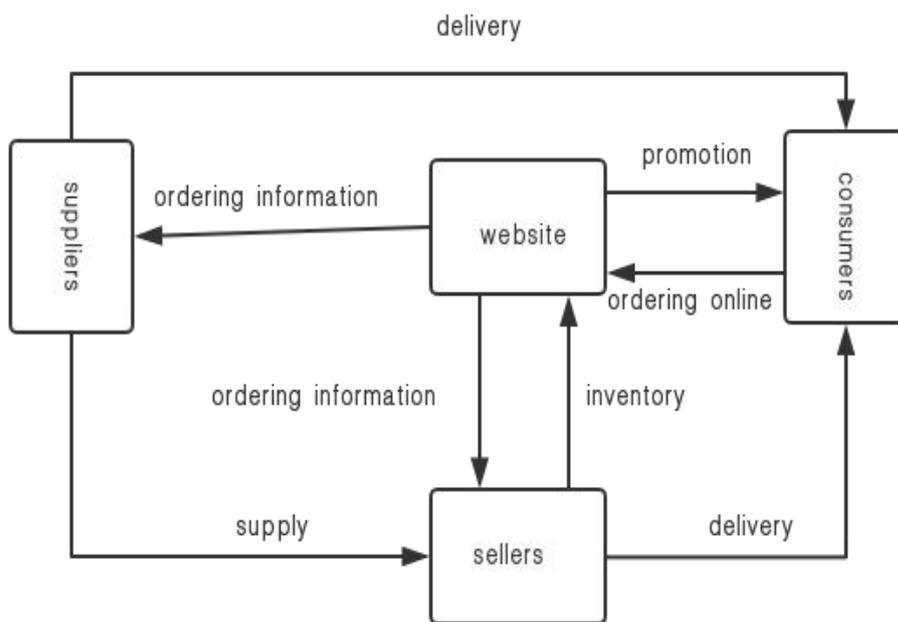


Figure 2. Logistics Distribution in E-commerce

2.4.2 The Current Situation of Logistics in E-commerce Environment

The self-operated logistics

Due to the development of e-commerce enterprise is limited under logistics bottleneck, especially for medium and large enterprises, breaking the bottleneck will become very important, therefore, these enterprises have to increase costs in self-operated logistics(The company manages the logistics business itself and completes the enterprise logistics distribution business.) so that they can take control, revitalize enterprises, increase brand value and reduce the transaction costs.

Under this logistics mode, It can directly control logistics assets, control logistics functions, ensure accurate and timely supply, ensure the quality of customer service, and maintain the long-term relationship between enterprises and customers. However, the enterprises need to invest a lot of money to building warehouses, purchasing logistics equipment and information management systems, which increases the burden on enterprises. According to the theory of scale economy, when the enterprise own logistics has a certain scale, the self-operated logistics can exert its system management effect. But when Limited capital investment limits the scale and modernization of self-operated logistics, which is very risky. [5]

Logistics Alliances

A logistics alliance is a group or team of trading experts who work together to help companies competently and successfully manage and deliver their products. Companies can hire or join logistics alliance groups to empower the alliance group to provide assistance, establish supply chains and offer business advice for the company. [6]

The enterprises can choose the best and suitable logistics companies in different areas by logistics alliances. At the same time, the enterprises also easily manage the warehousing and distribution by using IT, and the sharing of commodity circulation and logistics information of various logistics companies so that the range of logistics service and commodity circulation space is expanded, the finally, achieving distribution to consumers.

In the process of choosing a logistics alliance, the enterprises also build survey evaluation and elimination system so that optimizing resource of logistics alliance which improving cross-regional cooperation of logistics distribution and competitiveness.

