Study on the Innovation and Mode Comparative of E-business Supply Chain under the Background of Cross Border Trading

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Abstract
Cross border e-commerce is an emerging industry, with the popularity of consumer online shopping, cross-border e-commerce logistics has developed rapidly. In this paper, the author analyzes the innovation and mode comparative of E-business supply chain under the background of cross border trading. By comparing the main forms of cross-border logistics, as well as the existing problems, it can be seen that the cross-border e-commerce logistics in China has some problems as high cost, long time, low tracking and supervision ability. On this basis, the author puts forward some suggestions to optimize cross-border logistics capability. With the development of information technology, the mobile terminal logistics will become a new direction of cross-border e-commerce development.

Key words: Cross border logistics, E-commerce, Information system, overseas storage

1. INTRODUCTION

With the rapid development of e-commerce and Internet plus concept spread, most people think that e-commerce is the trend of social development, many domestic e-commerce enterprises has developed quite mature, the rapid development of networking and networking services, many traditional companies have begun to layout their own blueprint for e-commerce, the traditional enterprise combined with electronic commerce again, relative to the development of e-commerce, cross-border e-commerce platform A new force suddenly rises. In today's world economic globalization, regional economic integration tide, the rapid development of cross-border electricity supplier in China, cross-border e-commerce for China's traditional foreign trade enterprises to further open the international market and its own transformation provides the best way of upgrading. Cross border e-commerce logistics is accompanied by the development of cross-border e-commerce. The cross-border e-business supplier logistics refers to the transaction subject in different countries or regions of the deal through e-commerce platform and payment clearing, a delivery of goods through cross-border logistics business activities and the completion of the transaction. Due to the electronic business environment of people trading mainly rely on the network, this time as the main line of the main logistics activities is very important, it is directly related to the transaction can be completed successfully, the availability of consumer recognition. Compared with developed countries, China's cross-border e-commerce logistics still has many problems, and its infrastructure construction level and logistics operation level can not meet the needs of e-commerce development, mainly for the following characteristics. First, the distribution time is long, the distribution efficiency is low. As the cross-border e-business supplier logistics needs to go through their Customs issued from the logistics sent to, after the customs inspection and quarantine and other aspects and then sent to the destination, and then after customs inspection to China by the local logistics distribution to consumers, intermediate links very much, uncontrollable factors increase greatly, so the cross-border e-business supplier logistics process is very long. In the current global comparison of the developed eBay platform as an example, through the International E Po will deliver the goods to the European and American consumers generally for a period of 7 days to 12 days, the use of logistics needs 15 ~ 30 days. China's cross-border e-business supplier logistics delivery period is the same, the majority of business commitment service period is 3 months. The low efficiency of logistics distribution, while testing the patience of consumers, has seriously restricted the development of cross-border e-business supplier in china. Two is the package can not realize the whole process tracking. In the domestic e-business supplier logistics system, the whole track has become the basic requirements of the business, but the cross-border e-business supplier logistics tracking can not realize the basic course, currently only the United States, Britain, Australia and other developed countries to provide e-business supplier logistics parcel query. This is mainly because most of the country's logistics system is not high level of information, China's e-business supplier logistics enterprises can not establish logistics information with other countries logistics enterprises.

