

# STUDY ON THE JINCHENG INTERNATIONAL LOGISTICS DISTRIBUTION SERVICE EFFECTS MANAGEMENT

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# STUDY ON THE JINCHENG INTERNATIONAL LOGISTICS DISTRIBUTION SERVICE EFFECTS MANAGEMENT

**Thematic Certificate** 

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# ABSTRACT

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China's information technology is continuously improving, and the advancement of information technology has led to the further development of network technology, making online shopping widely accessible. With the continuous development of international e-commerce, consumers' experience of logistics distribution has not been good. The evaluation of this new distribution method is not high, and the assessment of logistics distribution is even lower. In the e-commerce market, the key to gaining market competitiveness is whether to attach importance to logistics and distribution links or increase customer satisfaction with the logistics and distribution links.

This article introduced international e-commerce and logistics distribution and revealed the internal connection between e-commerce and logistics distribution. This research systematically studied the distribution management services of Jincheng International Logistics, and constructed the theoretical basis of e-commerce and logistics distribution, including the relationship between the two; two typical models of logistics distribution; logistics distribution practices of e-commerce companies;

logistics distribution; logistics distribution practices of e-commerce companies; analyzed the status of e-commerce customer satisfaction; logistics distribution to customer satisfaction degree of impact; and customer satisfaction evaluation index. Through research on the theoretical basis, a research framework was constructed, and a hypothesis was proposed. After making assumptions, a questionnaire was designed according to the evaluation index system. The investigation objects were determined to be the customers of Jincheng International Logistics, and the questionnaire collection method and data analysis method was implemented. The questionnaires were used to collect the interviewees' basic situation, the score of satisfaction index, and the satisfaction with logistics services. After the completion of the surveys, the questionnaire data was entered into SPSS 21.0 software to process the data. Descriptive statistical analysis, reliability test, and validity test, correlation analysis and regression analysis method were used to test the paper hypothesis through the eigenvalues of data statistics, and finally concluded that the theory holds. In the last chapter of the thesis, the previous section's data was analyzed to draw relevant conclusions. At the same time, the research conclusion and the actual situation were contacted to show the current problems, and the corresponding e-commerce logistics distribution countermeasures were proposed. Also, in the end, this research presented the limitations in the research process and future research directions.

Keywords: E-commerce; customer satisfaction; distribution services; Jincheng International Logistics.

# 摘要

标题: 锦程国际物流配送管理工作设计的影响研究

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中国信息技术不断进步,信息技术的进步带动了网络技术的进一步发展, 使得网络购物得到广泛普及。在国际电子商务不断发展的同时,消费者对于物 流配送的体验却并不良好,对于这种新型配送方式的评价不高,在这些评价 中,对物流配送这一环节的评价更低。在电子商务的市场上,获取市场竞争力 的关键在于是否重视物流配送环节、能否提高客户对于物流配送环节的满意 度。

本文介绍了国际电子商务与物流配送,并揭示了电子商务与物流配送的内 在联系。并且从实际出发,系统研究锦程国际物流的配送管理服务问题。构建 了电子商务与物流配送的理论基础,包括两者之间的关系,物流配送的两种典 型模式,电子商务企业的物流配送实践,分析了电子商务客户满意度现状、物 流配送对客户满意度的影响以及客户满意度评价指标。通过对理论基础的研 究,构建了研究框架,并提出论文假设。在提出假设之后,根据评价指标体系 设计了调查问卷,确定调研对象为锦城国际物流的客户,同时确定问卷收集方 法以及数据分析方法。通过问卷收集受访者的基本情况、满意度指标打分情况 以及对物流服务的满意度。完成调查后,将问卷数据输入 SPSS 21.0 软件中以 处理数据,使用描述性统计分析、信度检验与效度检验、相关分析和回归分析 法,通过数据统计的特征值对论文假设进行检验,得出假设成立的结论。在论

文的最后一章中,对上一章的数据结果通过分析得出相关结论。同时,结合研 究的结论与实际的情况提出了当前存在的问题,并提出了相应的电子商务物流 配送对策。最后,本研究提出了在研究过程中的局限性和未来可以进行的研究 方向。

关键词: 电子商务; 顾客满意度; 配送管理; 锦程物流;



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# **CHAPTER 1 INTRODUCTION**

## **1.1 Research background**

According to CNNIC's "38th Statistical Report on Internet Development in China" in January 2018, at the end of 2017, the number of Internet users in my country was estimated to be 1.049 billion. Among the netizens, the number of netizens using mobile phones to access the Internet is 857 million. The scope of Internet use in my country has further expanded and has risen to 47.9%, an increase of 2.1% compared to 2016. At the same time, the number of consumers shopping online reached 361 million. In 2016, online shopping consumers increased by 59.53 million, with a growth rate of 19.7%. The utilization rate of online shopping has increased year by year, reaching 55.7%. The above data fully shows that e-commerce occupies an important position in the commodity trading model, and consumers will increasingly use the Internet to make purchases. The development of e-commerce is inseparable from the support of information technology, electronic payment technology, logistics and distribution. With the continuous improvement of information technology and electronic payment technology, the main factor of logistics distribution has been slow to develop, which has become an obstacle to the development of e-commerce. The biggest reason. The market size of the e-commerce industry is expanding rapidly, which has led to a skyrocketing growth in online shopping orders, along with the current trend of global purchases. As my country's current international logistics industry is at an early stage of development and its development level is lagging behind, it has caused heavy pressure on the delivery of goods in the express delivery industry. At present, there are many errors in logistics distribution, large damages to commodities, low consumer satisfaction, and high capital investment required by logistics, which hinders the development of e-commerce. After research, the China E-Commerce Research Center found that consumers are not satisfied with the express service. The complaints mainly focused on issues such as slow logistics, poor express attitude and signature before inspection. These problems do not increase consumer satisfaction with e-commerce.

The rapid development of global online shopping has produced great attraction for manufacturers, and the continuous emergence of online stores has made online stores fiercely competitive. The key to e-commerce companies' survival and further development lies in their ability to understand and grasp the behavioral characteristics and laws of consumers in the e-commerce environment, take consumers as the service center, and pay attention to consumer satisfaction. At present, e-commerce companies should focus on how to further improve consumer satisfaction with online shopping through logistics and distribution. In the current development environment, this research starts from the perspective of customers, discusses satisfaction, and collects statistics and analysis on customer satisfaction of e-commerce logistics distribution through questionnaire survey, and proposes corresponding improvement measures to improve electricity Services of commercial enterprises and logistics companies.

# 1.2 Objective of the study

Traditional commodity trading allows consumers to directly purchase physical goods, consumers can directly measure the price and quality of goods, and after-sales service can also be more guaranteed. In an e-commerce environment, transactions are conducted through the Internet. Under the emerging e-commerce transaction model, the vast majority of consumer experience will be affected by other factors. The quality of the website design, how to pay, whether the payment is safe, how to distribute, the speed of distribution, and after-sales processing of goods are all consumption Factors that the person will consider. Among these factors, the importance of logistics distribution, the consumers who pay more attention to logistics distribution factors, how satisfied with logistics distribution, and what aspects of logistics distribution can be improved, are the problems to be solved in this study.

The objectives of the study are as follows:

(1) Study the theoretical basis of this article. The theoretical basis is divided into two parts, and the theories involved in these two parts are studied and discussed to form a research framework.

(2) Adopt literature research method and informal interview method to determine what factors consumers are concerned about in logistics distribution, and establish a satisfaction evaluation index system.

(3) Establish a questionnaire scale based on the satisfaction evaluation index system, and analyze the questionnaire data using methods such as correlation analysis and regression analysis to verify the relationship between logistics distribution and customer satisfaction.

(4) According to the verification results, summarize the problems existing in the logistics distribution link, and propose corresponding improvement measures to further improve customer satisfaction.

# **1.3 Scope of the study**

By reading the relevant literature, the theoretical basis of the research in this article, that is, the theory on e-commerce, logistics distribution, customer satisfaction, etc., is constructed, and then the data required for the research is collected through questionnaires, and the collected data is analyzed using SPSS software. The data is processed, and then the problems arising are summarized according to the results of the processing, and corresponding countermeasures are proposed to closely link the theory and practice. The content of the paper includes:

The first is the introduction, including the research background, current situation, purpose and significance, the content and framework of the research, and innovations;

The second chapter is the theoretical basis, and sorts out the basic knowledge and basic theory related to the research in this article, such as the relationship between the two main elements, the typical model of logistics distribution, the practice of logistics distribution, the current status of customer satisfaction, and customer satisfaction Index system, etc., as the basis of the next chapter;

The third chapter is the research design. On the basis of the previous chapter, this chapter establishes the research model of this paper through research, and puts forward the hypotheses that need to be verified, the design of the survey scale, the questionnaire collection method and the data analysis method. Provide evidence;

The fourth chapter is data analysis, using the methods mentioned in the previous chapter to analyze the data, and conduct research and discussion based on the analysis results;

The fifth chapter is conclusions and prospects. This article summarizes this article, so as to draw conclusions, analyze the problems and countermeasures of logistics distribution, and point out the limitations and prospects in this study.

# **1.4 Research significance**

(1) Provide reference and reference for the research on customer satisfaction of some small and medium-sized logistics enterprises.

Improving customer satisfaction has become one of the operational goals of many small and medium-sized logistics companies. This paper, based on a large number of customer satisfaction research literatures, combined with the development and characteristics of small and medium-sized logistics enterprises, appropriately adjusts the customer satisfaction indicators, aiming to establish a customer satisfaction evaluation system suitable for some small and medium-sized logistics enterprises. Some small and medium-sized logistics companies provide reference and reference for customer satisfaction research.

(2) Establish a customer satisfaction evaluation index system suitable for logistics companies.

The internal and external environments of different companies in the same industry are different, and the management of corporate customer relationships is also different. This article from the perspective of logistics companies, combined with its unique enterprise situation, selects the customer satisfaction evaluation index suitable for logistics companies, establishes a reasonable satisfaction evaluation index system, analyzes the influencing factors of logistics company customer satisfaction, and provides a basis for service improvement.

(3) Provide reasonable suggestions for improving customer relationship management for logistics companies.

Analyze the evaluation results of customer satisfaction, put forward suggestions on the improvement of customer relationship management and logistics service level of logistics companies, improve customer satisfaction with logistics services of logistics companies, and enhance the core competitiveness of logistics companies.

# **1.5 Research model**

The paper systematically sorts out the relevant literature at home and abroad, and lays the theoretical foundation of this research by studying the theory of B2C ecommerce logistics distribution service and customer satisfaction, and then the two of e-commerce logistics distribution and customer satisfaction the relationship between them makes assumptions. This research uses a questionnaire survey method. After collecting and processing the data, the computer software SPSS 21.0 is used to analyze, verify the proposed hypotheses, and draw conclusions. Finally, based on the conclusions, the logistics distribution service is improved to improve customer satisfaction. Make appropriate recommendations. The specific research theoretical framework is shown in Figure 1.