The third-party logistics

Third-party logistics in logistics and supply chain management is an organization's use of third-party businesses to outsource elements of its distribution, warehousing and fulfillment services. Third-party logistics providers typically specialize in integrated operations of warehousing and transportation service that can be scaled and customized to customers' needs, based on market conditions, to meet the demands and delivery service requirements for their products. Often, services exceed logistics to include value-added services related to the production or procurement of goods, such as service that integrates parts of the supply chain. A provider of such integrated services is referenced as a third-party supply chain management provider(3PSCM), or as a supply chain management service provider(SCMSP). 3PL targets particular functions within supply management, such as warehousing, transportation, or raw material provision. [7]

The Fourth Party Logistics (4PL)

Fourth Party Logistics (4PL) is a supply chain integrator, which mobilizes and manages resources, capabilities and technologies provided by organizations and complementary services to provide an integrated supply chain solution.

Fourth-party logistics not only controls and manages specific logistics services, but also proposes solutions for the whole logistics process, and integrates the procedures through e-commerce. Therefore, there are many kinds of fourth-party logistics providers, and the degree of change can be very large.

The key of the fourth party logistics is to provide customers with the best value-added services, that is, fast, efficient, low-cost and personalized services. The development of the fourth party logistics needs to balance the ability, technology and trade management of the third party logistics, but it can also expand its own operational autonomy.

Fourth party logistics also includes the following four characteristics: supply chain rebuilding, function transformation, business process re-engineering, and multi-functional and multi-process supply chain management.

The benefits of the fourth party logistics for customers include profit growth and operation cost reduction, that is, through the outsourcing function of the whole supply chain to improve operational efficiency, reduce procurement costs, so as to achieve the goal of process integration. [8]

2.4.3 The Characteristics of Logistics Distribution in E-commerce Environment

In summary, compared with the traditional logistics distribution, with the progress of the times, the logistics distribution under the e-commerce environment in the new era has undergone a series of reform and development, which also prompted the process of its business flow to be completed, effective shortening and change. But people's life and other aspects of progress can quickly achieve the logistics process. The process of traditional logistics distribution is composed of many business processes, which are greatly influenced by human factors and time factors. In order to realize the rational distribution of a lot of customers and resources, traditional logistics distribution enterprises often use large-area warehouses for inventory. However, due to the limited space of logistics warehouse resources, the number and types of inventory are limited, and at the same time, they are large. Volume inventory occupies a large amount of cash flow, which leads to an increase in opportunity cost. Different from this, The business processes of logistics distribution in the e-commerce environment are connected by an Internet, the e-commerce enterprises are combined with virtual enterprise in the form of network. The Internet effectively connects warehouses belonging to different owners and scattered in different places, and are completed by highly automated decision support system (DSS), which is conducive to timely decision-making and enhances the control of logistics execution, so as to achieve the unified allocation of resources. Allocation and coordination management can achieve real-time control and rapid response to physical distribution.

The characteristics of logistics distribution are as follows:

The Intellectualization of Logistics Distribution

The process of traditional logistics distribution is complicated and inefficient because of the low degree of informatization. Logistics distribution in an e-commerce environment can realize the intellectualization of logistics distribution process based on Internet and DSS. It also uses many high and new technologies to realize the informationization and automation of logistics information monitoring, collection, storage, processing, transmission, sharing, publishing and other activities. On this basis, it realizes the expert decision support system for logistics activity management with the help of many artificial intelligence technologies, so as to realize the intellectualization of logistics distribution process. In this way, the logistics distribution link not only reduces the cost, but also improves the work efficiency, and achieves a higher level of logistics services, which is conducive to logistics enterprises or the e-commerce enterprises in the process of forming a supply chain management model with stronger core competitiveness.

The Informatization of Logistics Distribution

With the informatization of logistics distribution, e-commerce enterprises make their management more efficient in the overall process of logistics distribution, which greatly improves the efficiency of logistics distribution and also makes the process of online shopping and trading more efficient for consumers. It is also conducive to online shopping and transaction of consumers with lower costs and higher efficiency.

The Networking of Logistics Distribution

Nowadays, the wide use of computers and the Internet and the rapid development of computer network technology provide certain development opportunities for the networking of logistics distribution, and the trend of logistics networking is inevitable.