There are some obvious trends in cross-border e-commerce logistics. First, the dominant position of the postal system is gradually broken, and its price advantage is further reduced. The main distribution products of cross-border e-commerce logistics products are digital products and accessories and clothing and other portable products, because these products are more convenient through the postal system distribution. But with the rapid development of cross-border e-business supplier, some enterprises began to test the waters overseas positions, to
carry out strategic cooperation with international logistics giants to solve problems related to logistics, completely changed in the international parcel postal system mainly dominated. The postal system also does not accept the post because of policy, the price advantage has been weakened. Two is the rapid growth of overseas warehouse business share. In view of the cross-border e-business supplier logistics products rich in Home Furnishing products as the representative of the large and heavy products such as increasing proportion, has been difficult to through the way of the air transport logistics, take the consumer country overseas warehouse distribution obviously lower cost of goods. EBay, Amazon and other international e-business giants also actively encourage Chinese sellers to use overseas warehouse shipments, to ensure user experience, and further promote the rapid development of overseas warehouses. Three, the logistics problems of emerging market countries are still outstanding. On the one hand, emerging market countries customs inspection efficiency is low, the level is not high, on the other hand, emerging market countries logistics infrastructure is not perfect, customs clearance procedures are complicated, including the cost of overseas positions is difficult to effectively control the cross-border e-business supplier logistics is difficult to achieve fundamental change.

2. SWOT ANALYSIS OF CROSS-BORDER SUPPLIER LOGISTICS

2.1. Analysis of advantages of cross-border e-business supplier logistics

Cross border operation has become the choice of many Chinese e-commerce enterprises, and the opportunities for cross-border e-business supplier logistics development are increasing. In recent years, China's cross-border e-business supplier development is very rapid. Statistics show that in 2013 China’s cross-border e-business supplier turnover more than 3 trillion and 200 billion yuan. In 2014, the transaction volume of more than 4 trillion yuan, enterprises engaged in cross-border e-business supplier business through various platforms in China have more than 20, among them, there are more than 5000 platform enterprises. In this context, China's cross-border e-business supplier logistics development is very fast, which has gradually accumulated a larger cross-border e-business supplier logistics infrastructure. In 2013, China Customs launched cross-border trade e-business supplier service pilot, at the same time, it made clear the relevant regulatory measures and policies of cross-border e-business supplier development, and proposed 4 types of new customs clearance supervision modes, such as general exports, special regional exports, direct purchase, import and online shopping and bonded. The implementation of cross-border e-business supplier export model will benefit more companies, especially for small and micro enterprises, cross-border e-business supplier development is very favorable. Logistics rapid development of cross border e-business supplier can effectively promote the diversification of domestic product exports, and thus help more small and micro enterprises to join the ranks of cross-border e-business supplier services, in turn, increase cross-border e-business supplier logistics business.

![Figure 1](image_url)  
**Figure 1.** Sketch map of the market share of B2B e-commerce in China

2.2. Analysis of the disadvantages of cross-border supplier logistics

China’s cross-border e-business supplier logistics disadvantages are mainly manifested in the following aspects: first, the logistics cost is too high. Cross-border e-business supplier logistics need to expand from the domestic to foreign countries, the entire logistics industry chain has become longer, links are more, and so the logistics costs rose sharply. It is worth noting that, in the customs and commodity inspection links, uncontrollable factors are very difficult to operate. These will improve cross-border e-business supplier logistics costs. Second, the logistics distribution cycle is too long. In China, the e-business supplier logistics distribution
is not in place, which is often the focus of consumer complaints; in cross-border e-business supplier logistics development, the logistics cycle is too long, which are what consumers are most dissatisfied with, and the reason lies in the longer chain of cross-border e-business providers, logistics and more links. Among them, customs clearance and inspection and quarantine waiting time is essential, which lead to cross-border e-business supplier logistics average cycle is often more than 5 times the average cycle of domestic e-business supplier logistics, seriously affecting the development of cross-border e-business supplier in China. Third, logistics after-sales service is difficult to keep up with. Cross-border e-business supplier logistics involves many links, and the possibility of return logistics is very large. From the e-business supplier itself, the rate of return is much higher than the traditional rate of return under the business model. Because the cross-border e-business supplier logistics cycle is long, the cost is high, it is often difficult to meet consumer demand for return. As developed countries in Europe and America, there is exchange of consumer culture and consumer habits, when China’s cross-border e-business supplier to enter these countries market, the exchange rate is often high. However, due to the lack of strong logistics support and smooth logistics channels, the exchange of goods has become very difficult. Especially because the return logistics cost is high, sometimes it even more than the value of the logistics cost of the commodity itself, many of our enterprises have managed to support cross-border e-business supplier logistics.