# **CHAPTER 2 LITERATURE REVIEW**

# 2.1 Overview of E-commerce and logistics

### 2.1.1 The impact of e-commerce on logistics

What is logistics? Logistics is the flow of things. The "thing" here refers to physical thing; the "flow" refers to the movement of physical data in space. So far, the word still has literal meaning, but as a professional academic concept, it already has a very rich theoretical and practical connotation.

In the development process of the past century, the definition of logistics concept has been gradually deepened and gradually improved, mainly forming the following views:

The American Logistics Management Association believes that logistics is a part of the supply chain process. It is a plan for the efficient forward and reverse flow and storage of goods, services and related information between the starting point and the place of consumption in order to meet consumer demand, Perform and control activities.

The Japan Logistics System Association believes that logistics is a way of planning, implementing, and managing the effective flow of raw materials, semi-finished products, and finished products. It also coordinates the individual interests of various departments in supply, production, and sales, and ultimately meets the needs of customers.

The European Logistics Association believes that logistics is the planning, execution and control of the transportation and arrangement of people or commodities and related support activities within a system, and has reached a specific purpose.

The National Standard of the People's Republic of China "Logistics Terminology"

holds that logistics is the physical flow of goods from the place of supply to the place of receipt. According to actual needs, the basic functions of transportation, storage, loading and unloading, transportation, circulation processing, distribution, information processing, etc. are organically combined.

When the form of business activities undergoes revolutionary changes and ecommerce appears, it will inevitably have a great impact on logistics. Moreover, this influence is all-round, from the status of the logistics industry to the logistics organization model, to the logistics operations and functional links, all have undergone and are undergoing tremendous changes under the influence of e-commerce. Perfection will further promote the development of e-commerce. The impact of e-commerce activities on logistics is mainly reflected in the following aspects:

(1) E-commerce enables real-time network control of logistics. During the operation of traditional logistics activities, whether it is production-centered or cost or profit-centered, its essence is centered on business flow and is subordinate to business flow activities, so the movement of logistics is closely accompanied Movement along the business flow. Under e-commerce, logistics operations are centered on information. Information not only determines the direction of logistics movement, but also determines how logistics operates.

(2) E-commerce requires logistics to be informatized, automated and intelligent. The development of e-commerce requires logistics to be informatized. Because one of the advantages of e-commerce is to ensure the immediate interaction between the enterprise and customers at all levels, the enterprise can communicate with customers on product design, quality, packaging, delivery conditions, after-sales service, etc., which requires each of the logistics systems Instant information support for functional links. On the basis of informatization, logistics can be automated, thereby greatly improving the efficiency of logistics. E-commerce also requires logistics to be intelligent in order to improve the level of logistics modernization. The intelligentization of logistics has become a new trend in logistics development under ecommerce.

(3) E-commerce improves the efficiency of logistics operations. E-commerce enables enterprises to seek the rationalization of logistics, so that the physical entity can achieve the functions of the highest efficiency, the lowest cost, the shortest distance, and the least time in the actual movement process. The biggest impact of e-commerce on logistics is how to increase the speed of transportation to shorten the gap between the virtual availability of products generated by customers on the network and the availability of actual products.

(4) E-commerce changes the competitive status of logistics enterprises. In traditional economic activities, the competition among logistics companies often depends on their enterprises to provide quality services and reduce logistics costs. In the era of e-commerce, although these competitive contents still exist, the effectiveness is greatly reduced, because e-commerce requires a global logistics system to ensure the reasonable flow of commodity entities, and it is difficult for a single enterprise to meet this requirement. This requires logistics enterprises to form a state of coordinated competition in the competition, and compete with each other under the premise of mutual cooperation to achieve efficient, rational and systematic logistics.

(5) E-commerce will promote the improvement of logistics infrastructure, logistics technology and logistics management. The high-efficiency and global characteristics of e-commerce require logistics to improve infrastructure, as well as the improvement of logistics technology to improve logistics efficiency.

#### 2.1.2 The status and role of logistics in e-commerce

E-commerce is a fundamental revolution in the commercial field. However, the actual situation of its development in China is far from being as smooth as expected, and the lag in logistics capabilities is an important reason. One of the advantages of e-

commerce is that it can greatly simplify business processes and reduce business operating costs. The establishment and maintenance of the cost advantage of enterprises under e-commerce must use viable and efficient logistics transportation as the guarantee point. Modern enterprises must not only produce marketable products, but also adopt correct marketing strategies and strong financial support to win in the competition. It is necessary to strengthen quality management, the core of which is to emphasize timeliness, that is, the timeliness of services, the timeliness of products, the timeliness of information, and the timeliness of decision feedback. These must be guaranteed by strong logistics capabilities. Specifically, the role of logistics in ecommerce is reflected in the following aspects: (1) Logistics is the fundamental guarantee for e-commerce

First, logistics guarantees production. The rationalized and modernized logistics reduces costs, optimizes inventory structure, reduces capital pressure, and shortens the production cycle to ensure the efficient production of modern production. Without modern logistics, no matter how convenient the electronic commerce is, it will still be a recipe for nothing.

Secondly, logistics serves business flow. Under e-commerce, consumers click on the Internet to shop and complete the delivery process of commodity ownership, that is, the process of business flow. But the e-commerce activities are not over, and the commercial activities are ended only when the goods and services are truly transferred to consumers. In the entire e-commerce transaction process, logistics actually appears as a follower and a server of business flow. Without modern logistics, how easy business flow activities will still degenerate into a dead letter.

Finally, logistics is the fundamental guarantee to realize the "customer-centric" concept. The emergence of e-commerce has facilitated the ultimate consumer to the greatest extent. Logistics is the ultimate guarantee for the realization of the "customer-centric" concept in e-commerce. Without modern logistics technology, the convenience

of shopping brought by e-commerce to consumers is equal to zero. Consumers will inevitably turn to the tradition they think is safer. Shopping methods, then there is no need for online shopping.

(1) Logistics can expand the market scope of e-commerce. After China develops the Belt and Road Initiative, the application of e-commerce will pay more attention to cross-regional logistics. Only by establishing a perfect logistics system can we solve the problems that may arise in transnational logistics and cross-regional logistics in ecommerce, and expand the market scope of e-commerce.

(2) Logistics can improve the efficiency and effectiveness of e-commerce, thereby supporting the rapid development of e-commerce. Through fast and efficient information processing methods, e-commerce can easily solve the problems of information flow, business flow and capital flow. But only when the goods are delivered to the users in time, that is, the spatial transfer of the goods is completed, will the end of the e-commerce process be marked. Therefore, the efficiency of the logistics system is that e-commerce can have high-efficiency e-commerce, in order to support the rapid development of e-commerce.

(3) Logistics is an important link for e-commerce companies to achieve profitability. Good logistics management can greatly reduce the cost of enterprises. In the traditional cost of goods, logistics costs can account for half of the total value of goods. And now the logistics industry can greatly reduce the cost of this part. For example, in Japan in recent years, every time the logistics industry grew, the total economic volume increased. Therefore, logistics is a very profitable industry.

# 2.2 Overview of Distribution Center

#### 2.2.1 Delivery concept

The term "distribution" is a free translation of the English original word delivery when Japan introduced the American logistics science. China transferred to Japan and also directly used the word "distribution" to form a new vocabulary in Chinadistribution. In the "National Standards of the People's Republic of China-Logistics Terminology" promulgated by the China National Quality and Technical Supervision Bureau in 2001, the definition of distribution is as follows: within an economically reasonable area, according to customer requirements, sort, process, Packing, dividing, assembling and other operations, and timely delivery to the logistics activities of the designated location. Another widely accepted definition is: delivery is the process of sorting and distributing goods in the logistics base according to customer requirements, and delivering the delivered goods to the consignee. But the general distribution process is basically shown in Figure 2.





Figure 2 Delivery of the general process

In summary, the above concept of distribution reflects the following information: (1) Distribution is close to the entire process of customer resource allocation.

(2) Delivery is essentially delivery. It is also different from general delivery: general delivery can be an accidental behavior, but delivery is a fixed form, or even a certain organization, a certain channel, equipment and management strength, technical

strength, The institutional form of the system. Therefore, delivery is a high-level form of delivery.

(3) Distribution is a form of "transit". Delivery is a special form of delivery from the logistics node to the customer. From the perspective of the delivery function, its special performance is as follows: the delivery is a full-time circulation company, not a production company; the delivery is a "transit" type delivery, and the general delivery has its delivery from the factory to the customer. Direct delivery; general delivery is what you send for production, what you send, and delivery is what your company needs to send. Therefore, in order to deliver what is needed, it is necessary to raise this need in a certain transfer link, so that the distribution must appear in the form of transfer.

(4) The important difference between distribution and general delivery is that distribution uses effective sorting, distribution and other tally work to make the delivery reach a certain scale, so as to use the advantages of scale to obtain lower delivery costs. If sorting and distribution are not carried out, one will be shipped one by one, which needs to be sent one by one, which will greatly increase the consumption of labor and make delivery not better than picking. Therefore, in order to pursue the advantages of the entire distribution, sorting, distribution and other tasks are essential.

(5) Delivery is based on customer requirements. The definition emphasizes "according to customer requirements" and clarifies the dominant position of customers. Distribution is an activity carried out in accordance with the requirements of customers based on the interests of customers. Therefore, the concept of "customer first" and "quality first" must be clarified in concept. The status of the distribution enterprise is the service position rather than the dominant position, so it cannot be Starting from the interests of the enterprise, we should proceed from the interests of the customers and obtain the interests of the enterprise on the basis of satisfying the interests of the customers.

(6) The reference to "according to customer requirements" in the concept needs to be based on such a consideration: it is inappropriate to overemphasize "according to customer requirements". Customer requirements are limited by the customers themselves, and sometimes they may lose the interests of themselves or both parties. For the distributor, it must be based on "requirements", but not blindly, it should pursue rationality, and then guide customers to achieve the commercial purpose of mutual benefit.

#### 2.2.2 Impact of e-commerce on logistics and distribution

(1) It has a profound impact on the traditional logistics distribution concept. Traditional logistics and distribution enterprises need to configure a warehouse with a large number of people, and the e-commerce system network can connect the warehouses of different owners scattered in various locations through the e-commerce environment. The logistics distribution is connected through the network, making it a "virtual warehouse." "Unified management and deployment. Thus, the service radius and cargo distribution space are enlarged. In this way, the speed, scale, efficiency and reasonable allocation of resources in the organization of resources are all inferior to traditional logistics and distribution.

(2) The implementation of network control of logistics distribution has replaced traditional logistics distribution. The use of an advanced system will bring a brand-new management method to an enterprise. The traditional logistics distribution process is composed of multiple business processes, which are greatly affected by human factors and time. The application of the network can realize real-time monitoring and real-time decision-making of the entire process. The business processes of the new logistics distribution are all connected by the network system. When any nerve end of the system receives a demand information, the system can respond in a very short time, and draw up a detailed delivery plan according to the procedures designed by people in advance, and notify each link to start work.

