

STUDIES ON PROBLEMS AND COUNTERMEASURES  
IN THE DEVELOPMENT OF CROSS-BORDER LOGISTICS  
OF CAINIAO NETWORK



**BANGKOK  
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OF CAINIAO NETWORK



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#### ABSTRACT

This study objectives are; 1) to study the level of the decision to use Cainiao Network cross-border logistics. And 2) to examine the main influencing factors in the decision to use Cainiao Network cross-border logistics. This was a quantitative research study using a questionnaire with a sample in Cainiao, China. The Sampling totaling 208 individuals. Frequencies, percentages, means, and standard deviations were used in descriptive statistics. And use multiple regression analysis for inferential statistics.

The study found that the overall enterprises Using Cainiao Network Cross-border Logistics Services had a moderate score, with the highest being in the information system efficiency. Meanwhile, the overall decision score was also moderate.

The assumption testing revealed that the following factors did not influence the decision: partner service level, goods transportation, information system update speed, information system efficiency, customs clearance efficiency, emergency handling efficiency, infrastructure coverage and charges. However, the assumption of the study was not accepted for these factors.

*Keywords: The decision, Cross-border logistics, Cainiao Network Cross-border Logistics*

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background and Research Importance

The year, 2021 witnesses not only the 30th anniversary of the establishment of dialogue relations between China and ASEAN, the year of sustainable development and cooperation between China and ASEAN, but also the 8th anniversary of the joint construction of the "Belt and Road" initiative. The platform has played an active and exemplary role in promoting the facilitation of trade and investment, the construction of cross-border industrial parks, and the development of cross-border e-commerce.

Driven by economic globalization, the allocation of production factors has been continuously optimized, forming a production network based on the international division of labor. The degree of interdependence among countries has deepened, and their economic and trade cooperation has become closer and closer. Since entering the 21st century, regional economic integration has developed rapidly and has become a typical feature of the world economy. At present, the world has gradually formed three major economic circles: the European Union, the North American Free Trade Area, and East Asia. The GDP of the three economic circles accounts for 3/4 of the total global GDP, which has an important impact on global economic and political development. Among them, the EU and NAFTA have achieved regional economic integration, and the EU has developed to the degree of the common market. Although the East Asian economic circle started late, the ASEAN cooperation mechanism has shown great vitality and development potential since its establishment.

As a typical example, Cainiao Network has expanded its "China intelligent logistics backbone network" to the world, built the world's largest open cross-border logistics network, used big data to coordinate global logistics resources, optimized cross-border logistics services, and improved the cross-border shopping experience. By the end of 2019, Cainiao Network had more than 3,000 Chinese and foreign partners, including more than 100 cross-border logistics partners. Its logistics coverage capacity can reach 224 countries (or regions) and 231 cross-border warehouses, and the number is still rising. It has built a cross-border logistics

backbone network with real global distribution capacity. Undoubtedly, the development of Cainiao Network has made great contributions to the cross-border logistics industry.

However, Cainiao Network still has some deficiencies in the development of cross-border logistics. In terms of cross-border logistics services, there is still room for improvement compared with excellent competitors at home and abroad, and there is still a certain gap from its goal of "reaching within 24 hours in China and 72 hours in the world." In this context, studying the problems existing in the cross-border logistics development of Cainiao Network and putting forward feasible countermeasures and suggestions has important theoretical and practical significance for promoting the improvement of cross-border logistics service level and efficiency of Cainiao Network and helping the rapid development of cross-border e-commerce in China.

## **1.2 Research problems**

By investigating the cross-border logistics construction of Cainiao Network and its Chinese and foreign partners, this paper analyzes the problems existing in the cross-border logistics development of Cainiao Network from the outside and inside, so as to provide ideas for formulating the cross-border logistics optimization scheme of Cainiao Network.

## **1.3 Research Objectives**

1.3.1 To study the level of the decision to use Cainiao Network cross-border logistics.

1.3.2 To examine the main influencing factors in the decision to use Cainiao Network cross-border logistics.

## **1.4 Research assumptions**

1.4.1 Partnership service level will influence the decision to use Cainiao Network cross-border logistics.

1.4.2 Goods transportation will influence the decision to use Cainiao Network cross-border logistics.

1.4.3 Information system update speed system will influence the decision to use Cainiao Network cross-border logistics.

1.4.4 Information system efficiency will influence the decision to use Cainiao Network cross-border logistics.

1.4.5 Customs clearance efficiency will influence the decision to use Cainiao Network cross-border logistics.

1.4.6 Emergency handling efficiency will influence the decision to use Cainiao Network cross-border logistics.

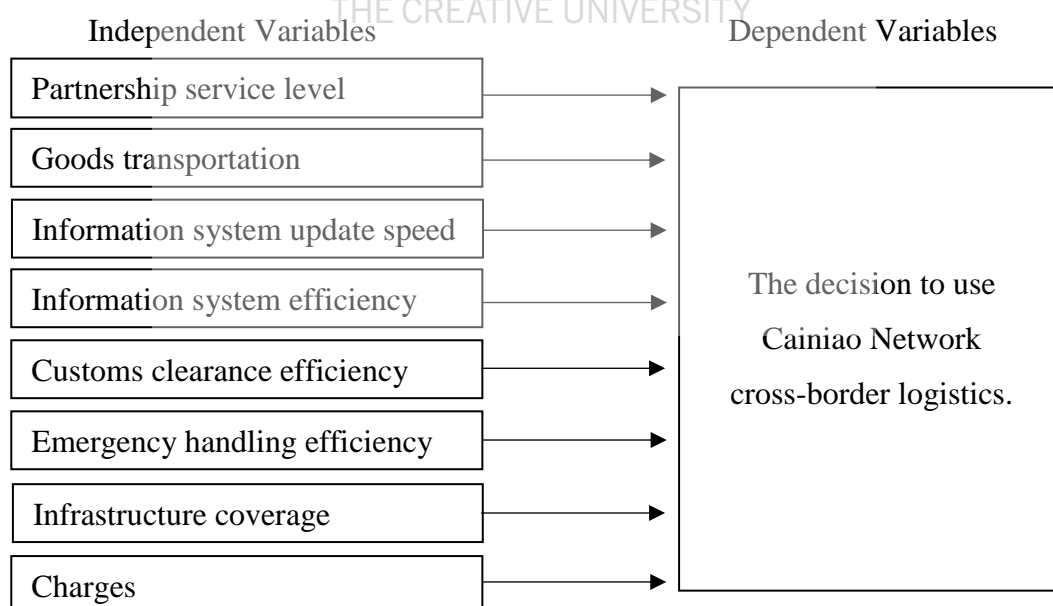
1.4.7 Infrastructure coverage will influence the decision to use Cainiao Network cross-border logistics.