**China and the US are the most popular cross-border destinations**

*For Western European shoppers however, shopping within Europe is still more popular*

![Figure 2. Cross-border E-commerce](image)

**2.3. Opportunity analysis of cross border e-business supplier logistics**

Since 2013, Taobao, Jingdong network and other Chinese e-business supplier giants began to layout overseas markets, accumulated a considerable number of cross-border e-business supplier operating experience, which provides a good opportunity for cross-border e-business supplier logistics development. On the one hand, China's cross-border e-business supplier gradually defined the direction of development, which helps the new mode of cross-border e-business supplier logistics development. In March 2014, import model cross border e-business supplier services pilot online shopping bonded promulgated by the General Administration of Customs became an important driving force for the development of cross-border e-business supplier in China. In the new mode, the e-business supplier logistics can provide effective support, which will become an important determinant of cross-border e-business supplier development. At present, many e-business supplier logistics enterprises are increasing innovation, and with foreign consumer spending habits and consumer culture, it has reformed the cross-border e-business supplier logistics operation mode. I believe in the near future, China’s cross-border e-business supplier logistics model will become more and more fixed, more and more mature. On the other hand, the experience of cross-border e-business supplier logistics development in developed countries provides a useful reference for the development of related industries in China. In Europe and America developed countries, the return of goods is a prominent cultural characteristic, and this is precisely the most inappropriate for our e-business supplier logistics enterprises. With foreign e-business supplier logistics companies stationed in the Chinese market, they solve consumer exchange practices, which is worth our study. In fact, in recent years, China’s cross-border e-business supplier logistics enterprises are trying to solve the problem of lack of logistics delivery time and high customer satisfaction through overseas warehouse business model, and have achieved good results.

**Table 1. list of business scope of major cross-border e-business supplier products in China**

<table>
<thead>
<tr>
<th>Cross-border</th>
<th>LightInTheBole</th>
<th>Dhgate</th>
<th>DX</th>
<th>Milanoo</th>
</tr>
</thead>
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2.4. Threat analysis of cross-border e-business supplier logistics

At present, China’s cross-border e-business supplier logistics still has the following threats: first, the risk posed by channel risk. Domestic e-business supplier development environment is different, foreign e-business supplier development environment is more mature, consumer demand for product quality is higher, e-business providers generally have a unified quality control methods and quality control standards. After China’s cross-border e-business supplier logistics enterprises out of the country, we must take measures to actively respond to foreign consumers due to product standards, product quality differences and other issues arising from the exchange requirements. The second is the threat of cross-border logistics risks. Cross border e-business providers are facing many logistics links, each link there is a huge risk. On the basis of solving the problem of international express delivery, cross-border e-business providers should also handle customs clearance, inspection and quarantine, tax, insurance and other issues. In mature market economy countries, the developed third party logistics can provide excellent services for cross-border e-business supplier enterprises, and even help cross-border e-business supplier logistics enterprises all customs clearance, delivery procedures.

![Figure 3. E-commerce logistics](image-url)

In view of the fact that most of the cross-border e-business supplier logistics enterprises in China has not yet formed the scale effect, the selection of technical conditions of the third party logistics agent customs is not mature, especially many small cross-border logistics enterprises, they are basically in a weak position in competition with international cross-border e-business supplier logistics enterprises. The third is the threat posed by product competition risk. The domestic several large-scale cross-border e-business supplier flagship products are mainly wedding dresses, electronic products and medical products, product combinations are relatively simple. Due to the combination of this product structure, cross-border e-business supplier often have to pay high advertising costs on a product promotion, it lacks the independent design brand, and the product core competitiveness is generally not strong. Some manufacturers love copying foreign brand design, the products produced by his country customs seized very big risk. Fourth is the threat of policy risk. Cross border e-business supplier logistics is often faced with domestic policy and foreign policy risk. From the domestic policy point of view, cross-border e-business supplier logistics risk is mainly reflected in the uncertainty of customs policy. Because our country's customs supervision mechanism, cargo clearance mechanism is mainly around the design of bulk goods, it lacks a large number of small parcels of logistics, customs clearance, inspection and quarantine system design, which gives domestic cross-border e-business suppliers and related customers unnecessary losses. From the point of view of foreign policies, many countries have frequent changes in customs policy, China’s...
cross-border e-business suppliers are often faced with product quality inspection and product copyright protection issues. Among them, the most representative is the Russian customs, and its customs clearance policy changes often allow executives to have a lot of discretion.