(3) The duration of logistics distribution will be greatly shortened in the network environment, which puts forward higher requirements on the speed of logistics distribution. In traditional logistics distribution management, due to the limitation of information exchange, it takes a long time to complete a distribution process. However, with the intervention of the network system, any distribution information and resources will be transmitted to the relevant links within a few seconds through the network management, so the distribution time will be shortened.

(4) The intervention of the network simplifies the logistics distribution process. In the new networked logistics distribution center, the logistics distribution storage, loading and unloading, storage, sorting and other processes are shortened. Computer system management enables the entire logistics distribution management process to be automated, mechanized, and informatized, thereby improving the competitiveness of the enterprise.

## 2.2.3 Characteristics of logistics distribution under e-commerce

#### (1) Informatization

In the era of e-commerce, logistics informatization is an inevitable requirement of e-commerce. Logistics informationization is represented by the commercialization of logistics information, the databaseization and coding of logistics information collection, the electronic and computerization of logistics information processing, the standardization and real-time of logistics information transmission, and the digitization of logistics information storage. Logistics informatization is the basis of logistics modernization management. Without logistics informatization, any advanced technical equipment cannot be applied in the field of logistics. Information technology and the application of computers in logistics will completely change the face of logistics.

## (2) Automation

The foundation of automation is informatization, the core of automation is electromechanical integration, and the external performance of automation is unmanned. There are many equipments for logistics automation, such as automatic barcode recognition system, automatic sorting system, automatic access system, automatic guided vehicle, and automatic cargo tracking system. These facilities have been widely used in logistics operations in developed countries, and in China, due to the late start of the logistics industry and the low level of development, the popularization of automation technology will take a long time.

## (3) Networking

The basis of networking in the logistics field is also information. The meaning of networking is the communication network between computers in the logistics distribution system, including the connection between the logistics distribution center and the manufacturer through the computer network and between the retailer and the logistics center. Communicate through computer networks.

Logistics network is inevitable for logistics informatization and one of the main features of e-commerce activities. The availability of global network resources such as INTEINET in the world today, and the popularization of network technology provide a good external environment for logistics networking, and the trend of logistics networking is unstoppable.

# (4) Intelligent

This is a high-level application of logistics automation and informatization. There are a lot of operations and decision-making in the process of logistics operations, such as the determination of inventory levels, the choice of transportation routes, the operation trajectory and operation control of automatic guided vehicles, and the decision support of logistics distribution center management and management. In the process of logistics automation, logistics intelligence is an unavoidable technical problem.

# (5) Flexible

Flexibility means that the production process can really be adjusted according to changes in consumer demand. It is impossible to achieve the goal without a supporting flexible logistics system. In the 1990s, flexible manufacturing systems were introduced in the international production field. Like the concepts and technologies of enterprise resource planning and supply chain management, their essence is to use production and circulation as the basis to organize production and arrange logistics activities according to demand. Therefore, flexible logistics is a new type of logistics model developed to meet the needs of production, circulation and consumption. This requires the

distribution center to flexibly organize and implement logistics operations according to the characteristics of "multiple varieties, small batches, multiple batches, and short cycles" of consumer demand.

## 2.3 Distribution management

#### 2.3.1 Content of distribution management

The so-called distribution management refers to the planning, organization, coordination and control of distribution activities in order to achieve the service level satisfied by customers with the lowest distribution cost. From different perspectives, distribution management includes different content. We analyze from the following angles.

## (1) Distribution mode management

Distribution mode is the basic strategy and method adopted by enterprises for distribution. The distribution model that an enterprise chooses depends mainly on the following factors: the importance of distribution to the enterprise, the enterprise's distribution capabilities, market size and geographic scope, guaranteed services, and distribution costs. According to the development experience at home and abroad and my country's distribution theory and practice. At present, the following distribution mode and third-party distribution mode.

### (2) Distribution business management

1) Selection of distribution lines

Whether the distribution route is reasonable has a great influence on the distribution speed, cost, and benefit. Therefore, it is very important to use a scientific and reasonable method to determine a reasonable distribution route. Determining the distribution route can be carried out by various mathematical methods and empirical methods developed and evolved on the basis of mathematical methods, mainly including program evaluation method, mathematical calculation method and mileage saving method. Many softwares have been developed to help managers and employees set up distribution lines, avoiding tedious mathematical calculations, so I won't introduce these calculation methods in detail here.

### 2) Formulate distribution plan

Managers need to work out a distribution plan for employees who are specifically responsible for distribution operations. Computers can now be used as the main means of preparing distribution plans.

#### 3) Distribution operation management

The distribution of different products may be unique. The management of the distribution operation process is to plan and organize the activities in this process.

#### 4) Management of various elements of the distribution system

From a system perspective, the management of each element of the distribution system mainly includes the following:

### (1)Management

People are the most active factor in the distribution system and distribution activities. The management of people includes: selection and recruitment of distribution practitioners; training and improvement of distribution professionals; development of distribution education and distribution personnel training plans and measures, and so on.

#### <sup>(2)</sup>Management of things

"Object" refers to the object of distribution activities, that is, material information entity. There are thousands of types of material information, and the physical and chemical properties of material information are very different. The management of things runs through the distribution activities. It has penetrated into the flow of distribution activities and cannot be ignored.

#### ③Financial management

Financial management mainly refers to the content of distribution management related to reducing distribution costs and improving economic benefits. It is the starting point of distribution management and the destination of distribution management. The main contents are: calculation and control of distribution cost; establishment of distribution economic benefit index system; fund raising and application; methods of improving economic benefits, etc.

#### **(4)**Equipment management

The main contents of equipment management are: the selection and optimization of various distribution equipment; the rational use and update of various equipment; the research, development and introduction of various equipment, etc.

#### <sup>(5)</sup>Method management

The main contents of method management are: research and promotion of various distribution technologies; organization and development of distribution scientific research work; promotion and popularization of new technologies; application of modern management methods, etc.

#### 6 Information management

Information is the nerve center of the distribution system. Only by effectively processing and transmitting logistics information in time can we effectively manage the five elements inside the system, including people, money, goods, equipment, and methods.

## 5) Management of specific functions in distribution activities

Functionally, distribution activities mainly include distribution plan management, distribution quality management, distribution technology management, and distribution economic management.

#### (1) Distribution plan management

Distribution plan management refers to the scientific planning management of each link in the distribution process under the constraints of the system objectives, which is specifically reflected in the entire process of preparation, execution, modification and supervision of various plans in the distribution system. Distribution plan management is the most important function of logistics management.

### 2 Distribution quality management

Distribution quality management includes distribution service quality management, distribution work quality management, distribution engineering quality management, etc. The improvement of distribution quality means the improvement of the level of distribution management and the improvement of the competitiveness of enterprises. Therefore, distribution quality management is a central issue in distribution management.

## ③ Distribution technology management

Distribution technology management includes the management of distribution hard technology and distribution soft technology. The management of distribution hard technology is the management of distribution infrastructure and distribution equipment. Such as the planning, construction, maintenance, and utilization of distribution facilities; the purchase, installation, use, maintenance, and updating of distribution equipment; the improvement of equipment utilization efficiency; the management of daily tools, etc. The management of distribution soft technology mainly refers to the development, promotion and introduction of various distribution technologies; the formulation of distribution operation procedures; the management of technical information and technical documents; the training of distribution technicians, etc. Distribution technology management is the basis of distribution management.

# ④ Distribution economic management

Distribution economic management includes the calculation and control of distribution costs, the determination and management of distribution labor prices, and the economic accounting and analysis of distribution activities. Cost management is the core of distribution economic management.

#### 6) Distribution center management

The distribution center is a place specializing in distribution activities. From the perspective of managing an enterprise or department, the various tasks involved should be properly arranged.

#### 2.3.2 The meaning of distribution management

The significance of distribution management is that it can help achieve the goal of achieving the most appropriate customer service level at the most reasonable cost through reasonable planning, organization, coordination and control of distribution activities. From different perspectives, its meaning has different manifestations.

(1) Significance for enterprises engaged in distribution

For companies engaged in distribution, the significance of distribution management is mainly expressed in the following points:

1) Through scientific and reasonable distribution management, the company's distribution efficiency can be greatly improved. Through rational organization of distribution activities, distribution enterprises can improve the efficiency of information transmission, improve the efficiency and accuracy of distribution decisions, improve the efficiency of each action link, effectively monitor real-time distribution activities, and promote the rational connection of distribution operations to reduce errors and better fulfill the distribution function.

2) Through scientific and reasonable distribution management, the degree of guarantee of the supply of goods can be greatly improved, the risk caused by the shortage of users can be reduced, and the customer satisfaction of the distribution company can be improved.

3) Through scientific and reasonable distribution management, the economic benefits of distribution enterprises can be greatly improved. On the one hand, the increase in the degree of guarantee of goods supply and customer satisfaction will increase the credibility and image of the distribution enterprise and attract more customers; on the other hand, it will enable the enterprise to choose the distribution method and route more scientifically and reasonably Lower inventory levels reduce costs.

(2) Significance and role for customers

For customers receiving delivery services, the meaning and role of delivery management are mainly reflected in the following points:

1) For demand-side customers, it is possible to reduce inventory levels through distribution management, and even achieve zero inventory, reduce inventory funds, improve financial conditions, and reduce customer operating costs.

2) For supply-side customers, if the supply-side implements a self-operated distribution model, it can improve its distribution efficiency and reduce distribution costs through scientific and reasonable distribution management. If the supply side adopts the entrusted distribution model, it can save investment in the distribution system and the allocation of human resources, improve the efficiency of the use of funds, and reduce costs.

(3) Significance and role for the distribution system

For the distribution system, the following functions can be achieved through scientific and reasonable distribution management:

1) Improve the distribution system. The distribution system is an important system that constitutes the overall logistics system. Distribution activities are at the end of the logistics activities. Its improvement and development will make the entire logistics system complete and develop. Through scientific and reasonable distribution management, you can help improve the entire distribution system, so as to achieve the purpose of improving the logistics system.

2) Strengthen the function of the distribution system. Through distribution management, the systemic nature of the distribution operation and the overall logistics operation will be more strongly reflected, so that the various links in the operation are closely connected and coordinated with each other, so as to achieve the optimal purpose of the system.

3) Improve the efficiency of the distribution system. For the distribution work, like any other work, the whole process management is needed to continuously improve the system operation efficiency and better achieve economic and social benefits.

# 2.4 Jincheng International Logistics Status and Distribution Management

### 2.4.1 Company Introduction

Founded in 1990, Jincheng International Freight Co., Ltd. is a first-class international freight enterprise approved by the Ministry of Foreign Trade and Economic Cooperation. Jincheng Logistics initially focused on freight forwarding business. With its unique business philosophy and sensitive market sense, Jincheng Logistics It took only 5 years for Jincheng Logistics to develop into one of the top three freight forwarding companies in Northeast China. Currently, Jincheng has a registered capital of 200 million yuan and has more than 800 employees. In 2005, the annual sales reached 2.6 billion yuan, mainly providing import and export companies with shipping, air transportation, customs clearance, warehousing, door-to-door and other agency services in China and other countries. In addition, while accelerating the construction of the physical service network, Jincheng Company invested in the "Jincheng Online Logistics" project, independently developed and applied a business management system, founded the "Jincheng Logistics Network", and established an e-commerce platform. The current website It has become a well-known website in the industry, with the number of visits ranking first in China's logistics website.

