

# Research on the Development Strategy of Cross-Border E-commerce in Jilin Province in the Context of Big Data

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**Abstract.** Big data has a great and positive impact on cross-border e-commerce. According to the current situation of e-commerce development in Jilin Province, this paper analyses the existing problems in the process of development, and puts forward the development strategy of cross-border e-commerce in Jilin Province based on the background of big data.

## The Influence of Big Data on Cross-Border E-Commerce

The definition of “big data” by CNKI is that the new processing modes need to be adopted to make it have massive, high-growth rate and diversified information assets with stronger decision-making power, insight and discovery power and process optimization ability.

As a new form of international trade, the integration of cross-border e-commerce and big data is a useful complement to our traditional foreign trade enterprises. Under the trend of slowing down the growth of import and export trade, the development of cross-border e-commerce shows a strong driving force. According to the “China’s Export Cross-Border E-Commerce Development Report in 2017” published by the E-Commerce Research Center, the scale of export cross-border e-commerce transactions in China was 6.3 trillion yuan in 2017 with an increase of 14.5% over the same period last year, and the volume of cross-border e-commerce transactions in China reached 8.2 trillion yuan with an increase of 22.3% over the same period last year.

With the rapid development of big data technology, e-commerce transactions are becoming more and more diverse. To sum up, the impact of big data on cross-border e-commerce is mainly reflected in the following aspects:

### Marketing Management.

Big data can improve the accuracy and initiative of enterprise marketing, and fundamentally subdivide the customer group to meet the consumer mentality. Using big data, cross-border e-commerce enterprises can target customers with the shortest distance and the fastest speed to carry out marketing. At the same time, the use of big data technology can also refine customers, so that cross-border e-commerce can provide corresponding products according to the level of customers’ consumption. In addition, the use of big data technology can also provide cross-border e-commerce customers’ consumption habits, consumer interests and shopping frequency, which will provide targeted data for cross-border e-commerce, thus realizing targeted sales of cross-border e-commerce and increasing the number of sales.

### Customer Experience.

In the traditional data analysis, generally, only a small part of the historical behavior data of e-commerce users is kept, and it takes a long time to analyze and process the data. Because of the small data capacity, the business value that can be excavated is limited. The application of big data has made great progress in the cost and time of storage and real-time processing of massive and diverse data. Cross-border e-commerce can mine more updated business value from the real-time processing and analysis of massive data, so as to enhance customer experience.

### Management Efficiency.

Big data reflects the information about consumer preference, consumption, time and place of consumption and other aspects. Through the analysis of data, cross-border e-commerce enterprises improve their products accordingly, optimize customer experience, and provide customized real-time

information for consumers, so as to achieve more effective interaction with consumers. More importantly, big data can help enterprises to establish a broad and deep market impression among global consumers, and ultimately give strong support to corporate decision-making, and improve the efficiency of decision-making.

### Current Situation of Cross-Border E-Commerce Development In Jilin Province

According to the statistics of Jilin Statistical Bureau (see Table 1), the total import and export trade of Jilin Province from 2012 to 2016 shows a downward trend.

Table 1 Total value of imports and exports

Year	Total Imports and Exports (USD 10000)	Total Exports	Total Imports
2012	2457171	598269	1858902
2013	2585254	675701	1909553
2014	2637817	577771	2060045
2015	1893841	465382	1428458
2016	1844246	420568	1423678

With the slow growth of traditional foreign trade, the growth rate of online trade has slowed down with the general trend, but it is still in the stage of rapid development. The total value of imports and exports by trade mode of 2016 is shown in Table 2. General Trade accounts for more than half of the Total Exports. According to the data from the website of the Ministry of Commerce of the People's Republic of China, the province achieved 1 billion yuan through cross-border e-commerce exports in 2016, accounting for more than one third of General Trade. In the first half of 2017, the export reached 900 million yuan with an obvious increase.