The High Efficiency of Logistics Distribution

Under traditional logistics distribution, because of the limited storage space, the number and type of items are greatly limited. But, under the e-commerce environment, the integrated informatization of logistics distribution system makes more e-commerce enterprises disperse all warehouses in different places through an Internet connection, becoming a relatively large "integrated warehouse". "Integrated Warehouse" is conducive to coordinated management and unified allocation, E-commerce enterprises can effectively and substantially reduce inventory, capital turnover can be accelerated, and most importantly, greatly improve the efficiency of logistics distribution.

2.4.4 Requirements of E-commerce Development on Logistics Distribution

With the rapid development of e-commerce, it has put forward specific requirements for logistics distribution, including the following aspects:

A. The requirements of e-commerce for logistics integration

Logistics integration refers to the integration and systematization of supply chains from production enterprises through logistics enterprises and sales enterprises to consumers, with a logistics system as the core. It is the advanced and mature stage of logistics development. Although, with the rapid development of economic globalization, The rapid growth of e-commerce not only enables enterprises to buy and sell directly but also can circulate and share information with each other. but rather complex and difficult to achieve logistics integration.

B. The Requirements of E-commerce for Logistics Distribution Networking

In the e-commerce environment, customers and suppliers can directly buy and sell so that reducing the process of the logistics distribution, but distributors have a large requirement for small batches and multiple batches of goods, so in order to deliver goods to customers cheaply and quickly, the distance between supply and requirement must be very close, otherwise it is difficult to achieve. To solve this problem, we must establish a set of standardized logistics distribution network system. In addition, the connection with customers also needs to go through the computer network system.

C. The Requirements of E-Commerce for Automation and Intelligence of Logistics Distribution

In the process of logistics distribution, logistic enterprises need to use the intelligent and automated system to enhance the ability of logistics distribution operation and reduce the errors of the logistics operation. In China, the application of logistics distribution automation technology is not popular. In the wake of the rapid development of information technology, the intellectualization of distribution is bound to be a new trend of logistics distribution in the e-commerce environment.

D. the Requirements of E-commerce for Flexibility of Logistics Distribution

Earlier, various fields of production in the world have put forward the introduction of flexibility. Therefore, flexible distribution corresponds to production and consumption. Flexibility is a new form of logistics distribution developed through this requirement. It clearly requires logistics distribution centres to flexibly organize and distribute logistics according to the consumption characteristics of "a small number of batches, many batches, many varieties", so as to better adapt to the holding of logistics distribution operation in the e-commerce environment.

2.4.5 The Change of Logistics Model Caused by the Development of E-Commerce

The E-commerce also has a tremendous impact on logistics distribution, mainly in the following aspects:

(1) Multifunctional Change

In the present e-commerce environment, the traditional logistics service of warehousing and transportation has been difficult to meet the requirements of customers. Therefore, we must change the existing logistics mode, actively expand the additional business, and improve the added value of the logistics industry. For example, by virtue of the advantages of the Internet of Things, we can increase the value-added services of logistics information, and provide third-party logistics information, business information, competition information and supply information for customers in requirements. Or cooperate with the fourth party logistics enterprises to establish comprehensive logistics services, including logistics consulting, logistics planning, logistics transportation and warehousing, logistics information query and other links, to provide diversified logistics services, to promote the development of logistics enterprises in the new e-commerce environment. [9]

(2) The Change of Informatization

E-commerce is based on modern information technology, and its development is closely related to the Internet. To achieve the development of multifunctional logistics, it is also premised on computer technology. Therefore, it is not only the requirement of e-commerce but also the need to promote the transformation of logistics mode. The informationization of logistics industry should be reflected in the collection and feedback of different logistics information in the supply chain, which requires ECR and JIT system to obtain logistics information by sweeping the electronic tags and input it into the database to satisfy the needs of customers.