Facing the difficult situation, Jincheng Logistics made innovations and sought new ways to form Jincheng's unique innovative development model, and achieved success in one fell swoop. In 2001, it passed the ISO9001 quality system certification and became a member of FIATA (International Federation of Freight Forwarders Association). Since the selection of the China Freight Industry Awards in 1999, Jincheng Company has been rated as "China's Top Ten Outstanding International Freight Companies" in previous selections. In 2005, in the ranking of China's top 100 freight forwarding companies, Jincheng ranked fifth in overall strength, ranking first among the top 30 residential logistics companies and top 15 among China's freight forwarding private enterprises. And won the "China's most competitive logistics enterprises" and "China's top ten famous logistics brands" and other titles, is the first comprehensive logistics enterprise in Northeast China to meet the recognized AAAAA national standards.

From the initial development of an unknown small freight forwarding company to the overlord of today's Chinese private logistics company, a banner of China's modern logistics company, Jincheng Logistics has shaped the myth of the growth of a Chinese logistics company in just 30 years.

#### 2.4.2 Company distribution business

As a third-party logistics, Jincheng International Logistics is the party that provides part or all of the distribution services for both parties to the transaction. The third-party distribution mode refers to a distribution operation mode in which both parties to the transaction entrust the distribution business that they need to complete to a third party to complete. With the continuous development of the logistics industry and the continuous improvement of the third-party distribution system, the third-party distribution model should become the preferred mode and direction for goods distribution by industrial and commercial enterprises and e-commerce websites.



Figure 3 Third-party distribution model mode of operation

In order to better adapt to the development of production and market and further improve logistics efficiency, in recent years, Jincheng Company has continuously explored and launched many reform measures in practice, thereby gradually bringing distribution to new live development track. During the internship of Jincheng International Logistics, I actively participated in the practice and read a lot of information, so as to summarize the current situation of Jincheng International Logistics' distribution business in combination with practice. Distribution business generally includes purchase, storage, replenishment, sorting, distribution and shipping, delivery, inspection and distribution processing and other elements.

## (1) Purchase

In the basic operation process of distribution, the purchase operation can be divided into three parts: ordering, receiving goods, and checking into the warehouse.

First ordering generally includes placing an order with the supplier to determine the type and quantity of the goods; communicating with the supplier to determine the date of delivery of the goods; predicting the delivery schedule of the delivery truck as accurately as possible; coordinating the parking information with the parking information to coordinate the transportation problems of the trucks; It is convenient for unloading and handling, planning the parking position of the truck; pre-planning the temporary storage location and other five aspects of the operation.

After the supplier organizes the supply according to the order, the distribution center must organize the human and material resources to receive the goods in time, and sometimes need to arrive at the station (port) and dock to pick up the goods. The main operations of receiving goods are unloading, handling, disassembly, cargo coding and classification.

When the goods are received, they must be inspected and accepted. According to the acceptance criteria, the quality, physical, chemical and appearance inspections are carried out. When conducting quantity acceptance, first check the number of the goods, and then check the packaging, length, size and weight of the goods according to the provisions of the order contract. Accepting the qualified goods shall go through the procedures of registering account, entering information and goods storage, and organize the goods storage.

(2) Storage
The inventory in the distribution system can be divided into two situations: one is the goods that need to be stored in the distribution system; the other is the transit goods, only a short stay in the distribution center, after sorting, distribution directly Delivery. The storage operation maximizes the use of space, the most effective use of labor and equipment, the most safe and economical handling of goods, and good protection and management of goods. A good storage strategy can reduce the moving distance of storage and storage, shorten the operation time, and make full use of storage space.

## (3) Replenishment

Replenishment is the work of transporting goods from the warehouse storage area to the picking area when the inventory in the picking area is lower than the set standard. The purpose is to deliver the right product to the designated picking area in the right quantity and in the most effective way at the right time and in the right place. In Jincheng International Logistics, pallet replenishment is mainly used. This replenishment method is based on pallet replenishment. The pallets are transported from the floor stacking storage area to the floor stacking moving pipe area. During sorting, the cargo boxes on the pallet are placed in the central conveyor to the delivery area, and the pallets can also be transported to the rack moving pipe area for replenishment.

## (4) Fitting

Matching refers to making full use of the weight and volume of transportation vehicles (such as cars, ships, etc.), adopting advanced loading methods, and reasonably arranging the loading of goods. Half of Jincheng's logistics distribution is delivery in small batches and multiple batches. The distribution quantity of a single customer often cannot reach the effective load of the vehicle. Therefore, in the distribution operation process, it is necessary to arrange and match, load the goods of multiple customers or multiple goods of the same customer, and load them in the same car. In this way, not only can the delivery cost be reduced and the economic efficiency of the enterprise can be improved, but also the traffic flow can be reduced and the traffic congestion can be improved. Therefore, assembly is a functional element with modern characteristics in the distribution system, and it is also an important difference between modern distribution and traditional delivery.

## (5) Delivery

The process of using the delivery vehicle to deliver the items ordered by the customer from the manufacturing plant, production base, wholesaler, dealer or distribution center to the customer during the delivery operation. Distribution delivery is usually a short-distance, small batch, high-frequency form of transportation. It takes service as the goal and meets customer needs as much as possible. The basic business process of Jincheng International Logistics Delivery is as follows: (1) Divide the basic delivery area. (2) Vehicle loading. (3) Tentative order of delivery. (4) Vehicle arrangement. (5) Select the delivery route. (6) Determine the delivery order of each vehicle. (7) Complete vehicle loading.

#### (6) Distribution processing

Distribution processing is to perform simple operations such as packaging, segmentation, metering, sorting, brushing, labeling, assembling, etc. on products according to user requirements. Distribution processing is not universal in distribution, but it plays an important role. Through distribution processing, customer satisfaction can usually be greatly improved. However, distribution processing does not change the basic form and function of commodities, but only improves the use function of commodities and is convenient for customers. The reason is that distribution processing can provide customers with customized services, improve the efficiency of the entire logistics, and also bring considerable benefits to the circulation industry. Economic benefits.

## 2.5 Analysis of the problems in the company's logistics distribution

## management

In the trend of rapid development of China's logistics industry, Jincheng Logistics has quietly created a miracle by virtue of the business model of "resource integration and innovative development", and the long-term dry logistics market in China has come to life. However, it can be seen from the combination of the current situation of Jincheng International Logistics and theoretical knowledge that the company has two problems in the assembly method and informatization that need to be solved. If the problems in these two aspects cannot be solved well, it will hinder the company. Longterm development.

## 2.5.1 Cargo matching

The distribution of goods in logistics is to distribute a reasonable quantity for customers under the conditions of meeting customer needs, dispatch the minimum number of vehicles, make the distribution vehicles have less transportation time and lower transportation costs, and effectively use the vehicles to make the goods in the shortest Within the customer's time. Solving the problem of cargo assembly will directly reduce transportation costs and bring huge benefits to the production and transportation departments. In the production and transportation planning, the importance of effective use of space is becoming more and more important. Therefore, it is of great practical significance to study and solve the problem of cargo assembly.

How to give a reasonable matching plan to ensure the stability of the shipment, prevent the damage of the goods caused by the movement of the goods during transportation, multi-destination transportation, load limitation, weight distribution in the box, the efficiency of the packing, etc., so that the container The maximum space utilization rate is the main goal of this type of problem.

The problem of cargo matching is very complicated, which involves the shape, weight, size, and material of the cargo. Generally speaking, there will be a waste of space. Although the volume of the cargo to be equipped is smaller than the volume of the container, it is generally difficult to put all the cargo to be packed into the box. in. It can be divided into many different branches, these branch problems have different classification criteria, different objective functions and different constraints. A common division basis is: whether to load a given large batch of goods into multiple containers (so as to minimize the number of required containers), or whether to load as many goods as possible into one container; another classification principle can Determine whether to consider the constraints, such as the main constraint of the weight of the container to maximize the space utilization of the container, or whether the uniform distribution of the weight of the cargo is the main constraint to maximize the space utilization, or not to consider the constraints, only to make The goal is to maximize space utilization.

It can be seen that in the assembly, if the goods and the goods are unreasonably integrated, it will not only cause a waste of space, but also directly increase the cost of transportation; if the integration is reasonable, it will not only effectively use the vehicle and space, but also Therefore, the transportation cost of goods is reduced and the efficiency of enterprises is improved. The solution to the problem of Jincheng logistics assembly can't wait.

## 2.5.2 Jincheng Informatization Construction Situation and Problems

## (1) Information strategy

Jincheng's information strategy is based on Jincheng's business strategy.

The strategic goal is to build an e-commerce platform that can integrate customer and supplier systems, and integrate internal and external decentralized logistics information resources to provide customers with globalized and professional online logistics services, thereby promoting corporate network layout and concentration the rapid realization of the procurement strategy.

The strategic content is to establish an enterprise-level professional call centercustomer interaction center to achieve high-quality, proactive and timely customer service; establish a platform-based integrated business system to achieve logistics value chain system integration, integration and sharing of dispersed information resources; establishment a management information system that combines corporate collaborative office, human resource management, branch management, financial management, and decision support functions to realize the mining and improvement of the value of basic data, focus on the efficiency of management information systems and the impact on management decisions, while Pay attention to system integration and optimization. The effective implementation of Jincheng's informatization strategy will solve the business development problems that Jincheng faces in the process of large-scale development and network management, and break through business management bottlenecks.

## (2) Review of information construction

1) Established an enterprise-level professional call center with 95105556 as the national unified booking number, in order to provide customers with more quality and

proactive services, improve customer service quality and customer satisfaction. It realizes multi-media access such as telephone, fax, SMS, e-mail, Web Chat, Web Video message and unified queue and agent processing, provides complaint, query, outbound service, information release, agent management and other functions, and carries out The development of the CRM system and the development of the EAI part of the call center system and the GBC booking service system.

2) In terms of integrated business system, in order to cooperate with the strategic realization of business integration, the JCTRANS system with C/S architecture was independently developed and applied; in order to meet the strategic needs of centralized procurement, it cooperated with China's well-known ERP software company-Beijing Nanbei Tiandi Technology Cooperated with Co., Ltd., developed a centralized B/S architecture GBC booking service system, and implemented and applied it. At the same time, a booking network was established, and the GBC booking service system was used as a supporting background, ready to provide customers with online Booking service.

3) In terms of management information system, the group headquarters has established the Jincheng enterprise network, which realizes the real-time sharing of internal information within the enterprise, and realizes the comprehensive automation of office and business activity information exchanges through enterprise mailboxes and instant messaging software, further improving Jincheng The Group's office automation level; through the introduction of Beijing Nanbei Tiandi Technology Co., Ltd.'s financial software system, to achieve unified financial management of the country's business, and laid the foundation for the realization of financial business integration. With the technical support of the North and South Dalian Branch, the system is running well and has achieved the expected goal.