3. CROSS BORDER LOGISTICS MODE

3.1. Traditional logistics mode

Along with the sea Amoy or purchasing mode gradually to cross-border e-business supplier mode change, cross-border logistics mode gradually tends to regularization, legalization, diversification. In the process of cross-border e-business supplier development, international postal parcels (especially international postal parcels) and international express plays an extremely important role, in many cross-border logistics mode, the use of the two largest proportion. In promoting the development of cross-border e-business supplier and acted under the market demand to stimulate the emergence of a variety of logistics mode, cross-border logistics mode is no longer adhere to the international postal parcels and international express delivery, the new cross-border logistics mode to overseas positions led by gradually attention, and has been used in cross-border e-business market. International postal parcel refers to the import and export of goods through the universal postal union system, and the use of individual parcels in order to deliver goods, the postal system as a commodity to achieve cross-border logistics carrier. In the cross border e-business market, the international postal parcels are mostly international postal parcels. International postal parcels in the current cross-border e-business suppliers use most, but also the sea Amoy and overseas purchasing the most commonly used cross-border logistics model. Take China as an example, according to incomplete statistics, at present, more than 60% of the cross-border e-business suppliers are transported through international postal parcels. Cross border e-business supplier commonly used another cross-border logistics model for international express. International express refers to goods through international express delivery company in two or more than two countries and regions between logistics and distribution activities. Global international express companies mainly include UPS, FedEx, DHL, TNT, ARAMEX and so on. China's famous express companies also expand the international express business, including EMS, SF express, Shen Tong, Yun Da, etc.. The international express is usually divided into weight calculation and volume calculation when charging goods. The most expensive one is the final billing method, and it requires higher packaging. International express can according to different customer needs, such as geographical, cargo type, size, weight of goods and so on, choose different channels to achieve freight transport and courier. International express and international postal parcel have obvious complementary. The advantage of international postal parcel is the disadvantage of international express, and the disadvantage of international postal parcel is generally the advantage of international express.

![Image of various logistics companies](image)

Figure 4. International postal parcel

3.2. New logistics mode

Overseas warehouse known as overseas warehousing, cross-border logistics mode rise in recent years,
refers to cross-border business enterprise in the country of the seller, especially the buyer's country through leasing or warehouse construction, through international freight, will advance the sale of goods shipped to the warehouse, and then through the cross-border e-commerce platform for merchandise display and sales. The development of cross-border e-business supplier and demand innovation to promote the emergence of overseas warehouses, overseas warehouse is an effective solution to solve the dilemma of cross-border e-commerce logistics, but also a breakthrough in the development of cross-border logistics path. After the emergence of overseas warehouse model, it has attracted much attention, more and more enterprises engaged in cross-border e-business business enterprises have established overseas warehouses, to solve the cross-border logistics problems faced. Amazon and eBay in the world by different model to set up overseas positions, have to cooperate with the government and enterprise cooperation mode, mode, lease mode, mode of self, in Australia, Latin America, Western Europe, Chinese fast clouds overseas warehouse