1.4.8 Charges will influence the decision to use Cainiao Network cross-border logistics.

## 1.5 Conceptual Framework

The overall conceptual framework of this research is shown in the following diagram:

Figure 1.1: Conceptual Framework



## 1.6 Research scope

Firstly, through the method of induction and summary, this paper analyzes the current situation of rookie network cross-border logistics from two aspects: rookie network cross-border logistics construction and rookie network cross-border logistics partners.

Secondly, it systematically analyzes the main problems existing in the cross-border logistics development of rookie network from the external and internal dimensions. Due to the objective gap between countries around the world in government support, customs clearance, infrastructure, the Internet and information technology, the development of rookie network cross-border logistics in different countries abroad is different. And in the fiercely competitive environment, the development of rookie network cross-border logistics is also easy to be blocked. At the same time, the rookie network has its own shortcomings, resulting in insufficient coordination with partners, delayed data update and excessive infrastructure construction cost. And the construction of high intelligence logistics needs to be expanded.

Thirdly, the questionnaire survey method is used to explore the main influencing factors of the cross-border logistics development of rookie network, and the importance of each influencing factor is calculated by random forest algorithm. Finally, in view of the problems existing in the cross-border logistics development of rookie network and combined with the importance of various influencing factors, this paper puts forward countermeasures and suggestions to promote the cross-border logistics development of rookie network, including accelerating the upgrading of information system, actively seeking the support of governments, promoting the construction of smart logistics, giving priority to enterprises with high tacit understanding and satisfaction, establishing a good incentive mechanism Learn from the successful experience of excellent competitors and strengthen the training of compound talents.

## **1.7 Definitions of relevant concepts**

1.7.1 Information system refers to sociotechnical, organizational system designed to collect, process, store, and distribute information. Composed of four components: task, people, structure (or roles) and technology.

1.7.2 Customs clearance refers to necessary procedure in permitting goods that are transported to a country through an authorized customs broker.

1.7.3 Infrastructure refers to information technology infrastructure or in short, that the IT structure is required to operate and manage the organization's various IT data.

1.7.4 The decision making refers to the cognitive process resulting in the selection of a belief or a course of action among several possible alternative options. It could be either rational or irrational.

1.7.5 Cross-border logistics refer to international logistics, which refers to transporting goods from one country or region to another by sea, air or land transportation, so as to complete the ultimate purpose of international commodity trading.

## **CHAPTER 2**

### **RELATED THEORETICAL AND RESEARCH CONCEPTS**

#### **2.1 Literature Review**

##### **2.1.1 Research on the Relationship Between Cross-Border E-Commerce and Cross-Border Logistics**

Trong & Khanh (2012) infer that most e-commerce enterprises that slowly disappeared in the fierce market environment ignored the role of logistics in the early stage of their development. They believe that the development level of logistics industry occupies an irreplaceable position in the development of e-commerce enterprises, and the relationship between cross-border e-commerce and cross-border logistics is the same. Hsiao, Chen, & Liao (2017) believes that the demand and importance of cross-border logistics services are increasing with the development of cross-border e-commerce, and cross-border logistics service providers can maintain their advantages in the increasingly fierce competition only by continuously improving and providing differentiated services.

##### **2.1.2 Research on Cross-Border Logistics System and Cross-Border Logistics Services**

In terms of regional cross-border logistics, Leung, Wu, & Lai (2002a) developed an optimization model to solve the logistics problem of Hong Kong manufacturing companies based on the fact that trucks transporting finished products between China and Hong Kong must pay cross-border fees. The characteristics of similar cross-border logistics problems and the alternatives of transportation products are discussed. In order to enhance the practical significance of the proposed model, different management logistics plans are evaluated according to the changes of future policies and clearing conditions. Davis, & Friske (2013) believe that public support for Public-Private Partnerships (PPPs) plays an important role in promoting the improvement of cross-border logistics. Although private enterprises and the public sector are key stakeholders in the quality of cross-border logistics, there are relatively few studies to test PPPs in logistics management. To address this gap, The current research aims to develop empirical, theoretical insights and explore the nature and role of PPP in the context of cross-border logistics.

Wong, Choy, Chow, & Lin (2014) used the performance evaluation system framework to evaluate the cross-border logistics policies of Hong Kong and the Pearl River Delta. Edirisinghe (2017) believes that logistics have a significant impact on the economic activities of any country. For the Sri Lankan government, improving logistics performance has become a more important development policy goal. The logistics performance index (LPI) was used as a tool to analyze the cross-border logistics performance in Sri Lanka, identified the main reasons for the low level of service provision performance, and put forward the necessary improvement of policies and regulations.

Cross-border logistics services. Boyson, Corsi, Dresner, & Rabinovich (1999) believe that third-party logistics is a new situation for the development of cross-border logistics in the future, and the stable development of third-party logistics is undoubtedly beneficial to the development of cross-border e-commerce. Furthermore, Jazairy, Lenhardt, & Haartman (2017) Put forward the guidelines to improve the logistics performance in terms of cost efficiency and on-time delivery in the third-party logistics supplier relationship. Foreign scholars are good at summing up the successful experience of the development strategy of FedEx, UPS and other international large-scale leading enterprises, and summed up some advanced ideas for other logistics enterprises to refer to and make contributions to cross-border logistics services.

Cross-border logistics system design. Leung, Wu, & Lai (2002b) proposed a robust optimization model to solve the cross-border logistics problem in the uncertain environment. By adjusting the penalty parameters, decision makers can determine the best long-term transportation strategy, including the best transportation route and the best vehicle composition, so as to minimize the total expenditure under different economic growth scenarios. Behar & Venables (2010) believes that national investment in transportation infrastructure can promote the development of international trade, % of cross-border logistics costs come from the investment of logistics infrastructure. In areas far from the port, the cost of cross-border logistics infrastructure accounts for 60% of the logistics cost. Therefore, the state should increase its investment in logistics infrastructure. Shi (2022) proposed that we can rely on the cross-border logistics management system of intelligent and networked



coordination to improve the distribution efficiency of express enterprises. Giuffrida, Mangiaracina, Perego, & Tumino (2017) took the garment industry as an example and proposed a logistics solution to support cross-border e-commerce in China. Hsiao, et al. (2017) believes that satisfactory cross-border logistics services (CBLS) can help promote the business activities of cross-border e-commerce. He can provide ideas for the development of CBLS through Kansei Engineering (KE) method and use Partial Least Squares (PLS) to analyze the relationship between customer perception and CBLS service elements.