4) In terms of cooperation in informatization construction, Jincheng Group has selected preliminary cooperation with a well-known software company with mature platform software products, and rich experience in project management and implementation, Beijing Nanbei Tiandi Technology Co., Ltd., Such as the development and implementation of the GBC booking service system, North-South financial system, etc. The North-South Company sent capable technicians from the headquarters and the

technical team of North-South Dalian Branch to conduct a detailed preliminary survey on Jincheng Group's logistics informatization project, and designed a set of implementation plans that meet the requirements of Jincheng Group's logistics informatization. Under the leadership of Fan Shixin, general manager of North-South Dalian Branch, the technical team of North-South Dalian Branch successfully completed the implementation of the system.

#### (3) Main problems encountered in informatization construction

The main problem encountered by Jincheng in the process of informatization in recent years is that it is difficult for system integration to lead to the dispersion of information resources, and it is impossible to accelerate the flow rate of information flow within and between enterprises, so that the effective integration and utilization of information cannot be achieved. The commercial value of information resources cannot be effectively exerted. The reason can be analyzed from the aspects of internal integration and external integration of the enterprise. The difficulty of internal system integration is due to the weak management awareness of modern logistics of many small and medium-sized freight forwarding enterprises being integrated, and the application of information technology and equipment is still relatively backward; scale The business processing systems used by larger freight forwarders have strong local business characteristics, and each has its own set of technical standards; the integration of external systems of enterprises is difficult to be constrained by the macro environment of China's logistics industry informatization.

# 2.6 Research on Customer Satisfaction of E-commerce Logistics Distribution

## 2.6.1 E-commerce customer satisfaction status

Satisfaction of e-commerce logistics service refers to the consumer's expected value of the logistics service provided by the website after the actual purchase of goods on the e-commerce website under the e-commerce network environment. Gaps. If e-commerce companies want to improve their competitiveness, they need to focus on

how to increase consumer satisfaction with logistics services. According to CNNIC's "China Online Shopping Market Research Report", in terms of online shopping satisfaction, consumer satisfaction is gradually increasing. According to the 2011 survey report, the proportion of consumers who are relatively satisfied with online shopping is 54.4%, the proportion of consumers who are very satisfied is 25%, and the proportion of consumers who are unclear and unsatisfied and very dissatisfied is 20 %. By 2014, 89.4% of consumers expressed satisfaction with online shopping, which represented a further increase in satisfaction. This improvement indicates that the service of online shopping is also further improved. Judging from consumers' satisfaction with all aspects of online shopping, the satisfaction of the payment link is the highest, at 84.2%, and the satisfaction of the two links of the website and merchandise is slightly lower than the payment link, at 80.5% and 79.3%, respectively. The satisfaction value of the logistics link is 75.1%, and the satisfaction value of the after-sales link is 73.4%, both of which are less than 80%. As shown in Figure 1-2, it can be seen that the reasons for consumers' dissatisfaction with online shopping are mainly reflected in the logistics link and After-sales link.

According to CNNIC's "2010 China Online Shopping Market Research Report", in the conclusion of the investigation on the reasons for consumers' dissatisfaction with online shopping, the two top ranking factors are the quality of goods and logistics distribution services. Inconsistent products and pictures are the main reason for dissatisfaction in shopping, accounting for 35.7%. For logistics distribution services, too long delivery time is the main reason for dissatisfaction, accounting for 12.3%; the rest, such as missing goods, poor courier attitudes, and high freight rates, account for a small proportion of these reasons.

# 2.6.2 The Influence of E-commerce Logistics Distribution on Customer Satisfaction

Chun-Chun Lin (2011) used a questionnaire survey to investigate the satisfaction of online shopping users in Taiwan. The survey included five perspectives: product quality, product price, system benignity, information quality, and the quality of distribution finally concludes: Of the five related factors, the most influential to satisfaction is product quality and distribution quality. Of these two factors, the primary influencing factor is distribution quality. Xie Peihong, Xi Hongmei and Wei Nongjian (2011) found that among the influencing factors of B2C customer satisfaction, among many factors, transaction ability has the greatest impact on customer satisfaction, and the remaining factors occupy the second payment method and logistics distribution, and the rest It is the website's customer service, security and privacy, product characteristics and other factors.

Christy M.K Cheung and Matthew K.O. Lee paid attention to customer satisfaction from the perspective of service quality, and established an online shopping customer satisfaction model, which studied satisfaction from three perspectives. Among these three factors, we mainly study service quality. Service quality includes eight indicators, namely: diversity (payment methods, diversified delivery methods), delivery quality, personalization, communication, signing conditions, perceived payment, Rules and procedures.

From the above literature research, we can find that among the many studies on B2C e-commerce customer satisfaction, among the main factors affecting customer satisfaction, the quality of logistics distribution service is definitely one of the main reasons. IResearch conducted a survey on the current development of China's express delivery industry and the degree of online shopping, analyzed the current status of the express delivery industry and China's online shopping requirements for the express delivery industry, to see whether the development of the express delivery industry meets the needs of online shopping For places that cannot meet the needs of online shopping, based on the needs of online shopping users, an online shopping consumer satisfaction evaluation system for logistics distribution services has been established.

## 2.6.3 E-commerce customer satisfaction evaluation index system

Through research and analysis of the indicators in IResearch, it was found that some of the indicators do not meet the current development status. The indicators under "Distribution accuracy rate" are "the goods delivered are exactly what I ordered" and "the goods delivered have no missing items". It is in line with the current development level, because on the basis of the advanced logistics monitoring network system and distribution equipment, the probability of wrong and missing goods is very small, and correct distribution has become a basic requirement for e-commerce logistics. Therefore, from the perspective of online consumers, this indicator has no meaning. In order to further understand the requirements of consumers for logistics and distribution in online shopping, 15 consumers who have purchased goods on the website were selected and informal interviews were conducted with them. In addition to the elements involved in IResearch's logistics distribution evaluation system, some people hope that the goods can be free of charge or reduce the freight standard to reduce shopping costs; some hope that there can be a self-collection point, which can be used when the goods are urgently used and the logistics distribution speed is slow Pick up the goods from the pick-up point; some people hope that they can check the delivery status of the goods and know the location of the goods in a timely and accurate manner; others hope to provide different payment methods such as cash on delivery to reduce shopping risks.

Combining the evaluation index system established by IResearch and the aforementioned informal interviews, the logistics distribution evaluation index system can be divided into five dimensions, including nine indexes, as shown in Table 1-1.

Dimension	Index
Responsiveness	Delivery speed
Economy	Logistics costs
Integrity	Logistics Packaging

Table1 Evaluation Index System of Logistics Distribution

Communicative	Deliveryman quality
	Order tracking
	Advance SMS notification
flexibility	Cash on delivery
	Inspection Service
	Pick up service

Responsiveness refers to the speed of logistics distribution, including the length of time consumers take from ordering on the website to receipt of goods, whether the purchased goods can be delivered within the agreed time, and the length of time to wait when picking up the goods. The determination of the logistics distribution speed is based on consumers' shopping experience on the one hand, and the delivery time of the goods promised by the shopping website on the other hand.

Economic efficiency refers to the cost of logistics distribution, including whether the logistics distribution cost is reasonable and whether the logistics service I received is super value compared with the logistics cost paid. Free shipping strategies and promotional strategies such as 100% free shipping still urge consumers to choose websites with such promotional activities to buy, and logistics costs are an important factor for consumers to pay attention to.

Integrity means that the goods purchased by consumers online are not damaged and the outer packaging of the goods is not damaged. For industries such as cosmetics that have high requirements for product integrity, how to ensure that the products are not damaged during transportation and that the outer packaging added on the basis of the original product packaging is beautiful and intact, and enterprises should give this in the increasingly fierce competition Value. Communication refers to the consumer's experience of logistics services and logistics information in e-commerce logistics. Factors that affect consumers' feelings include the overall image, service attitude, and professionalism of couriers and the fast, timely, and accurate logistics information.

Flexibility refers to the choice of logistics services provided by different consumer needs to meet the needs of different customers. Including a variety of payment methods to choose from, a variety of receiving methods to choose from, providing inspection services, etc., to improve customer satisfaction.



## **CHAPTER 3 RESEARCH METHOD**

## **3.1 Research hypothesis**

According to the theoretical basis of the previous chapter, regarding the research on customer satisfaction in e-commerce, logistics service quality occupies a large proportion, and the quality of logistics distribution service has a very positive impact on e-commerce customer satisfaction, so Hypothesis 1: E-commerce logistics distribution services have a positive impact on customer satisfaction.

The measurement of the quality of e-commerce logistics distribution service is divided into five dimensions, responsiveness, economy, integrity, communication and flexibility. Among them, responsiveness includes the short time from placing an order to receiving the goods, the goods can be signed on time, and the goods do not need to wait too long when they are signed. Responsiveness reflects the time and speed required for goods distribution, and represents whether logistics companies can provide customers with fast and effective services. In B2C online shopping, the vast majority of consumers want to receive the goods as soon as possible, and hope that they can be processed quickly and shipped promptly after placing the order. Responsiveness is the key to the logistics distribution service, and it is also the basis of the service. The quality of the completion will directly affect customer satisfaction. Therefore, based on the above analysis, Hypothesis 2: E-commerce logistics distribution service has a positive impact on customer satisfaction in response.

Economics include measures such as reasonable logistics and distribution costs, and the value of the services received compared to their costs. Customers will consider the price factor of logistics when evaluating B2C logistics services. Logistics services are an auxiliary consumption of online shopping products, and they cannot produce a sense of presence and pleasure for customers. Therefore, most customers will weigh whether the cost of logistics services is affordable. Compare with similar logistics service prices. If consumers are not satisfied with the logistics price after comparing the three, it will reduce their satisfaction with their services. At the same time, if the higher logistics costs are paid, consumers will think that logistics should provide better services, the expectation of logistics services will increase, and the evaluation of logistics service satisfaction will be stricter. Therefore, the economics of logistics distribution services Sex has an important impact on customer satisfaction. Therefore, Hypothesis 3: E-commerce logistics distribution service has a positive impact on customer satisfaction in economic terms.

Integrity includes indicators that the online shopping product is not damaged, and the outer packaging of the product is not damaged. Intactness reflects the ability of B2C logistics companies for the intactness of commodities. Express service personnel can deliver the intact goods to customers in the correct way during the logistics transportation process. The outer packaging of the product is the customer's first impression of the product. If the outer packaging of the product is squeezed and deformed during the transportation process, and there are holes, the customer will have an unpleasant perception of the logistics service. At the same time, if the delivered product such as cosmetics contains Liquid and breakable products are damaged, leaving customers with an extremely bad impression. Therefore, based on the above analysis, Hypothesis 4 is proposed: the e-commerce logistics distribution service has a positive impact on customer satisfaction in terms of integrity.