Table 2 Total value of imports and exports by trade mode (2016)

unit:10000 dollars

Item	Total Imports and Exports	Total Exports	Total Imports
Total Value of Imports and Exports	1844246	420568	1423678
General Trade	1551882	269086	1282796
Processing Trade	168708	119543	49165
Compensation Trade			
Processing and Assembly Trade	14502	8700	5803
Processing Trade for Imported Material	154205	110844	43362
Sale by Consignment			
Small Trade on Border	27229	11874	15354
Leasehold Trade			
Imported Equipment used as Investment by Foreign Funded Enterprises	1148		1148
Processing Trade for Exported Materials	6768	3176	3592
Dicker Trade	99	88	11
Others	16234	4152	12082

On September 14, 2016, the first cross-border e-commerce summit was held in Jilin Province. Meanwhile, the provincial government issued the "Opinions on Promoting the Development of Cross-border E-commerce in Jilin Province". All efforts were made to introduce Alibaba "One Touch", a comprehensive foreign trade service platform enterprise, to establish "Jilin Cross-Border

E-Commerce Special Zone” and “Online Industry Belt”, to strive to build the overall framework of cross-border e-commerce development in our province, and to create an all-round cross-border e-commerce development environment. Taking Alibaba International Station as an example, since the beginning of 2016, the cooperation number of cross-border e-commerce enterprises in Jilin Province has increased nearly three times, reaching 247 (a total of 85 by the end of 2015).

The number of inquiries from overseas buyers to enterprises in Jilin Province has increased significantly. The number of inquiries for overseas purchases per enterprise per month has increased from 28 at the end of 2015 to 43 at present with an increase of 50%. The advantage of credit guarantee quota shows that the average quota of enterprises in our province in cross-border e-commerce platforms has increased from \$32,000 before the introduction of credit guarantee policy to \$171,000, and the total amount has increased by \$18.1 million.

On July 13, 2018, the executive meeting of the State Council decided to promote the development of cross-border e-commerce in a wider scope, select the places with good basic conditions and great potential for import and export development, incline to the central-west and north-east areas, and set up a number of new comprehensive test zones for cross-border e-commerce in 22 cities including Changchun. The huge market demand has brought unprecedented development opportunities for cross-border e-commerce in Jilin Province.

## **Problems in the Development of Cross-Border E-Commerce in Jilin Province**

### **Cross-Border E-Commerce Enterprises are Scarce and Passive in Development.**

The development of cross-border e-commerce in Jilin Province is still dominated by heavy industry and resource-based enterprises, with traditional industries such as automobile, petroleum and chemical and agricultural products processing. Although there are more than 10,000 enterprises with foreign trade import and export rights, and more than 5,000 trade products in 20 categories, such as agricultural products, automobile and parts, petrochemical products, etc., the development of cross-border e-commerce industry is extremely passive due to the lack of product category, commodity prices, experience, information and so on.

#### **Lack of Cross-Border E-Commerce Platform.**

The cross-border e-commerce enterprises in Jilin Province lack not only the e-commerce platform, but also the integration of upstream, midstream and downstream enterprises in the province, as well as logistics, payment, insurance services and other related industries, to form an organic and unified integrated cross-border e-commerce platform.

#### **Huge Talent Gap.**

On the one hand, cross-border e-commerce is facing customers all over the world, involving payment, logistics, customs clearance, network and other comprehensive knowledge and skills, and needs compound talents. With the popularization and application of information technology, the number of enterprises involved in the network, enterprises' self-shopping websites, and third-party e-commerce platforms is increasing, and the demand for e-commerce practitioners is increasing. On the other hand, Jilin Province has a shortage of e-commerce talents. As an emerging industry, there are fewer cross-border e-commerce talents, especially experienced and capable cross-border e-commerce talents.

### **Cross-Border E-Commerce Service Providers are Relatively Inadequate in Resources, and Logistics Development Lags Behind.**

The cross-border e-commerce has a long industry chain. Besides cross-border e-commerce platform enterprises, service providers such as logistics, payment, marketing, training and talents are crucial to the development of the industry around the upstream and downstream industry chain. Jilin Province has not achieved obvious results in the resource agglomeration of cross-border e-commerce service providers, and the resources of service providers are relatively scarce, which is not conducive to the rapid development of cross-border e-commerce industry in Jilin Province.