### **2.1.3 Research on Cainiao Network**

At present, scholars' research on Cainiao Network mostly focuses on the significance and role of Cainiao Network for China's e-commerce industry and logistics industry. When the Cainiao Network was established, Sun (2023) pointed out that the successful establishment of the Cainiao Network is equivalent to building a socialized logistics infrastructure platform, and the mode and business of its cooperative enterprises will not change, but small and medium-sized express enterprises will accelerate the reshuffle. Chen (2018) concluded that the Cainiao Network can not only improve the current situation of the industry, but also serve as a warning to express logistics enterprises to a certain extent, and small and medium-sized express enterprises will be shuffled 45. Zhao, Li, & Zhou (2019) proposed that Cainiao Network provides a freely accessible platform for social logistics by creating "Skynet + Genet." It is a specific form of trying to penetrate into the traditional express industry with internet thinking. Chen, Apibunyopas & Batool (2022) pointed out that the self-built logistics e-commerce enterprises such as Amazon, Jingdong Mall and Dangdang have impacted traditional express enterprises to a greater extent. The intensive distribution of Cainiao Network and the integration of multiple companies have greatly increased the business volume of traditional express enterprises, but the formation of intelligent backbone network will reduce the whole process participation of traditional express enterprises and make them focus on the last kilometer of distribution business, Improve professionalism. Ren (Fotis, 2016) said in the interview that Cainiao Network didn't know much about logistics when it was first established, and it didn't start early in the field of logistics. However, after three years of development, Cainiao Network took data as the core and shared

economy as the concept, integrated social resources and reshaped China's logistics industry. Based on grounded theory, J. Wang, Si, Yang, & L. Wang (2023) deeply studied the driving force and core elements of Cainiao Network innovation and summarized the innovation path of Cainiao Network business model.

Liu, Liang, Wei, & Wu (2020) based on the theory of the business ecosystem, studied the basic structure and members of Cainiao Network business ecosystem, and put forward the development countermeasures of smart logistics in China. Zhao, et al. (2019) studied the challenges faced by the Cainiao Network logistics platform and its partners and the ecological advantages formed by the cooperation evolution, and put forward the countermeasures and suggestions for the ecological cooperation evolution of the Cainiao Network logistics platform. Zhang & Lee (2023) revealed the internal mechanism of the coupling and interaction between technological innovation and service model innovation of Cainiao Network Technology Co., Ltd., which is conducive to providing reference for the innovation activities of cloud logistics platform. Ryan, Sun, & Zhao (2008) estimated that the comprehensive evaluation of Cainiao Network is at the medium level through fuzzy comprehensive analysis and evaluation method, and the competitiveness of Cainiao Network is low in terms of price. Chen (2018) analyzed the warehousing mode, and logistics operation of Cainiao Network, defined the roles, gains and losses of all parties in its system, and inferred the impact of its successful implementation on relevant industries and even the national economy. Chinese scholars have less special research on Cainiao Network cross-border logistics, mostly focusing on the construction status and services provided by Cainiao Network cross-border logistics, which are qualitative research. Li (2018) pointed out that the Cainiao Network cooperates with multinational postal services through equity investment and other means, and has realized freight communication in more than 220 countries and regions; at the same time, cooperate with local distribution enterprises in various countries, Realize network coverage in Japan, South Korea, Russia, Britain, the United States and other countries. Falcone, Kent, & Fugate (2019) concluded that Cainiao Network has greatly improved the timeliness of cross-border logistics by building a global network of overseas warehouses and establishing partnerships with major Chinese import bonded warehouses. Zhao, et al. (2019) concluded on the basis

of studying the cross-border logistics of Cainiao Network that for Chinese logistics enterprises Building a "global 72 hr. logistics network" is not difficult, but making "China logistics" a world recognized high-quality service brand, There is still a long way to go. Zhang (2021) pointed out that the China Europe train of Cainiao Network is heading for Liege to serve Poland France, Czech Republic and other 28 European countries; the distance between China's supply chain and the global Cainiao Network has been narrowed. Novel coronavirus pneumonia is a Cainiao Network that represents the international logistics system, according to Mr. Ban Juanjuan. Cainiao Network quickly launched the global anti epidemic rescue channel through the world e-trade platform hub, supported the accelerated recovery of cross-border trade through the innovation of intelligent logistics backbone network and digital trade mode, helped stabilize the global supply chain and industrial chain and further promoted the trade transformation.

#### **2.1.4 Factors Affecting the Development of Cross-Border E-Commerce Logistics in China**

Cross-border logistics are very different from domestic logistics. First of all, global logistics are decentralized, and the development of logistics companies is also regional. Compared with the local area, the development is very good, but for the global market, It is said that no logistics company can cover everything and do its best in every corner of the world. Second, the mode of flow is different, the environment faced by logistics in each country is different, the customs are also different, and the traffic conditions are different, personnel income is not the same, logistics development level is not the same, etc. It is difficult to adapt a company's logistics model to the development of global logistics, and logistics companies have explored it under the accumulation of long-term experience in actual operation. The development model adapted to local logistics, once involved in cross-border logistics, may not be suitable for the original development model of cross-border logistics. Third, logistics companies probably did not develop along with the development of cross-border e-commerce companies. Development, its own handling of e-commerce logistics may also undertake offline logistics, so the formation of its system can be difficult to adapt to the needs of the development of cross-border e-commerce in building a sound cross-border logistics network is huge, especially in the construction

of overseas logistics networks. The investment in labor and material resources is even a large amount. At the same time, compared with the domestic logistics network, the warehousing and material resources, the flow management ability puts forward higher requirements, and the tax policies, trade policies and customs operation procedures of various countries They are also not the same, so the factors affecting cross-border network logistics are intricate and complex. Building a complete cross-border logistics network Networking is not something that happens overnight, it takes a long time and the effect is slow. With the increasing scale of cross-border e-commerce transactions, The requirements for the construction of cross-border e-commerce logistics network are getting higher and higher.

(1) Information system asymmetry. The information system mainly refers to the asymmetry of information between the domestic segment and the overseas segment, and the asymmetry of the language information system and the information management system. With the rapid development of domestic e-commerce in recent years, the logistics information system has become more and more advanced, however, compared with domestic information systems, the construction of overseas information systems has just started. The poor connection between the system and the foreign information system leads to slow logistics and poor service in the overseas segment, which often leads to transnational cross-border e-commerce logistics needing the backing of professional information technology. As a traditional logistics enterprise, cross-border logistics require the cooperation of many logistics providers to complete and has strong requirements for timeliness. Therefore, it needs a more complete information system to support it. The docking of logistics information systems in Europe and America at currently at a high level, but in developing countries and many small-language countries, information connection is not smooth.

At present, cross-border logistics companies also need to strengthen their logistics management capabilities, and some logistics companies have not yet fully developed good contingency plans, During the peak sales season, logistics companies are prone to liquidation, which requires cross-border goods streamlined enterprises establish a sound emergency plan, and a sound emergency plan also requires a sound information system support.