Communication features include good overall image of couriers, good service attitude of couriers, familiarity with business processes, real-time query of order tracking information, timely and accurate update of order tracking information, and SMS notification in advance of logistics arrival. In the e-commerce logistics process, the courier is the only contact point for customers to communicate face-to-face. Customers can only feel the business proficiency of their services from the courier's attitude and dress. The courier is an important factor affecting the quality of service. At the same time, the B2C online shopping transaction is a process of communication between consumers and the Internet. Its core is information. The query of logistics tracking information can enable customers to understand where the goods are located. Express delivery arrival SMS can enable customers to understand when to sign for and make effective. Decision-making, sufficient information, timely and accurate information in e-commerce logistics services is very important. Therefore, based on the above analysis, Hypothesis 5 is proposed: the e-commerce logistics distribution service has a positive impact on customer satisfaction in communication.

Flexibility includes multiple payment methods to choose from, providing inspection services, and multiple receiving methods to choose from. Different customers have different levels and different ways of demanding logistics services. The diversity of choices such as payment methods and delivery methods can improve customers' perception of logistics services. Hypothesis 6 is proposed here: e-commerce logistics distribution services are flexible Sexually has a positive impact on customer satisfaction.

So far, we have drawn all six research hypotheses in this article:

H1: E-commerce logistics distribution service has a positive impact on customer satisfaction;

H2: The responsiveness of e-commerce logistics distribution service has a positive impact on customer satisfaction;

H3: The e-commerce logistics distribution service has a positive impact on customer satisfaction economically;

H4: The e-commerce logistics distribution service has a positive impact on customer satisfaction in terms of integrity;

H5: The e-commerce logistics distribution service has a positive impact on customer satisfaction in communication;

H6: The flexibility of e-commerce logistics distribution services has a positive impact on customer satisfaction.

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## **3.2 Survey scale**

The entire questionnaire includes the following two parts:

The first part is the introduction, introducing the interviewee to the survey subject, making the interviewee understand the purpose of the survey, improving the recovery rate of the questionnaire, and explaining that the questionnaire is filled in anonymously. The survey results are only used for academic research. Thank you.

The second part is the main part, which is divided into three smaller parts:

(1) Customer basic situation survey, this part is a survey of the interviewee's personal information and online shopping information, including gender, age, education, monthly income, average monthly shopping frequency.

(2) Weight survey. This part includes nine satisfaction indicators for cosmetic products. Respondents can score the indicators to calculate the average value of the indicators.

(3) Customer satisfaction survey on B2C online shopping flow service, measuring respondents' responsiveness, economy, integrity, communication and flexibility of cosmetic products B2C online shopping flow service, and conducting overall customer satisfaction Score. The specific content of customer online shopping flow service satisfaction measurement scale.

## 3.3 Questionnaire collection method

The survey method used in this study was in the form of a self-filled questionnaire, and the Likert Scale was used to measure the measurement problems. As a kind of score-addition scale, Likert scale is simple in structure and easy to operate, and can be easily filled out by respondents, so it is widely used in surveys. In this study, Likert's 5-point scale was used for measurement, namely "1"-"very disagree", "2"-"relatively disagree", "3"-"general", "4"-"relatively agree", "5"-"Strongly agree", each question

can be selected from five satisfaction options. In order to broaden the survey channels and statistical questionnaires, the survey adopts two methods: on-site distribution and online distribution. Respondents are asked to answer the questions in a self-service manner.

(1) On-site collection. When distributing the questionnaire to the interviewees, first explain to the interviewee the subject of the questionnaire survey and the questionnaire is only used for academic research, so that the respondent can answer the questions truthfully, and indicate that the survey is anonymous and does not involve personal privacy, then Explain to the interviewee the academic language and questionnaire filling method involved in the questionnaire.

(2) Network collection. Distribute the questionnaire on a special questionnaire questionnaire website to allow people who meet the requirements to fill out the questionnaire online. At the same time, the questionnaire is also distributed to classmates and friends by QQ, email, etc., and invite them to complete the survey.

## 3.4 Data method

The questionnaire design, sample selection and questionnaire distribution have laid the foundation for the research of the paper. At the same time, it is necessary to use relevant research methods and tools to systematically analyze the data collected by the questionnaire. Therefore, SPSS 21.0 statistical software was used in the study to analyze the collected data. Analyze and describe from multiple aspects.

(1) Descriptive statistical analysis. First of all, the frequency analysis of the respondents in the questionnaires recovered, through the descriptive statistics of the sample, to understand the distribution and structure of the sample, and at the same time, the average of the items in the statistical table to describe the difference between the indicators.

(2) Reliability and validity test. Before analyzing and processing the sample data, the items in the scale should be tested for reliability and validity, and the options and variables that do not meet the test should be eliminated to ensure the accuracy of the next analysis of the data.

(3) Related analysis. The correlation analysis is to detect the correlation between variables, mainly to determine the correlation coefficient between B2C e-commerce logistics distribution service and customer satisfaction, and then determine whether they are related.

(4) Regression analysis. Through the correlation analysis in the previous step, you can know the correlation between the variables and the related direction, and if you want to know which is the dependent variable and which is the independent variable, you need to perform regression analysis on the variables.



## **CHARPTER 4 DATA ANALYSIS**

After completing the questionnaire survey plan and actually collecting the data, the data can be analyzed. This chapter is mainly to apply the methods mentioned in the previous chapter to analyze the collected data in many ways, and to study the data through analysis as the basis for drawing conclusions in the next chapter. All data analysis in this chapter is performed using a computer, which is completed by using IBM SPSS Statistics 21.0 (SPSS 21.0 for short) software. A total of 300 questionnaires were obtained in this survey, of which 274 were valid, accounting for 91.3% of the total number of questionnaires. The questionnaire recall meets the relevant requirements of the survey, and research and analysis can be conducted on this basis.

## 4.1 Descriptive statistical analysis

(1) In terms of gender: the ratio of men and women is 8.4% and 91.6%, respectively, and more women are surveyed than men. Women use logistics more frequently in ecommerce than men, and women play a more important role. Therefore, a larger proportion of women are favored in the investigation process, which meets the needs of research.

(2) In terms of age: the proportion of customers in the four age groups is 4.0%, 60.0%, 34.0%, and 2.0%, respectively. There are more people in the middle two age groups, which is 20-30 The consumer group at the age of 12 years old, because the research object is the customer group of Jincheng Logistics, and the customer group is biased towards the younger group. This group is the main force of consumption. Therefore, as a research object, it is basically consistent with the actual situation.

(3) In terms of education: the largest number of graduate students, a total of 183 people, accounting for 66.7%, followed by a total of 81 undergraduate students, accounting for 29.6%. There are 10 junior college students, accounting for 3.7%.

(4) In terms of monthly income: 107 people from 3001-6000, accounting for 39.0%, 121 people from 6001-10000, accounting for 44.0%, and those with 3000 and below and above 10001, accounting for 1.0% and 16.0% The monthly consumption is the highest between 6,000 yuan and 10,000 yuan.

(5) In terms of average monthly frequency of use: the number of respondents under 1, 1-3, 3-5, 5 and above were 26.6%, 50.0%, 21.9% and 1.5% respectively It can be seen that 2-4 times account for a relatively large amount. This sample structure shows that most of the interviewees have rich experience in online shopping. They have more experience and knowledge in online shopping, which guarantees a higher reference of data.

(6) In terms of the history of online shopping: 3.3% for less than 1 year, 50.7% for1-3 years, 32.1% for 4-5 years, 13.9% for more than 5 years, 1 The cumulative percentage of the history of online purchases by year and by year reached 96.7%.

•	
Gender	Male: 23 (8.4%)
	Female: 251 (91.6%)
Age (in year)	Mean: 27.7
	Standard deviation: 8.56
Educational level	High Vocational Certificate: 10(3.7%)
	Bachelor degree: 81 (29.6%)
	Master degree: 183 (66.7%)
Salary	Less than 3,000 RMB: 27 (1%)
	3,001-6,000 RMB: 107 (39%)
	6,001-10,000 RMB: 121 (44%)

Table 2 Descriptive statistics of the samples (N=274)

## More than 10,001 RMB: 22 (16%)

usage frequency/month	Mean: 3
	Standard deviation: 4.69
Online shopping experience	Less than 1 year: 9 (3.3%)
	1-3years:139(50.7%)
	4-5years: 88(32.1%)
	More than 5 years: 38(13.9%)

## 4.2 Reliability and validity test

The scales in the questionnaire used in the research of this paper are based on the reference to the existing related scales, combined with the new questions and characteristics that need to be analyzed, and formed after adjustments. Therefore, it is necessary to trust the samples collected in the questionnaire. The degree and validity are checked to ensure the quality of data analysis.

## 4.2.1 Reliability test

Reliability analysis, also known as reliability analysis, means that an object needs to be measured multiple times, and it can only be measured using the same method to see how consistent the measurement results are. There are four common methods of reliability test and analysis. For the scale of this article, it is important to ensure its internal reliability, that is, to make the internal consistency of the scale high, and the alpha reliability coefficient method is used. The value of Cronbach's  $\alpha$  coefficient should be between 0-1. When the value of  $\alpha$  is above 0.8, it indicates that the scale has good reliability. When the value of  $\alpha$  is greater than 0.7, it indicates that the reliability of the scale is good. When the value of  $\alpha$  When it is less than 0.6, it means that the reliability of the scale is low and its reliability is poor. When the value of  $\alpha$  is less than 0.3, it means that the reliability of the corresponding part of the scale is very low, and the corresponding items will also be eliminated. Therefore, 0.7 is generally used as the critical value. If the value of  $\alpha$  is greater than 0.7, it indicates that the scale is credible. Therefore, the reliability of the questionnaire needs to be tested first. Reliability analysis of the data obtained by the questionnaire through SPSS 21.0 software, the results are shown in Table 2.

Variables	Reliability	Items	Reliability	Number		
Responsiveness	0.746	3	0.868	16		
Economy	0.781	2				
Integrity	0.750	2	2019			
Communicative	0.782	6				
Flexibility	0.770	3	2			
Customer satisfaction	0.782	2	0.782	2		

Table 3 Results from reliability test

As can be seen from Table 3, for the five dimensions of logistics distribution services: responsiveness, economy, integrity, communication, and flexibility, the Cronbach's  $\alpha$  value of the five dimensions is greater than 0.7, and as a whole of the five dimensions The Cronbach's  $\alpha$  value of the logistics distribution service is also greater than 0.7. At the same time, for the part of customer satisfaction, its Cronbach's  $\alpha$  value is also greater than 0.7. Therefore, it can be considered that the questionnaire used in this survey has good internal reliability and high internal consistency, which can be further tested and analyzed.

## 4.2.2 Validity test

Validity (Validity), also known as validity, that is, for objects that need to be measured, certain tools and certain methods are used to measure them, to see how well they can measure the characteristics of their measured objects. The validity test is to measure the accuracy of the measurement scale used in the questionnaire to measure the research target. When the validity value is higher, it means that the scale can measure the higher the characteristics of the measured object. This study mainly uses the structure validity to measure the validity of the questionnaire. The structure validity is mostly used to measure the accuracy of the problems in the measurement scale for the measured variables, that is, the structure of the measurement results and the structure of the measured variables Corresponding degree. The measurement of structural validity requires a corresponding measurement coefficient. The KMO coefficient is used to measure the structural validity of the scale, and the significance level is determined by the Bartlett spherical test. For the KMO coefficient, the larger the value, the better the correlation and the better the structural validity of the scale. When the KMO coefficient value is greater than 0.6, the scale has acceptable validity. When the KMO coefficient value is greater than 0.7, the validity is compared. ideal. For the Bartlett value, when the displayed value is less than the  $\alpha$  value (where  $\alpha$  is the significance level), the scale can pass the structure validity test. The calculated KMO coefficient is 0.858, which is greater than 0.7, indicating that the questionnaire has good structural validity. The significance is less than 0.001, and the assumption about sphere is not true, then there is a correlation between variables.