Border warehouse is a concept derived from overseas warehouses and cross border logistics model. The difference between a frontier warehouse and an overseas warehouse is the geographical location of the warehouse. Overseas warehouse is the warehouse built outside the country where the seller of the cross-border e-business trading is, and the warehouse is the warehouse of the neighboring countries where the buyer of the cross-border e-business trading is the main buyer. The border positions specifically refers to the country's neighbors in input commodity border, through leasing or warehouse construction, will advance the delivery of goods in the warehouse, goods display, browse, order, payment processing, customer service and a series of activities through cross-border e-commerce platform, cross-border logistics transportation and distribution directly from the warehouse through the line material flow. International logistics special line is also a new cross-border logistics mode under the background of cross-border e-business supplier development. International logistics refers to cross-border logistics mode formed in more than two countries or regions, transport routes, transportation time, transportation logistics, the starting point and end point are fixed, especially for fixed cross-border logistics lines. International logistics of cross-border e-business supplier, can play the function of long-distance cross-border transport, with scale property is high, through the line of logistics mode, to economies of scale, to reduce cross-border logistics cost is significant, especially cross-border e-business providers on the fixed market, is a kind of effective cross-border logistics solutions.

![Figure 5. Overseas warehouse](image)

In the context of cross-border e-business supplier development, free trade zone and free trade zone value highlights, the world has accelerated the pace of construction of free trade zones and bonded areas. Relying on the bonded area or free trade zone logistics services, cross-border e-business supplier market has become a new cross-border logistics model. Free trade zone or free trade zone logistics is by international freight will advance goods to the bonded area or FTA warehouse, goods display, flow, orders, processing, payment and other activities through cross-border e-commerce platform, when processed network order, realize the sorting, packaging, delivery of goods through the line of the bonded area or trade warehouse the completion of the terminal distribution logistics activities. Free trade zone or bonded area in large scale logistics mode of logistics, logistics, logistics cargo localization advantages, can shorten the logistics time, improve logistics efficiency,
reduce logistics costs, but also to enjoy the free trade zone or free trade area resources. Free trade zone or free trade zone logistics can enjoy preferential policies and the comprehensive advantages of free trade zone or free trade zone, mainly in logistics, customs clearance, commodity inspection, receipt and payment of tax rebates and other aspects, but also simplifies the tedious cross-border and cross-border logistics processes and procedures. Under the stimulation of cross-border e-business supplier development, cross-border logistics demand driven the fourth party logistics is also applied in the cross-border e-business supplier market, to solve the needs of cross-border logistics commodities. Fourth party logistics is the main independent of both transaction parties and professional third party logistics providers for commodity logistics and distribution business, specifically refers to commodity trading parties, the third party logistics consulting, logistics planning, transportation, logistics information system, supply chain management and other comprehensive activities of a supply chain integrator. The fourth party logistics supply chain emphasizes the ability of resource integration, through its influence and discourse power of the whole supply chain, in order to solve the logistics demand as the foundation, through the integration of all kinds of internal and external resources, make full use of logistics information sharing and social logistics resources.

4. COUNTERMEASURES AND SUGGESTIONS ON CROSS BORDER E-COMMERCE LOGISTICS DEVELOPMENT

4.1. Increase national policy support
For the development of cross-border e-business supplier supporting integration needs, from the national level to introduce support policies to promote cross-border e-business supplier logistics development. One is to introduce long-term planning of cross-border e-business supplier logistics development. Cross border e-commerce logistics enterprises facing the logistics distribution time is too long, other countries customs, commodity inspection links and other issues, relying solely on the enterprise's own operation is unable to completely solve. The long-term planning of cross-border e-business supplier logistics development should be introduced, and the logistics development objectives, development initiatives and business functions of the Ministry of Commerce and other government departments should be clearly defined so as to form a situation for the whole industry to seek common development. Two is to increase investment in logistics infrastructure construction. The key point is to strengthen the construction of port logistics system, to achieve the same logistics at home and abroad, to improve the distribution capacity and supporting level of port logistics. Constantly improve the level of port logistics informatization, promote cross-border e-business supplier logistics development. Three is to develop cross-border e-business supplier for the development of advanced logistics policy. To strengthen the cross-border e-business supplier logistics industry development analysis, judgment, according to the actual situation of economic cooperation between China and other countries, to develop a forward-looking cross-border e-business supplier logistics development policy.