(2) The policy environment is not perfect. The government is an important key to solve the development plight of cross-border e-commerce and cross-border logistics enterprises. At present, the Chinese government has successively issued many regulations that are conducive to the development of cross-border e-commerce and cross-border logistics enterprises. Policy documents, such as the "Implementation Opinions on Promoting E-commerce Applications" issued by the Ministry of Commerce in 2013, the "Related Supervision of Cross-border Trade E-commerce Import and Export Goods and Articles." promulgated by the General Administration of Customs in 2014, and the "Guidance for Promoting the Healthy and Rapid Development of Cross-border E-commerce", "Several Opinions on Accelerating the Cultivation of New Advantages in Foreign Trade Competition", and "Opinions on Accelerating the Cultivation of New Economic Drivers" issued by the State Council in 2015, have made important arrangements for cross-border e-commerce. The government has increased the construction of cross-border logistics, payment, supervision and other supporting systems, but there are still more supportive policies to be further strengthened, the implementation of relevant policies by local governments is not high, and relevant local policies and regulations are also not perfect. The e-commerce development in the coastal areas is relatively fast, while the central and western areas are still relatively weak. The relevant support for the central and western areas is not enough, although the relevant departments are also stepping up the study of relevant preferential policy strategies, but they are all advancing through exploration. I believe that in the near future, cross-border e-commerce and logistics Policies are getting better and better.

(3) Cross-border quarantine and customs procedures are cumbersome. The difference between cross-border e-commerce and domestic e-commerce is that cross-border e-commerce needs to go through customs quarantine and customs clearance. Taxation and other procedures are one of the important factors affecting the development of cross-border e-commerce logistics; while domestic logistics do not have customs clearance issues. The customs policies of each country are different, and the inspection of inbound and outbound goods is also different. In some countries, the customs declaration the procedures are cumbersome, the declaration time is long, and the expenses are also very high. It happens from time to

time that the goods are stranded, and consumers will not be able to receive the goods because of this.

For the customs of most countries, it is difficult to realize the seamless connection between cross-border e-commerce enterprises, as the customs system is very large and requires a lot of manpower and material resources. Whether the systematic management of customs can be realized is related to the further development of cross-border e-commerce. For the customs of various countries, on the one hand, with the development of cross-border e-commerce the entry of goods has brought challenges to customs supervision and taxation. On the other hand, customs urgently need to solve the Customs efficiency, foreign exchange settlement and export tax rebates and other issues. How to establish and improve the import tax system compatible with cross-border e-commerce, the adapted customs tax collection system truly realizes the convenience of cross-border transactions and shopping. It is a cross-border logistics enterprise and the future direction of joint efforts of customs.

Regarding customs clearance issues, countries all over the world have more or less existing problems, which also restrict the development of cross-border e-commerce. This is a key factor hindering the rapid development of e-commerce. At present, the systematic management of personal small import tax system is the only one in the world. Most of the countries in the world have not yet realized it. Even in the same country, due to the different customs areas, customs clearance personnel.

There are differences in business capabilities. The customs of various countries will face the management problems of small import and export goods.

However, for the customs, if the management of small-value imports and exports is completely relaxed, it will not be conducive to the customs' control of small-value imports and exports at home and abroad. Commodity import and export management, and if the small amount of import and export management is completely released, the country will lose a lot of tax revenue. Excessive customs control on this will hinder the development of related industries, and will also encourage underground transactions through informal channels. The small import and

export tax system should be re-established and gradually unified around the world to solve this problem, which It makes small cross-border e-commerce transactions and shopping more convenient, and also greatly promotes the health of small cross-border e-commerce healthy development.

The biggest difference between cross-border e-commerce and domestic e-commerce is that cross-border e-commerce involves overseas customs clearance supervision and taxation, while domestic e-commerce does not have this problem. The booming cross-border e-commerce With the development of a large number of domestic and foreign goods entering and leaving the country through express delivery or logistics, the traditional customs supervision and taxation of goods have already How to improve the efficiency of customs clearance for cross-border e-commerce and solve the problem of cross-border e-commerce development Efforts must be made to speed up customs clearance, standardize foreign exchange settlement, and resolution export tax rebates.

Commodity inspection is the inspection of commodities. The quality control methods and regulations implemented by different countries on import and export commodities the standards are different. The current commodity inspection model is set up to satisfy the traditional cross-border commodity inspection, which is no longer suitable to meet the inspection and quarantine requirements of cross-border e-commerce goods, the current inspection and quarantine department is also an evasive attitude, and no relevant plan has been introduced. Commodity inspection is indispensable in cross-border e-commerce transaction's link, its backward commodity inspection mode has brought many troubles to the development of cross-border e-commerce.

In June 2019, the Guangdong inspection and quarantine department took the lead in "breaking the ice" and started to connect with cross-border e-commerce platforms. Through data unification, information symmetry, and complete unification of quarantine, customs, and enterprise data, the data can be monitored. Supervise the dynamics of goods in the whole process. From customs declaration to inspection, there is no need to repeat declaration materials, which greatly speeds up the efficiency of customs clearance. Rate. If this model can go smoothly, the General Administration of Inspection and Quarantine is likely to be the

pilot cities are quickly promoted, but this model still needs a long period of exploration and demonstration.

Inspection and quarantine are a crucial part of the entire import and export trade link, whether the goods can enter and exit normally. The environment depends on the approval of the inspection and quarantine department. It is expected that through continuous exploration, we can find out a road that is really suitable for cross-border the inspection and quarantine model for the development of overseas e-commerce.

(4) Logistics law is not perfect. China's existing regulations such as "Regulations on the Administration of Domestic Waterway Transport", "Measures for the Customs Supervision of Bonded Areas" and "Tao Road Transport Regulations and other logistics laws and regulations, these laws and regulations are basically to meet the current traditional logistics the development of the industry being enough, but China's current logistics, rules and regulations for e-commerce are almost blank. It can no longer meet the needs of e-commerce development.

At the same time, the logistics laws, regulations, rules, international treaties, international practices and other laws are in a decentralized state.

### **2.1.5 Review of Research**

Combing the research status at home and abroad, it can be seen that the research focuses of scholars at home and abroad are different. Foreign scholars' research on cross-border logistics mainly focuses on the relationship between cross-border e-commerce and cross-border logistics and the solution of cross-border logistics problems. Chinese scholars mainly study the coordinated development of cross-border e-commerce and cross-border logistics, the construction and optimization of cross-border logistics system, cross-border logistics mode and cross-border logistics management.

In addition, foreign scholars have less research on open logistics platforms such as Cainiao Network. Chinese scholars' research on Cainiao Network mostly focuses on its value and significance, less on the specific operation of Cainiao Network, and less on its cross-border logistics. At present, Cainiao Network has served 224 countries and regions around the world and is committed to making



"global buy and global sell" worry free. In order to help Cainiao Network become a cross-border logistics backbone network with real global distribution capacity as soon as possible, and it is necessary to find out the prominent problems existing in Cainiao Network's cross-border logistics, deeply analyze its influencing factors, and then find the main factors affecting the development of Cainiao Network's cross-border logistics, And further put forward the corresponding countermeasures, which has important theoretical and practical significance for the development of Cainiao Network and related cross-border e-commerce and cross-border logistics enterprises.

## **2.2 Theoretical Basis**

The development of Cainiao Network cross-border logistics starts from local areas. In the process of development, it has always adhered to the concept of green and environmental protection and constantly develops emerging technologies to improve its cross-border logistics efficiency. Cainiao Network cross-border logistics has developed rapidly on the basis of regional logistics theory, circular economy theory and intelligent economy theory. Therefore, this paper will study on the basis of these three theories.