## 4.3 Correlation analysis

Correlation analysis can determine whether there are interdependencies between the random variables in the study. If there are interdependencies, determine the relative direction of the variables, and at the same time count the correlation between the variables. Correlation analysis generally judges the association between variables, and finds the degree of association for the variables that are related. Correlation in correlation analysis does not require a functional relationship, but can be a nonfunctional, uncertain relationship. Because of this characteristic, correlation analysis can be said to be a necessary prerequisite for regression analysis.

This part adopts the correlation analysis method, and selects Pearson (Pearson) coefficient as the index to measure the correlation. The Pearson coefficient generally takes a value between -1 and 1. When the Pearson coefficient takes a negative value, that is, between -1 and 0, the variable has a negative linear correlation; when the Pearson coefficient takes a positive value, that is, 0 Between 1 and 1, the analyzed variables have a linear correlation, and the direction is positive; when the value is -1, the correlation between the variables is the largest, and the direction is completely negative; when the value is 1, , The correlation between variables is the largest, and the direction is completely positive; when the value is 0, there is no linear correlation between the variables. When the absolute value of the Pearson coefficient is greater than 0.8 (including 0.8), the variables are highly correlated; when the absolute value of the Pearson coefficient is between 0.5-0.8 (including 0.5), the variables are moderately correlated; when the absolute value of the Pearson coefficient is absolute When the value is between 0.3-0.5 (including 0.3), the correlation between the variables is low; when the absolute value of the Pearson coefficient is less than 0.3, the correlation between the variables is very low, and it can be considered that there is no correlation.

Table 2 is the correlation analysis between the measurement variables of logistics distribution services and the measurement variables of customer satisfaction. It can be seen from the table that the Pearson coefficient of responsiveness and customer satisfaction is 0.457, the Pearson coefficient of economy and customer satisfaction is 0.353, the Pearson coefficient of intactness and customer satisfaction is 0.454, and the Pearson coefficient of communication and customer satisfaction. The coefficient is 0.462, and the Pearson coefficient of the flexibility and dependent variable is 0.431. At the same time, it can be seen that the significance of the five dimensions is 0.000, which is less than 0.01, indicating that the five dimensions are significantly related to the dependent variable—customer satisfaction, and The correlation is greater than 0.3, which is a low degree of correlation; the Pearson coefficient of logistics distribution services and customer satisfaction is 0.587, and the corresponding significance

probability is also less than the significance level of 0.01, which shows that logistics distribution services and customer satisfaction are also significantly related Relationship, and moderately related.



		Logistics distribution service					
Customer Satisfaction		Responsiveness	Economy	Integrity	Communicative	Flexibility	Logistics distribution service
	Pearson	0.457	0.353	0.454	0.462	0.431	0.587
	Significance (bilateral)	0.000	0.000	0.000	0.000	0.000	0.000
	N	274					

# Table 4: Correlation among variables

## 4.4 Regression analysis

Correlation analysis can indicate whether each variable has a dependency relationship and the degree of dependency, but in the correlation analysis, all variables are in the same position, and it is impossible to distinguish between the dependent variable and the independent variable. This is more in-depth Research is not enough, and regression analysis of variables can further determine the dependent and independent variables and the degree of mutual influence between them. Therefore, after correlation analysis, regression analysis is also required to determine the quantitative relationship between variables. Taking two variables as an example, assuming that X is an independent variable and Y is a dependent variable, the direction and degree of the influence of X on Y can be obtained through regression analysis, that is, the change of the independent variable X will cause the dependent variable Y to change, which shows The relationship is more accurate than the correlation analysis. Through this analysis method, the purpose of related hypothesis testing can also be achieved.

In this study, a regression analysis between logistics distribution services and customer satisfaction is established. At the same time, logistics distribution services are divided into five dimensions: responsiveness, economy, integrity, communication, and flexibility. Therefore, a regression analysis between responsiveness and customer satisfaction has been established accordingly in the study. Regression analysis between customer satisfaction, regression analysis between integrity and customer satisfaction, regression analysis between integrity and customer satisfaction, regression analysis between flexibility and customer satisfaction. Through the above six regression analysis, the hypothesis proposed by the paper is finally tested.

In regression analysis, based on the assumptions (hypothesis H1, H2, H3, H4, H5, and H6) proposed in the previous chapter of the paper, customer satisfaction is set as

the dependent variable, and the logistics distribution service and the five dimensions it contains (response Sex, economy, integrity, communication and flexibility) were set as independent variables, using SPSS software for regression analysis.

	Unstandardized	Standardized	t value	Sig	R <sup>2</sup>	Adjusted
	coefficient	coefficient		value		<b>R</b> <sup>2</sup>
Responsiveness	0.610	0.457	8.481	0.000	0.209	0.206
Economy	0.371	0.353	6.220	0.000	0.125	0.121
Integrity	0.501	0.565	8.402	0.000	0.206	0.203
Communicative	0.603	0.462	8.599	0.000	0.214	0.211
Flexibility	0.468	0.431	8.674	0.000	0.186	0.183
Logistics distribution service	0.935	0.587	11.947	0.000	0.344	0.342

Table 5 regression analysis

According to the results, the non-standardized coefficient values of the five dimensions and customer satisfaction in logistics distribution services are 0.610, 0.371, 0.501, 0.603, and 0.468, respectively, and the corresponding significance probabilities are all less than 0.001. Significant level, so it can be considered that the five dimensions of responsiveness, economy, integrity, communication and flexibility have a positive impact on customer satisfaction; at the same time, logistics distribution services as a whole are not standardized with customer satisfaction the coefficient is 0.935, and the

significance probability is less than 0.001. Therefore, it can also be considered that the logistics distribution service as a whole also has a positive impact on customer satisfaction.

So far, assuming that H1, H2, H3, H4, H5, and H6 all passed the test, all six hypotheses are true, and the result can be obtained:

E-commerce logistics distribution services have a positive impact on customer satisfaction;

E-commerce logistics distribution services have a positive impact on customer satisfaction in terms of economy;

E-commerce logistics distribution services have a positive impact on customer satisfaction in terms of integrity;

E-commerce logistics distribution services have a positive impact on customer satisfaction in communication;

E-commerce logistics distribution services have a positive impact on customer satisfaction in terms of flexibility.

## **CHARPTER 5 CONCUSION AND FUTURE RESEARCH**

## 5.1 Conclusion

This paper organizes relevant literature at home and abroad, based on e-commerce logistics distribution theory and customer satisfaction theory as the research basis, takes the cosmetics industry as the research field, and takes college students as the research sample, and uses the questionnaire survey method for B2C e-commerce logistics distribution services. (Contains five dimensions) and the relationship between customer satisfaction was studied, the questionnaire data was analyzed and tested by SPSS software, and the following conclusions were obtained by empirical methods:

(1) E-commerce logistics distribution services have a positive impact on customer satisfaction

According to the test results in the previous chapter, it can be seen that there is a linear correlation between B2C logistics distribution services and customer satisfaction, and assuming that H passes the test, it can be considered that B2C logistics distribution services have a positive impact on customer satisfaction, that is, logistics distribution services Increased, the corresponding satisfaction will also increase. The improvement of the quality of logistics distribution services can make logistics distribution more responsive, economical, intact, communicative, and flexible, and increase the customer's pleasure in logistics services, thereby improving customer satisfaction.

(2) The responsiveness of e-commerce logistics distribution services has a positive impact on customer satisfaction

According to the results of the previous analysis, it can be seen that there is a linear correlation between responsiveness and customer satisfaction, and Ha hypothesis passes the test, so it can be considered that responsiveness has a positive effect on customer satisfaction, that is, the ability to improve responsiveness, corresponding Of customer satisfaction will also increase. At the same time, according to the results of regression analysis, responsiveness is the factor that has the greatest impact on customer satisfaction. The biggest advantage of e-commerce is convenience and convenience. Customers who buy cosmetics through the Internet can buy products that are far away from themselves. I have high expectations for the goods, hoping to unpack the package as soon as possible, and the faster the logistics, the higher the customer's pleasure, and the higher the customer satisfaction.

(3) The e-commerce logistics distribution service has a positive impact on customer satisfaction economically

According to the results of the previous analysis, it can be seen that there is a linear correlation between economy and customer satisfaction, and the Hb hypothesis passes the test, so it can be considered that economy has a positive effect on customer satisfaction, that is, the ability to improve economy, corresponding Of customer satisfaction will also increase. College students, a young group on campus, lack a source of income, have low monthly consumption levels, and spend less on online purchases of cosmetics, so they pay more attention to freight levels, and college students, especially female college students, demand for cosmetic products Higher, while paying attention to the price of cosmetics products will also pay attention to the level of freight. The research by iResearch found that the shipping strategy can attract consumers' attention and make them feel good about the goods. Therefore, if the freight level is too high, it will not attract consumers to buy, and it will also affect their satisfaction. Evaluation.

(4) The e-commerce logistics distribution service has a positive impact on customer satisfaction

According to the results of the previous analysis, it can be seen that there is a linear correlation between intactness and customer satisfaction, and the Hc hypothesis passes the test, so it can be considered that intactness has a positive effect on customer satisfaction, that is, the ability to improve intactness, corresponding Of customer satisfaction will also increase. The correlation coefficient value of intactness in the regression analysis is higher, ranking third, indicating that college students consumers

pay more attention to the intactness of cosmetics. After purchasing cosmetics online, consumers will evaluate the quality of the product based on the product packaging after receiving the product. The quality of the product packaging can reflect the company's intentions. At the same time, whether the outer packaging of the product is intact and there is no squeeze damage can reflect the logistics distribution service. The quality of the goods, and the delivery of the goods without damage can get consumers' goodwill, which affects the consumer's evaluation of the logistics distribution service. Therefore, the integrity of cosmetic products should be paid attention to by B2C websites and logistics companies.

(5) Communication of e-commerce logistics distribution services has a positive impact on customer satisfaction

According to the results of the previous analysis, it can be seen that there is a linear correlation between communication and customer satisfaction, and the Hd hypothesis passes the test, so it can be considered that communication has a positive effect on customer satisfaction, that is, the ability to communicate improves, corresponding Of customer satisfaction will also increase. The correlation coefficient value of communication in regression analysis is second only to responsiveness, which plays an important role in the satisfaction of logistics distribution. Logistics service personnel is the only link between the customer and the e-commerce company. The external image, business proficiency and service attitude of the logistics service personnel directly affect the consumer's impression of the e-commerce company, so the e-commerce company should strengthen its logistics service personnel. The emphasis on the service level.