(3)The Change of Globalization

E-commerce itself has the characteristics of globalization, and the current logistics industry in China is gradually in line with the world market. This requires that under the background of the development of e-commerce, the logistics mode should be transformed into the direction of globalization, a unified logistics system should be established all over the world, and logistics information should be shared with logistics enterprises in other countries, so as to provide perfect logistics services for international commercial trade and transnational goods circulation. However, under this trend of change, there are higher requirements for the management mode and talent quality of the existing logistics industry. Therefore, in order to realize the globalization of the logistics mode, we must strengthen the internal management of enterprises and strengthen the training of specialized high-end logistics talents. Only in this way can we cope with the complex international market environment and establish a global logistics network. [10]

(4) Social Change

With the rise and expansion of e-commerce, the trend of the socialized division of labour in logistics service provision or supply chain has become very obvious. In the production sector, the raw materials needed by manufacturers need to be provided through logistics enterprises. In the sales sector, the transportation and circulation of goods are closely related to logistics services. Therefore, in order to save logistics costs, both manufacturers and sellers need to establish good cooperative relations with logistics enterprises to optimize the allocation of logistics resources and improve logistics speed. This requires logistics enterprises to move towards the direction of socialization of housing exhibition, in order to satisfy the needs of various customer groups and achieve further refinement of logistics services.

(5) Systematic change

To promote the reform and transformation of the logistics industry, it is necessary to establish a systematic logistics system, expand logistics services to the whole supply chain of production-sale-after-sale, and integrate suppliers, logistics enterprises and customers into a whole. Only in this way can we ensure that every link of logistics activities can achieve the purpose of overall arrangement, thereby reducing logistics costs and optimizing logistics efficiency. [11]

3 MAIN PROBLEMS AND STRATEGIES OF LOGISTICS DISTRIBUTION IN E-COMMERCE ENVIRONMENT

3.1 The main problems of Logistics Distribution in the E-commerce Environment

Under the e-commerce environment, there are several problems in logistics distribution in China:

A. The model of Logistics distribution restricts the development of e-commerce.

With the expansion of e-commerce, China's logistics enterprises have developed very rapidly. By 2017, the number of all kinds of logistics enterprises has exceeded 700,000. But, most of them only provide transport services and warehousing services in their business. The degree of networking is low, it is difficult to satisfy the requirement of the development of e-commerce, and cannot provide complete and digital supply chain services. Both logistics management ability and logistics distribution speed cannot keep up with the development of e-commerce, and even to a certain extent, restrict the further development of e-commerce platform.

B. The low added value of logistics services

Due to the late start of logistics enterprises in China, the current logistics enterprises in China are still dominated by traditional logistics enterprises, and the development of specialized third-party logistics is slow, accounting for only about 30% of the proportion, with a larger space for development. However, other large-scale logistics enterprises have the problem of transformation, which makes it difficult to adapt to the reform of the logistics system in an e-commerce environment. They simply use logistics activities as an auxiliary operation but do not provide corresponding value-added services, which hampers the development and reform of traditional logistics enterprises.

C. Infrastructure is backward

In the process of logistics distribution, transportation and warehousing are the most critical, which requires the establishment of the specialized and digital distribution base, and the improvement of storage and transportation equipment to improve the status of logistics infrastructure. However, at present, there are some problems in our logistics enterprises, such as unreasonable planning and confusion in the setting of logistics distribution nodes, which make the logistics nodes and logistics bases unable to effectively link up and reduce the speed of goods circulation. The development of e-commerce involves a large number of logistics, if the logistics speed cannot keep up, it will directly affect the development of the e-commerce economy in China. [12]

D. Seriously lack professional personnel.

Due to the late start of the development of logistics distribution in China, there is a serious shortage of intelligent logistics talents with professional logistics management knowledge and modern logistics distribution operation. At the same time, the teaching of Logistics Specialty in our country is late, the teaching staff is single, the teaching methods are backward, and the teaching work is out of touch with practice, which not only restricts the popularization of e-commerce logistics distribution but also affects the operation of e-commerce logistics distribution.

E. Lack of laws, regulations and policies.

At present, our country lacks experience in the development of e-commerce logistics and draws lessons from the development model of developed countries to a certain extent. There is no perfect logistics law in China, which leaves a loophole for foreign capital to dominate China's logistics industry. At the same time, the logistics industry and other transport departments lack of cohesion, laws and regulations are incomplete, incomplete, lack of corresponding laws and regulations to protect. The development of e-commerce policy is not clear, these shortcomings have seriously hindered the healthy and fast development of e-commerce logistics distribution. At the same time, China lacks national legal documents. This is not wise for some enterprises who want to make e-commerce logistics industry bigger and stronger.