### **2.2.1 Regional Logistics Theory**

The theoretical basis of regional logistics is the unbalanced growth theory, which was put forward by German American economist Albert Hirschman in his book economic development strategy in 1958. Under the condition of limited resources and capital, Hirschman advocates economic growth through the development of industrial sectors with "correlation effect." This theory has been supported by British development economist Hans Singh, American development economist Cha Goldberg and American economic historian Walter Whitman Rostow. The research of regional logistics theory is produced by the practice of regional logistics, and at present, many countries have carried out the research on regional logistics. Because the correlation between logistics enterprises is large, it plays a very important role in the regional economy.

Regional logistics mainly serve the designated area, and improves the comprehensive economic strength of the region by improving the local logistics level and timeliness and expanding the radiation range of logistics infrastructure. As a

special form of regional economy, regional logistics have a multi-level and multi-dimensional structure, including three basic elements: logistics subject, logistics object and logistics carrier. Each of these three elements has its own complete structural system and different functions, thus forming the overall function control of regional logistics.

The regional logistics of various parts together constitute the overall logistics system. The cross-border logistics of Cainiao Network also develop from the local regional logistics, and then grow step by step to form the current global cross-border logistics network.

### **2.2.2 Circular Economy Theory**

The thought of circular economy originated in the era of the rise of environmental protection thought; in the 1960s, the economist poled in mentioned the theory of circular economy; from people's concern about harmless treatment of pollutants in the 1970s to people's resource-based treatment of pollutants in the 1980s, it can be said that it has developed a big step; in the 1990s, the sustainable development strategy became the world trend and formed a relatively perfect circular economy strategy; at the beginning of the 21st century, the development significance of circular economy was recognized from the perspective of emerging industrialization; then, with the development of economy, it puts forward the strategy of developing circular economy from different spatial scales of cities, regions and countries.

The theory of circular economy is essentially an ecological economic theory, which requires the use of ecological laws to guide the economic activities of human society. Circular economy is a new closed-loop economic model, which takes the efficient recycling of resources as the core and the principle of 3R (reduce, reuse, recycle - reduction, reuse and recycling.) to realize the harmony between the economic system and the natural ecosystem. The development concept of circular economy is to transform the linear growth economy relying on resource consumption into an economy relying on ecological resource circulation. It has created a new mode of economic growth and a new mode of pollution control and promoted the integration of economic development, resource conservation and environmental protection.

### 2.2.3 Intelligent Economic Theory

The concept of smart economy was put forward in the "Europe 2020 strategy" announced on March 3, 2010. It is one of the three priorities of the EU's future economic development. After that, the government's report of the two sessions in 2019 put forward the important strategy of "intelligence ten", mainly including deepening the R & D and application of big data and artificial intelligence. Intelligence economic theory uses the automation of data flow to resolve the uncertainty of complex systems, so as to realize the optimal allocation of resources and promote high-quality economic development. The framework system of intelligent economy is mainly composed of five parts: governance system, economic form, service mechanism, operation paradigm and underlying technical support.

Intelligent economy has shown the following three characteristics: first, taking the data as the key production factor. As a new stage of the development of digital economy, the intelligent decision-making and intelligent operation of the core "data, computing power and algorithm" will depend more on the acquisition and processing of data. Second, take man-machine cooperation as the main mode of production and service. The "mechanization" of human beings to a certain extent and the "life" of machines to a certain extent will be carried out at the same time, and the production model of man-machine cooperation will become more and more popular. Third, to meet the personalized needs of a large number of consumers is the pursuit direction of business value. In the future, every enterprise will have the ability to serve the personalized needs of a large number of users in real time at low cost.

After experiencing the invention and popularization of PC, Internet of things and mobile Internet, digital economy has entered a new stage of intelligent economy with artificial intelligence as the core driving force. Smart economy will bring new vitality to the global economy and is the core engine driving the global economy upward again. Cainiao Network cross-border logistics rely on intelligent logistics under the intelligent economy, and uses artificial intelligence to improve work efficiency and further drive the development of Cainiao Network.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Data Collection**

The influencing factors of Cainiao Network cross-border logistics development are mostly qualitative indicators. Before using statistical analysis method to clarify the importance of these factors, it is necessary to quantify the indicators. Therefore, this paper collects the data of relevant influencing factors through a questionnaire.

##### **3.1.1 Questionnaire Design**

Based on a large number of materials and field research, combined with the current situation and existing problems of Cainiao Network cross-border logistics development, this paper sorts out eight influencing factors, designs an initial questionnaire for it, and then deletes and modifies the ambiguous questions and options in the questionnaire to form the final questionnaire.

The first part is enterprise information. It mainly includes the number of people in the enterprise, the annual sales volume of the enterprise and where the enterprise sells its goods; in addition, a screening question is set to distinguish the second part from the third part.

The second part is the answer of enterprises using Cainiao Network cross-border logistics services. In this part, the influencing factors are divided into partner factors (partner service level, connection with goods in different transportation sections), operational efficiency factors (updated speed of information system, processing efficiency of information system, customs clearance efficiency of goods, handling of emergency) Other factors (infrastructure coverage, service charge) may affect the decision Making using Cainiao Network cross-border logistics.

The third part is the answer to enterprises that do not use Cainiao Network cross-border logistics services. It mainly involves the reasons why the Cainiao Network cross-border logistics service is not used and the improvement direction of the Cainiao Network cross-border logistics. It is expected to find the direction of cross-border logistics efforts of Cainiao Network.

### 3.1.2 Questionnaire Distribution and Recovery

This questionnaire is mainly edited and distributed by the questionnaire star Network platform. By contacting relevant associations and enterprises in Guangzhou and Shenzhen, Jiangsu, Zhejiang, Shanghai, Heilongjiang and other places, questionnaires were distributed to the logistics business heads of cross-border e-commerce enterprises. 411 questionnaires were distributed and 411 questionnaires were recovered. Among them, 217 questionnaires showed that they had used Cainiao Network, 9 invalid questionnaires were excluded, and 208 valid questionnaires remained; 173 questionnaires were not used, and the remaining 21 questionnaires were invalid. A total of 30 invalid questionnaires was eliminated, and 381 valid questionnaires remained, with an effective rate of 92.70%. The eliminated invalid questionnaires are mainly those that answer all extreme values, and those that fill in the questionnaire in less than 30 seconds and all the answers are the same option.

### 3.2 Reliability Analysis

The original data collected through the questionnaire may have measurement errors and cannot be directly used for empirical analysis. It is necessary to investigate the reliability and validity of the questionnaire, that is, reliability test and validity test, to prove that the questionnaire is effective.