4.2. Vigorously enhance cross-border e-commerce logistics enterprise informatization level
Strengthening the informatization construction of cross border e-commerce logistics enterprises is the only way to improve their service level. The informatization construction of cross-border e-business supplier logistics companies must cover cross-border logistics each terminal of intelligent equipment all information processing, for the first time will be many written information into electronic information, and feedback to the information management system. One is to improve the level of consumer information processing and service, through the APP, web pages and other information inquiry system, for consumers to solve the whole process of tracking cross-border logistics. Two is to strengthen cross-border e-commerce logistics enterprise business information system construction. In logistics transportation, storage, handling, handling, packaging and capital settlement, such as the transmission of information, through the establishment of information processing module, promote cross-border e-business supplier logistics business process standardization and unification.
4.3. Vigorously promote cross-border e-business supplier logistics overseas warehouse business

At present, many problems appeared in cross-border e-commerce logistics development has seriously restricted the development of cross-border e-business supplier. In this case, many cross-border e-business suppliers began to try to develop overseas warehouse business, that is, through the establishment of warehouses overseas, directly completed part of the logistics distribution task or solve cross-border logistics problems in the development of e-commerce. Compared with the traditional e-business supplier logistics, overseas warehouse business model has the following advantages: first, it can significantly reduce cross-border e-commerce logistics costs. Overseas warehouse has the advantages of one-time batch transportation and batch declaration, which can effectively reduce the number of customs declaration and inspection and quarantine, and effectively reduce the cross-border logistics costs of e-commerce. Alibaba statistics show that through the establishment of overseas warehouses, enterprises can reduce about 20% of the logistics costs. Two is to effectively shorten the cross-border e-business supplier logistics transportation and distribution cycle. Enterprises set up overseas warehouse, can provide warehousing, sorting, packaging and delivery of integrated services, so that the cross-border e-business supplier to respond to consumer demands of local consumers in a timely manner, through local distribution, delivery of products to consumers as soon as possible. In addition, cross-border e-business suppliers can also combine the local logistics characteristics, improve the efficiency of logistics distribution, shorten the transportation and distribution cycle, and then compete with the local e-business supplier logistics enterprises in the same running line. Three is to fully meet the local consumers unconditional return requirements. In the countries and regions with overseas warehouses, when consumers put forward the exchange requirements, the cross-border e-commerce logistics enterprises can return the goods to overseas warehouses, and then provide new goods from overseas warehouses. This method can reasonably avoid complicated customs and commodity inspection links, and shorten the delivery cycle of goods.

5. CONCLUSION

E-commerce and logistics coexist, cross-border e-commerce logistics problems are also emerging, seriously affecting and restricting the development of China's cross-border e-business supplier. In order to deal with many logistics problems, many Chinese cross-border e-business suppliers have set foot in overseas warehouse business. Through the establishment of warehouses overseas, we can effectively solve many of the logistics problems encountered by China's cross-border e-business suppliers. The development of cross-border e-business supplier can not do without cross-border logistics. Cross border e-business supplier compared to traditional e-business supplier has many new features, in the logistics, China cross border e-business supplier is experiencing new problems and risks. Combined with the new characteristics of China's cross-border e-business supplier, analysis of cross-border e-commerce logistics problems and risks, the proposed overseas warehouse is to solve the dilemma of China's cross-border e-business supplier an effective way. There are some disadvantages in overseas warehouses. It costs cost to build or lease overseas warehouses. Overseas warehouses need to operate teams, not all products are suitable for overseas warehouses and so on.

References


Liu L. Research on Logistics Problems and Countermeasures in Chinese Cross-border E-commerce