F. Lack of management mode and a low degree of integration.

Logistics information network platform is not smooth, logistics distribution enterprises lack correct and efficient management, which leads to lower distribution efficiency, managers do not, distribution channels are not complete, logistics professionals. In fact, e-commerce and logistics distribution industry are interdependent, complementary and interactive, but the degree of integration between logistics information flow and electronic flow is not high in our country today. The utilization rate of resources is not high, and the management mode needs to be constantly restructured and improved. At the same time, the lack of complete supporting measures in the process of classification, processing and transportation of goods leads to a low degree of integration.

3.2 Countermeasures of Logistics Distribution Development in E-commerce Environment

Measures to develop logistics distribution in the e-commerce environment are as follows:

(1) Improve the quality of logistics distribution.

With the development of logistics, the quality of logistics distribution in China has been improved to a certain extent, but overall, the level of logistics distribution is still imperfect, and there are still a lot of defects in all aspects. Therefore, logistics distribution enterprises should improve the efficiency in the management of logistics goods as soon as possible, and ensure that the goods can be accurately delivered to the majority of consumers in a timely, greatly improve the quality of logistics distribution, to ensure that consumers trust and support online shopping.

(2) Vigorously develop third-party logistics.

Third-party logistics can provide comprehensive, personalized and professional logistics services, and its operational efficiency and quality have a great advantage over the traditional logistics distribution. Third-party logistics can provide convenience for circulation enterprises to increase processing efficiency, reduce inventory and cost, and achieve the goal of "win-win" for enterprises. Therefore, through increasing the development of third-party logistics, so as to form a more efficient and professional logistics enterprise system and build a perfect logistics service function system.

(3) Strengthen the introduction and training of high-level logistics distribution personnel.

At present, the universities majoring in logistics in China are not comprehensive. Therefore, By establishing and strengthening effective contacts with logistics-related enterprises, universities and logistics specialized research institutions, we can actively communicate with them and strengthen long-term cooperation between capital and technology, so that form a community of mutual interests and promote each other, so as to meet our country's pressure on logistics professionals. To meet the needs and make it develop healthily.

- (4) Strengthen and improve the infrastructure adapted to logistics distribution under the e-commerce environment.

Faced with this problem, logistics enterprises should strengthen the innovation of e-commerce network technology, and establish efficient and intensive logistics distribution network to improve the distribution service capacity and build their own unique logistics delivery system. And the use of more modern logistics distribution network distribution facilities, which will inevitably form a large efficient network system.

- (5) Improving the logistics management mode

The government regulates the logistics industry comprehensively and macroscopically and forms a complete and mature logistics management mode. Finally, it builds a strong comprehensive ability and broad radiation scope e-commerce system with the logistics industry as the centre. By reducing the logistics transportation cycle and strengthening the information exchange, the barrier-free implementation of the whole process of logistics distribution can be ensured. Improve the links with the information exchange platform, and gradually form an integrated logistics distribution system in an e-commerce environment.

- (6) Reasonable planning of logistics distribution to form the scale of the system.

At present, with the sustained development of China's market economy, a good competitive environment is provided for the future long-term development of logistics industry, but there is still a big gap compared with developed countries. The organizational layout of computer networks cannot constitute the system needed by logistics distribution. Therefore, we must consider the current e-commerce environment and the development of market supply and demand, and use a large number of advanced information technology to form the perfect logistics distribution system. to accelerate the fast flow of information and the integration and sharing of resources, and complete the planning and integration of various fields and industries.

(7) Accelerate the improvement of the level of information technology in the logistics industry.