Reliability test can represent the stability and consistency of questionnaire data by measuring the same or similar groups in different forms or time. The most commonly used reliability test is Cronbach's coefficient test. Referring to table 3.1 below, Cronbach's coefficient corresponds to the quality of the questionnaire. The value of Cronbach's coefficient is between 0 and 1. The closer the instrument value is to 1, the better the correlation between the items set in the questionnaire and the higher the reliability of internal consistency.

This paper uses the statistical package to analyze the reliability of the questionnaire. The test results are shown in table 54. The Cronbach's coefficients of partner factor, operation efficiency factor and other factors are 0.867, 0.880 and 0.762 respectively, which are greater than 0.7, indicating good internal consistency; the Cronbach's coefficient of the overall sample is 0.835. Therefore, the questionnaire on

the influencing factors of the cross-border logistics development of Cainiao Network fully meets the reliability requirements of the research needs.

Table 3.1: Correspondence between Cronbach's coefficient and questionnaire quality

<b>Cronbach's coefficient</b>	<b>Sub-questionnaire reliability</b>	<b>Total-questionnaire reliability</b>
$\alpha < 0.5$	Not ideal, give up	Very unsatisfactory, give up
$0.5 < \alpha < 0.6$	Acceptable, needs to be modified	Not ideal, need to reprogrammed or revised
$0.6 < \alpha < 0.7$	Acceptable	Acceptable, but it needs to be modified
$0.7 < \alpha < 0.8$	Reliability is high	Acceptable
$0.8 < \alpha < 0.9$	Reliability is very high	Reliabilities very high
$\alpha > 0.9$	Reliability is very high	Reliabilities very high

Table 3.2: Reliability test of measurement data

<b>Detection variables</b>	<b>Clone Bach alpha is based on the standardized clone Bach alpha</b>	
Partner factors	.867	.868
Operational efficiency factors	.880	.881
Other factors	.762	.774
<b>Overall</b>	<b>.835</b>	<b>.839</b>

### 3.3 The Population and Sample

The population of this study is enterprises in Guangzhou and Shenzhen, Jiangsu, Zhejiang, Shanghai, Heilongjiang and other places.

The sample of this study consisted of 411 state enterprises. The participants were selected through non-probability sampling by Convenience Sampling.

### **3.4 Data Analysis**

#### **3.4.1 Descriptive Statistics**

These statistics were used to analyze the enterprise information of respondents. The information included is Number of employees, annual sales, the export destinations, cross-border logistics services use currently, and the main reasons of the company use Cainiao cross-border logistics services. A descriptive statistic is used to analyze and summarize the characteristics and observations of the data and present them in the form of frequencies, percentages, means, and standard deviation.

#### **3.4.2 Inferential Statistics**

These statistics are used to interpret the meaning of the data and the relationship between the variables. Multiple regression analyses was used to test the assumptions and to study the relationship between the variable independents, which are the main influencing factors, and the dependent variable, which are the decision to use Cainiao Network cross-border logistics.

## **CHAPTER 4**

### **DATA ANALYSIS**

Questionnaires with complete answers were used to collect data for the purpose of clarifying and testing hypotheses about each variable. A total of 208 data sets was analyzed as follows:

4.1 Analysis of Descriptive Data

4.2 Analysis of Inferential Data

4.3 Findings from data analysis

#### **4.1 Analysis of Descriptive Data**

Part 1: Analysis of Enterprise Information using Frequency and Percentage Distributions.

Part 2: Analysis of Enterprises Using the Cainiao Network for Cross-border Logistics Services Using Mean and Standard Deviation.

Part 3: Analysis of decision data using the mean and standard deviation.

#### **4.2 Analysis of Inferential Data**

Part 4: Enterprises using Cainiao Network cross-border logistics services Effect of Decision Making Using Multiple Regression Analysis

#### **Symbols and Abbreviations for Statistical Analysis**

A total of 208 respondents was surveyed for data. To generate comprehensibly, the researcher studied the data from the questionnaire and processed it with a statistical package. As a result, the researcher defines the following symbols upon analyzing the data:

- N represents the number of the population.
- n represents the number of samples.
- $\bar{x}$  represents the sample mean.
- S.D. represents the standard deviation.
- F represents the F statistic used in the hypothesis test.
- t represents the t-type statistic Distribution.



Sig. represents the calculated value of the statistic used in the hypothesis test.

\* represents statistically significant at the 0.05 level.

\*\* represents statistically significant at the 0.01 level.

### 4.3 Findings from Data Analysis

**Part 1: Enterprise Information Analysis Using Frequency and Percentage Distributions**, the results of the analysis are as follows:

Table 4.1: The number and percentage classified by the number of employees in your business.

<b>Number of employees in your business</b>	<b>Number (person)</b>	<b>Percentage (%)</b>
20 and below	36	17.3
31 to 100	41	19.7
101 to 500	45	21.6
501 to 1,000	39	18.8
More than 1,000	47	22.6
<b>Total</b>	<b>208</b>	<b>100.0</b>

The findings of the study from Table 4.1 showed the number of more than 1,000 employees in your business accounted for 22.6% of the total, followed by 101 to 500, which accounted for 21.6%, 21 to 100, which accounted for 19.7%, and 501 to 1,000, which accounted for 18.8% each, while 20 and below accounted for 17.3%.

Table 4.2: The number and percentage classified by annual sales of your enterprise

<b>Annual sales of your enterprise</b>	<b>Number (person)</b>	<b>Percentage (%)</b>
Less than 5 million Yuan	29	13.9
5 to 10 million Yuan	29	13.9
10 to 50 million Yuan	37	17.8
50 to 100 million Yuan	43	20.7
100 to 150 million Yuan	49	23.6
More than 150 million Yuan	21	10.1
<b>Total</b>	<b>208</b>	<b>100.0</b>

According to Table 4.2, the annual sales of your enterprise were found to be 100 to 150 million Yuan at 23.6%; 50 to 100 million Yuan at 20.7%; 10 to 50 million Yuan at 17.8%, less than 5 million Yuan and 5 to 10 million Yuan at 13.9%; and more than 150 million Yuan at 10.1%.

Table 4.3: The numbers and percentages classified by where are the export destinations of your cross-border e-commerce business

<b>Where are the export destinations of your cross-border e-commerce business</b>	<b>Number (person)</b>	<b>Percentage (%)</b>
Southeast Asia	32	15.4
Northeast Asia	37	17.8
Europe	39	18.8
North America	34	16.3
South America	43	20.7
West Asia	23	11.1
<b>Total</b>	<b>208</b>	<b>100.0</b>

From Table 4.3, Where are the export destinations of your cross-border e-commerce business, revealed that South America accounted for 20.7% of the total. Europe accounted for 18.8% of the total. Northeast Asia accounted for 17.8% of the total. North America accounted for 16.3% of the total. Southeast Asia contributed 15.4%, while West Asia contributed 11.1%.