## **Development Strategy of Cross-Border E-Commerce in Jilin Province in the Context of Data Background**

### **Enterprises Change Awareness and Develop Trade Ways.**

Business expansion needs not only pragmatism, but also innovation and mutation, which requires entrepreneurs' vision and awareness of the systematic changes brought by e-commerce to traditional enterprises. When carrying out internal enterprise reform, trading enterprises in Jilin Province should not only make use of traditional trade methods, but also make full use of "big data" and try to use cross-border e-commerce for transactions, so as to not only save costs, but also quickly empty inventory, expand output and improve product profits.

### **Superimposing the Advantages of Big Data, Developing Platform Services, and Promoting the Centralized Development of Cross-Border E-Commerce.**

At present, Jilin Province has cooperated with Ebay and Alibaba Group to sell automotive parts, special safe and other products online, thus realizing the sell of "Jilin Made" to "the whole world" through the Internet. However, we should make greater efforts to guide the mainstream third-party e-commerce platforms (such as Amazon, AliExpress, Wish, etc.) into Jilin Province. In order to develop cross-border e-commerce in Jilin Province, efforts should be made to superimpose the common advantages of "big data" and its related businesses so as to provide more extensive platform services for large, medium and small e-commerce enterprises.

We will strengthen communication with pilot enterprises and focus on solving problems arising in the operation of the platform. Considering the industrial foundation, development space and location characteristics of the special Customs controlling zones comprehensively, we will build a cross-border e-commerce industrial zone which integrates R&D, application, public platform, supporting facilities and logistics distribution, promote the agglomeration and cluster development of local cross-border e-commerce enterprises, and continuously optimize the eco-environment of cross-border e-commerce.

### **Speeding up the Construction of Talents and Providing Impetus for Industrial Development.**

In view of the shortage of talents in cross-border e-commerce field, on the one hand, we should rely on domestic and foreign universities and well-known Internet enterprises to develop the training of middle and high-end talents in the fields of e-commerce, logistics distribution and Internet finance, support conditional e-commerce enterprises to establish educational practice and training base with scientific research institutes, universities and third-party institutions, innovate e-commerce personnel training mechanism, and establish a high-quality professional talent team. On the other hand, we should strengthen the introduction of e-commerce talents, gather the leading figures of e-commerce, improve the incentive measures for e-commerce talents, broaden the channels for talent introduction, flexibly adopt various ways such as core talent introduction, team introduction, project introduction, and so on, and introduce high-end talents and compound talents suitable for the development of e-commerce in Jilin Province.

### **Strengthening the Construction of Cross-Border E-Commerce Service System and Improving Cross-Border E-Commerce Related Logistics Support.**

The cross-border e-commerce service enterprises that understand both e-commerce and foreign trade, and can provide specialized services such as customs declaration, refund of duty, international logistics, overseas warehousing and exchange for enterprises should be cultivated and introduced. The training, overseas legal and financial consultation, overseas after-sales support, international transportation, global warehousing and other comprehensive cross-border trade e-commerce solutions should be provided for traditional enterprises willing to carry out cross-border e-commerce activities. The cross-border e-commerce innovation pilot area should be provided to further optimize zone services, and accelerate the construction of integrated service platform, logistics sorting line, bonded warehouse and other infrastructure services. The relevant supporting policies of the zone should be improved to attract the settlements of cross-border e-commerce related enterprises and projects such as finance, logistics, production and trade, and form a good cross-border e-commerce ecological environment. The process should be optimized to improve the processing efficiency of

direct delivery of packages(collection - customs clearance - shipping), and reduce the timeliness and cost of logistics with coastal enterprises as a whole.

## Conclusions

“Big data” is the inevitable result of the integration of Internet and modern production and lifestyle. The cross-border e-commerce based on “big data” is one of the most active commodity trading modes in China. In the context of “big data”, in addition to making full use of the existing advantages of resources, Jilin Province should continue to strengthen the supervision and management of cross-border e-commerce with the help of big data, cloud computing and other network technologies. Making use of big data to realize the synchronization of information service and supervision of cross-border e-commerce is not only a good help for the current industry transformation and upgrading, but also an important measure to promote cross-border e-commerce to improve its quality and achieve long-term development.

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