(6) Flexibility of e-commerce logistics distribution services has a positive impact on customer satisfaction

According to the results of the previous analysis, it can be seen that there is a linear correlation between flexibility and customer satisfaction, and He hypothesis passes the test, so it can be considered that flexibility has a positive effect on customer satisfaction,

that is, the ability to improve flexibility, corresponding Of customer satisfaction will also increase. Flexibility also accounts for a certain percentage of customer satisfaction factors. Cosmetic products have the characteristics of fragile products, and the goods need to be inspected before they can be signed. Therefore, whether these products provide inspection services will affect consumers' satisfaction with logistics services. At the same time, although online shopping can be paid through a thirdparty Payment by way of payment, but based on security considerations, you will also need to provide a variety of payment methods such as cash on delivery or credit card, so flexibility is also a factor that affects customer satisfaction.

In summary, a good logistics distribution service has a very positive effect on the improvement of B2C e-commerce customer satisfaction evaluation.

## **5.2 Research Implications**

This paper organizes and analyzes the research theory, which provides a theoretical basis for the research hypothesis. At the same time, it empirically tests the research hypothesis through the questionnaire survey, and finally obtains the result of the hypothesis. In the previous section, the results of hypothesis testing were summarized and analyzed, and the research conclusions were drawn. However, for research, whether it is theoretical research or empirical research, after conducting research at the academic level, the research results must also be used in practice or guidance to practice in order to complete the purpose of academic research. Therefore, this section analyzes the existing problems and proposes corresponding countermeasures in conjunction with the conclusions of the study and the actual situation.

## 5.2.1 Analysis of E-commerce Logistics Distribution Service Problems

(1) The speed of logistics distribution needs to be improved

Responsiveness is the most important factor that affects consumers' satisfaction with logistics distribution services. Distribution speed is the core part of responsiveness.

The biggest advantage of e-commerce is convenience. Although the delivery speed of online shopping products in first-tier cities has greatly improved, with the popularity of computers and the expansion of online shopping users, second- and third-tier cities and rural areas also have gradually increased online shopping. Demand, and in reality, this part of consumers has entered a long waiting period after online shopping. The distribution speed of logistics distribution in these cities seems to be inadequate, making the advantage of e-commerce across the time domain lost, so these places There is still much room for improvement in delivery speed. The products selected by buyers through online shopping are relatively random, and the geographical location is relatively scattered, which will cause the characteristics of high frequency and small batch of logistics distribution, which will increase the difficulties of logistics distribution vehicle arrangements and route planning. Therefore, do Good logistics planning, reducing distribution costs, and improving user satisfaction are issues that e-commerce companies need to solve.

## (2) The quality of logistics personnel is low

Logistics and distribution personnel are the only ones who have face-to-face physical contact with online shopping customers and bear the image of an e-commerce enterprise. Since the work of logistics and distribution personnel is mostly manual labor, and the requirements for academic qualifications are low, the express delivery company will basically not train them, and the distribution personnel can immediately enter the distribution work. E-commerce companies with self-built logistics systems in my country have distribution personnel directly under the company, and logistics service personnel have a good attitude. But for the delivery staff of the third-party logistics company, the e-commerce enterprise is only the company's cooperation object, and the customer delivery staff of the e-commerce enterprise lacks the enthusiasm for service. Therefore, the service consciousness, enthusiasm and professionalism of the courier staff are not as high as those of self-employed enterprises, which will affect the image of e-commerce enterprises and cause low satisfaction evaluation. (3) Attention should be paid to detailed services

There are many links from the process of placing an order online to receiving the goods, and there are many detailed services worth of attention in these links. As can be seen from the analysis in the previous chapter, in addition to logistics speed and logistics costs, there are many indicators that affect customer satisfaction with logistics services. The clothing of the delivery staff is more casual and cannot be uniformly dressed, which will make consumers think that the service is not professional enough. Secondly, the product packaging is not uniform, and many products only use simple packaging, which will make consumers feel that the goods are cheap; there are many Couriers are not equipped with POS machines that provide cash-on-debit card swiping; in addition, whether or not to provide inspection services will also affect the service. For the details of these logistics and distribution links, companies should provide attention.

## 5.2.2 Analysis of countermeasures for e-commerce logistics distribution

(1) Strengthen the construction of self-built logistics system

Many powerful B2C e-commerce companies have chosen to establish their own logistics system. First, building their own logistics system can strengthen the company's control over all aspects of logistics. Second, self-built logistics systems can respond to customer needs more quickly and flexibly. ; Finally, the self-built logistics system can be connected with other systems, and the logistics information of commodities can be transmitted in time in the enterprise. Therefore, self-built logistics can provide better business support for B2C e-commerce enterprises. At the same time, for areas that cannot be reached by self-built logistics systems, product distribution can be carried out in the form of logistics outsourcing. For the pressure of self-built logistics funds, large B2C enterprises with self-built logistics can establish cooperative relations with companies that do not overlap in business, jointly use the logistics system, and charge a certain fee, on the one hand, it can ease the pressure of funds and reduce waste of resources. On the one hand, for cooperative e-commerce companies, with the help of self-built logistics and distribution centers, the speed of distribution and service

efficiency are improved.

(2) Strengthen strategic cooperation with third-party logistics companies

Online shopping transactions require third-party logistics companies to complete the last step. At the same time, for third-party logistics companies, the rapid development of e-commerce has also promoted the expansion of their scale, so cooperation between the two should be strengthened to achieve a win-win situation. First, e-commerce companies should choose suitable logistics companies to understand the capabilities and credibility of third-party logistics companies. At the same time, in order to reduce risks, they can cooperate with multiple logistics companies; second, strengthen the supervision and management of both parties, and formulate an assessment and evaluation system. The three-party logistics enterprise should timely transmit the feedback of the logistics service quality to the e-commerce enterprise, and the e-commerce enterprise should also communicate with the third party on a regular basis to better improve the quality of the logistics service; again, strengthen the information management level of both parties, and transmit and share the information in time, Improve the timely feedback capability of logistics information, solve the logistics problems of consumers in the shopping process, and reduce the difference between third-party logistics and self-operated logistics.

## (3) Strengthen the cultivation of logistics and distribution personnel

Strengthening the management of express delivery personnel has a very important impact on improving the quality of B2C logistics distribution services. Logistics service personnel are the most direct contact between consumers and logistics companies when picking up their goods. Their service attitude will directly affect the logistics experience. Therefore, enterprises should strengthen the management of logistics and distribution personnel. First of all, pay attention to the quality of the delivery personnel, often train the delivery personnel to improve the service awareness of the delivery personnel, and evaluate the delivery personnel to pass the assessment; secondly, set up a reasonable performance evaluation mechanism to improve the delivery experience user's sense of responsibility, A certain punishment will be given for failure to pass the assessment indicators, and appropriate rewards will be given through the assessment indicators. The performance assessment mechanism can increase the enthusiasm of couriers and enhance their service awareness.

## 5.3 Research limitations and prospects

In the research process of this article, although I conduct research in a serious and rigorous manner according to scientific research methods, due to various reasons such as personal knowledge level, economic conditions, and external environment, some research limitations are inevitable in the paper:

(1) Limitations of survey samples

The study sample population is not large, the survey sample is small, and the number of effective samples is small, limited by time and effort. Since the survey object is college students and is a survey of cosmetic product shopping, the sample population of the questionnaire is mainly concentrated on female college students, which will have a certain impact on the data analysis of the thesis. Moreover, part of the sample population of the questionnaire is concentrated in Northeast China such as Shenyang, and the regional universality needs to be improved.

## (2) Limitations of research methods

Research and analysis collected data through a questionnaire, using Likert's 5-point scale, divided into "very disagree" "Disagree, "General", "Comparatively agree", "Strongly agree" five measurement levels, allowing respondents to choose among five evaluation options. However, different respondents will have different understanding of the questionnaire indicators, can it It is debatable to accurately transform your psychological attitude into an option. In addition, for the subsequent processing of the data, the five options are set to 1-5 points, but the consumer's perception of satisfaction should be A linear, continuous relationship, this relationship is worthy of further study. Research prospects, the continuous development of information technology and
network technology has led to the rapid development of B2C e-commerce industry, and the research of customer satisfaction in e-commerce is becoming more and more important. Subsequent research should avoid the above-mentioned limitations or deficiencies. Office. The questionnaire survey method used in the research in this paper is mainly an analysis of the subjective attitudes of the interviewees. The data is subjective, and the concept of qualitative analysis is greater than quantitative analysis. Further quantitative analysis. At the same time, in future research, we can analyze the current mainstream B2C e-commerce enterprises and discuss the distribution services under different logistics models.



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### Appendix A Questionnaire Survey

Dear Sir/Madam, Hello!

This is a questionnaire about employee loyalty in your daily relationship with your leaders. There is no right or wrong answer.

This questionnaire is not named and the results will only be used for academic research and will not involve commercial use or personal privacy. We guarantee that all information provided by you will be kept strictly confidential. If you would like information on research results, we will also actively provide feedback.

Thank you for your support and cooperation!

# Part ONE: Please read the following questions carefully and tick " $\sqrt{}$ " on the number that matches your situation based on your personal subjective perception.

Totally	Slightly	General	Some Agree	Totally Agree
Disagree	Disagree			
1	2	3	4	5

Numbering	Торіс		Degree of consent					
Responsiveness								
1	Short time from order to receipt		2	3	4	5		
2	The purchased goods can be delivered at the		2	3	4	5		
	agreed time							
3	Short waiting time when picking up	1	2	3	4	5		
Economy								
4	Reasonable logistics and distribution costs	1	2	3	4	5		
5	Compared with the logistics fee paid, the logistics	1	2	3	4	5		
	service I accept is super value							
Integrity								
6	The delivered goods are not damaged	1	2	3	4	5		
7	The outer packaging of the delivered product is	1	2	3	4	5		
	intact							
Communicative								
8	Good overall image of logistics service personnel	1	2	3	4	5		

9	Good service attitude of logistics service		2	3	4	5
	personnel					
10	Familiar with logistics service personnel		2	3	4	5
11	Can query order tracking information in real time		2	3	4	5
12	Order tracking information is updated in a timely		2	3	4	5
	and accurate manner					
13	SMS notification of logistics arrival in advance	1	2	3	4	5
Flexibility						
14	There are multiple harvesting methods to choose	1	2	3	4	5
	from					
customer satisfaction						
15	I am satisfied with the cosmetic products I bought	1	2	3	4	5
16	I am satisfied with the logistics service of the	1	2	3	4	5
	website					

## Part TWO: Demographic Data

1. Gender

□Male

□Female

2. Age\_

#### 3. Education

□High Vocational Certificate

□Bachelor degree

□Master degree

## 4.Salary(month)

□Less than 3,000 RMB

□3,001-6,000 RMB

□6,001-10,000 RMB

□More than 10,001 RMB

#### 5. usage frequency/month\_\_\_\_\_

## 6. Online shopping experience

□Less than 1 year

□1-3years

□4-5years

□More than 5 years