**Part 2: Analysis of Enterprises Using the Cainiao Network for Cross-Border Logistics Services Using Mean and Standard Deviation.**

Table 4.4: The mean and standard deviation of enterprises using Cainiao Network cross-border logistics services

<b>Enterprises using Cainiao Network for Cross-Border Logistics Services</b>	$\bar{x}$	<b>S.D.</b>	<b>Level of Opinion</b>
Partner service level	3.32	1.534	Moderate
Transportation of goods	3.26	1.472	Moderate
Information system update speed	3.43	1.511	High
Information system efficiency	3.65	1.409	High
Customs clearance efficiency	3.50	1.121	High
Emergency handling efficiency	3.29	1.385	Moderate
Infrastructure coverage	3.24	1.369	Moderate
Charges	2.93	1.404	Moderate
<b>Total</b>	<b>3.32</b>	<b>.593</b>	<b>Moderate</b>

According to the study's findings, as shown in Table 4.4, Enterprises Using Cainiao Network Cross-border Logistics Services had opinion levels. The overall level was moderate. The mean  $\bar{x}$  score was 3.32. Considering each opinion individually, it was found that high level of opinions were information system update speed, information system efficiency and customs clearance efficiency; the medium level of opinions was partner service level, transportation of goods, emergency handling efficiency, infrastructure coverage and charges.

Table 4.5: The numbers and percentages classified by what cross-border logistics services do you currently use

<b>What cross-border logistics services do you currently use</b>	<b>Number (person)</b>	<b>Percentage (%)</b>
1. Small postal package	33	15.9
2. Overseas warehouses	37	17.8
3. Cross-border logistics services of UPS, FedEx, DHL and other international express companies	42	20.2
4. Cross border logistics services of foreign e-commerce enterprises such as Amazon FBA	35	16.8
5. Logistics enterprises such as Yanwen and Ruston	40	19.2
6. Cross-border logistics services of intelligent platforms as Lianlian Link	21	10.1
<b>Total</b>	<b>208</b>	<b>100.0</b>

The findings according to Table 4.5 on what cross-border logistics services you currently use found that cross-border logistics services of UPS, FedEx, DHL, and other international express companies accounted for 20.2%, followed by logistics enterprises such as Yanwen and Ruston at 19.2%, overseas warehouses at 17.8%, cross-border logistics services of foreign e-commerce enterprises such as Amazon FBA at 16.8%, small postal packages at 15.9%, and cross-border logistics services of intelligent platforms such as Lianlian Link at 10.1%.

Table 4.6: The number and percentage classified by what are the main reasons why your company does not use Cainiao network cross-border logistics service

<b>What are the main reasons why your company does not use Cainiao network cross-border logistics service</b>	<b>Number (person)</b>	<b>Percentage (%)</b>
1. The export cost is expensive	29	13.9
2. The export transportation cycle is long	28	13.5
3. The export cargo tracking ability is low	31	14.9
4. The degree of logistics informatization is low	42	20.2
5. The current cross-border logistics service mode can meet the needs of the company	46	22.1
6. other reasons	32	15.4
<b>Total</b>	<b>208</b>	<b>100.0</b>

Table 4.6 displays the study's findings on your main reasons for not using Cainiao Network's cross-border logistics service. It was discovered that the current cross-border logistics service mode can meet the company's needs and accounted for 22.1%, followed by logistics information technology, which had a low level and accounted for 20.2%; for other reasons, it accounted for 15.4%. The ability to track export cargo was low and accounted for 14.9%. The export cost was expensive, which accounted for 13.9%, and the export transportation cycle was long, which accounted for 13.5%.

**Part 3:** Analysis of decision data using the mean and standard deviation.

Table 4.7: The mean and standard deviation of decision

<b>Decision</b>	$\bar{x}$	<b>S.D.</b>	<b>Level of Opinion</b>
Decision	2.86	1.399	Moderate
<b>Total</b>	<b>2.86</b>	<b>1.399</b>	<b>Moderate</b>

Table 4.7 indicates that the overall opinion level was moderate, with a mean score  $\bar{x}$  of 2.86.

**Part 4:** Enterprises using Cainiao Network cross-border logistics services  
Effect of Decision Making Using Multiple Regression Analysis

Table 4.8: The results of assumption testing for enterprises using Cainiao Network cross-border logistics services

<b>Independent Variable</b>	<b>B</b>	<b>SE</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
Partner service level	.699	.368		1.897	.059
Transportation of goods	-.081	.043	-.089	-1.898	.059
Information system update speed	.076	.044	.080	1.741	.083
Information system efficiency	.036	.042	.039	.854	.394
Customs clearance efficiency	-.018	.045	-.019	-.406	.685
Emergency handling efficiency	-.100	.053	-.080	-1.898	.059
Infrastructure coverage	-.064	.043	-.063	-1.469	.144
Charges	.088	.045	.086	1.959	.051

$R^2 = 0.656$ ,  $F = 41.968$ ,  $\text{Sig of } F = .000$

- B = Regression coefficient  
 SE = Standard Error  
 Beta = Influence of the independent variable affects to the dependent variable.

t	=	Statistical value
Sig.	=	P value of statistical t
R <sup>2</sup>	=	Influence of the free variable
Sig of F	=	P value of F statistics
*	=	P value $\leq 0.05$

Based on Table 4.8, the results of a multiple regression analysis of factors influencing decision-making behavior were found. Nevertheless, the independent variables were: partner service level; transportation of goods; information system update speed; information system efficiency; customs clearance efficiency; emergency handling efficiency; infrastructure coverage; and charges. Using multiple regression statistics. So, the analysis results are as follows:  $R^2 = 0.656$ , all 8 independent variables had an influence on the dependent variable, which represented 65.6%.

$F = 41.968$ ,  $F \text{ Sig} = .000$ . The P-value of F was less than 0.05, indicating that the model of the equation was significant and that at least one independent variable had an influence on the dependent variable, which can generate straight-line equations.

According to the findings of the research assumption test, the factors do not influence the decision were partner service level, goods transportation, information system update speed, information system efficiency, customs clearance efficiency, emergency handling efficiency, infrastructure coverage and charges. Therefore, the assumption of the study was not accepted.

## CHAPTER 5

### RESEARCH SUMMARY

#### 5.1 Summary and Conclusion

Based on data analysis using frequency, percentage, mean, standard deviation, hypothesis testing using multiple regression analysis, the statistical analysis of variance can be summarized as follows:

##### **Part 1: Analysis of Enterprise Information**

More than 1,000 employees accounted for the most in your business study, accounting for 22.6%, followed by 101 to 500, which accounted for 21.6%; 21 to 100, which accounted for 19.7%; 501 to 1000, which accounted for 21.6%; and 20 and below, which accounted for 17.3%.

According to a study of your enterprise's annual sales, 100 - 150 million Yuan accounted for 23.6%, 50 - 100 million Yuan accounted for 20.7%, 10 - 50 million Yuan accounted for 17.8%, less than 5 million Yuan accounted for 13.9%, and more than 150 million Yuan accounted for 10.1%.