The informationization of logistics distribution is the integration, timeliness and data of the classification, transmission, tracking and storage of logistics information. It is the soul support of the modern logistics distribution industry and the core of the high-level and high-level management of enterprises. Through information-based and efficient logistics distribution service, the advantages of information logistics technology can be fully displayed in logistics distribution activities. The information of logistics distribution nodes can be efficiently linked up among logistics enterprises. The basic information of goods can be queried and located accurately and timely, and the information can be timely returned to enterprises, thus fully meeting the requirements of consumers, and it will be faster, more efficient and more efficient. At the same time, to give convenient and high-quality services to consumers.

(8) Strengthen professional participation and cooperation to promote mutual benefit and win-win situation.

At present, the e-commerce logistics industry is not a single logistics industry, but a non-simplified industrial structure model with wholesalers, warehousing and other enterprises as a whole.

Therefore, we should strengthen cooperation and exchanges in professional fields to form a multi-perspective, omnidirectional, high-level and multi-field logistics distribution system.

While perfecting their own conditions, logistics enterprises in China attach importance to communication and learning with relevant industries, and accelerate the formation of resources. Internal environment and external suppliers need to reach consensus on resource cooperation and sharing.

(9) Promoting the Development of Green Logistics

Green logistics is an inevitable trend of the development of modern logistics industry. Problems of green logistics in China are mainly reflected in the product packaging, transportation costs, technology and equipment, logistics base, logistics personnel, etc. Developing green logistics must improve the system of green logistics consciousness of culture, the rule of law and management system, and promote the construction of green logistics market.^[13]

4 Conclusions

With the gradual improvement of logistics distribution system in the E-commerce environment in China, the intellectualization of logistics distribution and the universal use of network technology, the efficiency of logistics distribution has been greatly improved. E-commerce has changed people's understanding of the traditional concept of logistics distribution, simplified the process of logistics distribution, greatly shortened the time of logistics distribution, and brought a new technology management method for the logistics distribution system.

In general, if we want to develop our logistics industry, we must strengthen the construction of logistics software and hardware facilities, and promote the unification and modernization of our logistics distribution system in China. In addition, in the course of the research, I deeply realized the leading role of the government in promoting the development of logistics distribution in China. With an efficient logistics distribution platform, e-commerce will go to a new stage of vigorous development, which is of great significance to the development of economy and transformation in China.

In addition, the wide application of logistics distribution technology in the e-commerce environment will inevitably lead to fierce market competition. In order to survive and develop in the future, Chinese traditional logistics enterprises must study their own development strategy, locate the market, establish a proactive logistics service concept, communicate effectively with customers and find competitive logistics solutions. Strengthening the informationization of distribution management in logistics enterprises can not only increase the market competitiveness of logistics enterprises but also make the existing traditional logistics enterprises change smoothly into the era of the network information economy. Only when logistics enterprises can lead e-commerce, gallop in the field of Internet, and become the driving force of e-commerce logistics distribution, will the logistics industry in China really make a qualitative leap.

REFERENCES

- [1] <https://en.wikipedia.org/wiki/E-commerce>
- [2] Retail e-commerce sales CAGR forecast in selected countries from 2016 to 2021 .
- [3] Wienclaw, Ruth A.(2013) "E-commerce." Research Starters: Business
- [4] <https://leancor.com/blog/distribution-logistics/>
- [5] YUEHUI, WANG, XIANGRONG DU, YAN HONG, Marketing Business 01.2017
- [6] <https://bizfluent.com/info-8786143-definition-logistic-alliance.html>
- [7] Outsourcing Transport and Warehousing: Pricing, Honesty and Contentious Issues” Published in Australian Freight Logistics Magazine.
- [8] <https://baike.baidu.com/item/4PL/5865757>
- [9] YUTING YANG, Research on Logistics Management Based on Electronic Commerce [J] 2015.
- [10] ZE ZHANG, Logistics Management Innovation in E-commerce Environment[J] 2018.
- [11] XING WANG, Research on the Development of Electronic Commerce and Logistics Industry [J] 2018.
- [12] MENG HUI The Change of Logistics Model in the Development of E-Commerce.
- [13] XIAOLIN SUN, The problems and countermeasures of Green Logistics Development in China[J] 2017.



SAVONIA