The study of where are the export destinations of your cross-border e-commerce business found that South America accounted for 20.7% Europe accounted for 18.8%, Northeast Asia accounted for 17.8%, North America accounted for 16.3%, Southeast Asia accounted for 15.4%, and West Asia accounted for 11.1%.

##### **Part 2: Analysis of Enterprises Using the Cainiao Network for Cross-border Logistics Services**

From the findings of the Enterprises Using the Cainiao Network Cross-border Study, logistics services had a high level of opinion. The level was moderate overall, with a 3.32 average score. When each opinion was considered individually, it was discovered that information system update speed, information system efficiency, and customs clearance efficiency obtained high levels of opinion; partner service level, transportation of goods, emergency handling efficiency, infrastructure coverage and charges received medium levels of opinion.



According to a study of what cross-border logistics services, you currently use, UPS, FedEx, DHL, and other international express companies accounted for 20.2%, followed by logistics enterprises such as Yanwen and Ruston, which accounted for 20.2%. Cross-border logistics services of foreign e-commerce enterprises, such as Amazon FBA, accounted for 16.8 %, small postal packages accounted for 15.9%, and intelligent platform cross-border logistics services, such as Lianlian Link, accounted for 10.01%.

The research discovered that the main reasons why your company does not use Cainiao Network cross-border logistics services were: The current cross-border logistics service model can meet the needs of the company, which accounted for 22.1%, followed by the degree of logistics Informatization is low, accounted for 20.2% and other reasons for the 15.4%. While the tracking ability of exported goods is low was 14.9%, the export cost is high, which accounted for 13.9%, and the export transportation cycle is long, which accounted for 13.5%.

### **Part 3: Decision Data Analysis**

The findings of the decision study showed that the overall level of opinion was moderate, with an average score of 2.86.

### **Part 4: Assumption Testing Results: Enterprises Using Cainiao Network Cross-border Logistics Services Effect of Decision Making Using Multiple Regression Analysis**

Results of the multiple regression analyses of factors influencing decision-making behavior showed that the independent variables were: partner service level, transportation of goods, information system update speed, emergency handling efficiency and charges. The dependent variable was a decision, using multiple regression statistics. However, the analysis results are as follows:

With all 4.8 independent variables influencing the dependent variable,  $R^2 = 0.656$ , which accounted for 65.6%.

The results of the research assumption test showed that the factors do not influence the decision were partner service level, goods transportation, information system update speed, information system efficiency, customs clearance efficiency, emergency handling efficiency, infrastructure coverage and charges. Therefore, the assumption for the study was not accepted.

## **5.2 Discussion**

From the findings of the Enterprises Using the Cainiao Network Cross-border Study, logistics services had moderate scores overall. Same, where customer service is important, it must be done quickly and with quality at an affordable price. These things give it a competitive advantage. Correspond to Ryan, et al. (2008) estimated that the comprehensive evaluation of Cainiao Network is at the medium level.

From the results of the research assumption test showed that partner service level, goods transportation, information system update speed, information system efficiency, customs clearance efficiency, emergency handling efficiency, infrastructure coverage and charges were not influence the decision. This may be because this transportation service has limitations in terms of competition in many aspects according to the changing situation of society and the economy. Which is inconsistent with Jazairy, Lenhardt, & Haartman (2017) Put forward the guidelines to improve the logistics performance in terms of cost efficiency and on-time delivery in the third-party logistics supplier relationship. Foreign scholars are good at summing up the successful experience of the development strategy of FedEx, UPS and other international large-scale express leading enterprises, and summed up some advanced ideas for other logistics enterprises to refer to and make contributions to cross-border logistics services. Which, this may be because each factor is difficult to control, resulting in uncertainty in the decision to use the service.

## **5.3 Recommendations for Implication**

From the charges that have the greatest influencing decision making in cross-border logistics services, appropriate charges should be charged or discounts for interested members to maintain a long-term customer base.

## **5.4 Recommendations for Future Research**

In the next research, in-depth interviews should be conducted to obtain more detailed information. In order to be able to apply it correctly.

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## QUESTIONNAIRE

### Part 1 Enterprise Information

1. Number of employees in your business

- 20 and below
- 21 to 100
- 101 to 500
- 501 to 1,000
- More than 1,000

2. Annual sales of your enterprise (Currency: RMB)

- Less than 5 million Yuan
- 5 to 10 million Yuan
- 10 to 50 million Yuan
- 50 to 100 million Yuan
- 100 to 150 million Yuan
- More than 150 million Yuan

3. Where are the export destinations of your cross-border e-commerce business?

- Southeast Asia
- Northeast Asia
- Europe
- North America
- South America
- West Asia

### Part 2 Enterprise using Cainiao Network cross-border logistics service

Please fill in according to your true feeling about your company's use of Cainiao Network and type in the corresponding column "✓"

"Very high" scores 5, The "Very low" score is 1, decreasing in turn.

Proposed indicators	Problem explanation	Subjective evaluation				
		1	2	3	4	5
Partner service level	What do you think of the service level of the cross-border logistics partners of Cainiao Network?					
Transportation of goods	Do you think the Cainiao Network is closely connected in different transportation segments of cross-border logistics?					
Information system update speed	How satisfied are you with the update speed of Cainiao Network cross-border logistics information system?					
Information system efficiency	How satisfied are you with the processing efficiency of Cainiao Network cross-border logistics information system?					
Customs clearance efficiency	What do you think of the customs clearance efficiency of Cainiao Network?					
Emergency handling efficiency	How efficient do you think Cainiao Network is dealing with emergencies?					
Infrastructure coverage	How do you think the coverage of infrastructure construction affects your company choice of Cainiao Network cross-border logistics services?					
Charges	What do you think of the charges for cross-border logistics services of Cainiao Network?					
Decision	Decision					



**Part 3** Questions for those enterprises that do not use Cainiao Network cross-border logistics services

1. What cross-border logistics services do you currently use?

- Small postal package
- Overseas warehouse
- Cross-border logistics services of UPS, FedEx, DHL and other international express companies
- Cross-border logistics service of foreign e-commerce enterprises such as Amazon FBA, Wish Mail and eBay logistics
- Logistics enterprise such as Yanwen and Ruston
- Cross-border logistics services of intelligent platforms such as Lianlian Link

2. What are the main reasons why your company does not use Cainiao Network cross-border logistics services?

- The export cost is expensive.
- The export transportation cycle is long.
- The export cargo tracking ability is low.
- The degree of logistics informatization is low.
- The current cross-border logistics service mode can meet the needs of the company.
- Other reason

3. What improvements would you like Cainiao Network to make or what kind of services would you like to provide? You may be willing to choose Cainiao Network to provide cross-border logistics services for your company?

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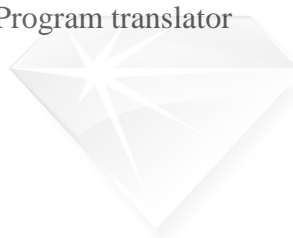
**BIODATA**

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