Analysis of Terminal Delivery Mode in Express Industry

Hui-zhen WANG
Xi'an International University, Xi'an, Shaanxi, China
hwang@163.com

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Abstract. The rapid development of e-commerce has led to the development of express delivery industry. The number of express parcels has increased dramatically year by year. Especially in festivals such as "Double Eleventh", the express delivery volume has reached seven or eight times as much as usual. Distribution disconnection, loss of goods and overstock of goods have become hot issues in society. This paper puts forward a new innovative mode of end-delivery - "joint distribution" mode, which completes the terminal distribution task through the mode of end-joint distribution center. End joint distribution means that after each logistics company transports the goods to the logistics centers of each city, the express delivery in the area under its jurisdiction is collected from the distribution centers of each logistics company, and then the goods are centrally distributed to the "last kilometer" distribution in the hands of customers.

Introduction

In recent years, as an important part of supporting the development of e-commerce, express industry has ushered in a golden period of development driven by e-commerce. Although the revenue of express companies is increasing year by year, the blowout development of express industry is also confronted with the problems of rising labor costs, increasing transportation costs and high construction costs of express outlets, especially the cost of "last kilometer" of express delivery accounts for 30% of the total logistics cost, so the "last kilometer" problem needs to be solved urgently. Developing new distribution mode has become the general trend of express industry in the future.

Summary of Terminal Delivery in Express Industry

Express delivery companies will deliver express to express outlets, and this part of the logistics service from express outlets to customers is called terminal delivery (the last kilometer or 100 meters). This is the closest process for express companies to contact customers, and also an opportunity for express companies to reflect their service quality. Customers can serve express companies by "enjoying" or "suffering" terminal delivery services. Service quality will have the most intuitive experience.

Present Situation of Terminal Delivery in Express Industry

Intelligent Suitcase

Intelligent express boxes have been popularized to a certain extent, and the cumulative number of parcels delivered is also increasing. In addition to Chengdu, express delivery has also been welcomed by the people of Tianjin. Now it has been distributed in several hundred places in Tianjin, but the utilization rate is not high in Chengdu, and it is still in the stage of promotion. Intelligent express box still has many problems at this stage, such as some large pieces of goods cannot be put in at all, after all, the size of the package box is limited. In addition, some package consumers forget to pick up, other express delivery will not be put in, and because of the cost of delay, consumers and express companies often have disputes. Some citizens said that the express company did not inform themselves that it would incur additional costs if it failed to withdraw more than 24 hours after the expiration date, and they really felt that it was somewhat wrong. Although
smart package boxes have brought some troubles to express companies, they still feel that the trouble lies not in the machine, but in the management, as well as the courier and users.

**Agency**

Comparing with smart package boxes, there are many forms of agent points. For example, some express companies and supermarkets, nail salons, laundry signed agreements. When the package arrives at the cooperation point, the recipient will receive a short message from the express company. If the recipient does not take the package, the package will not stay overnight at the cooperation point. The express company will send someone to take the package away and contact the recipient. At present, Shentong Express has cooperated with supermarkets. Of course, cooperation has also brought some problems. There are many complaints from citizens. Why did the express which should have been signed by itself be handed over to supermarkets?

**Other Forms of Collection**

Express receipt channels are diverse, not limited to smart packages and agents. Other ways may not make users feel comfortable.

Some residential properties provide express service for the owners. The parcels of non-residential owners cannot be deposited here, but there are often outdoor express mail appearing at the residential collection point. The courier can only let the addressee change their address and redistribute, which brings bad experience to consumers.

The person in charge of the express outlet also said that if there is a cooperation agreement between the cigarette hotel and the express company, it will become the agent of the express company. In fact, there are some private agreements between the express outlet and some convenience stores and laundries to pay by piece. This kind of behavior has not been approved by the express company, but is only an individual act, and the safety and service quality of the express is not good. To safeguard, there are still many problems.

**Terminal Express User Experience Satisfaction is Lower**

Compared with the vigorous development of express service in our country, compared with the overseas express service, the overall quality of Chinese express service is too low, the problems of delay, loss of express and service attitude are more prominent, and the express delivery is slower on holidays. As a result, users often complain about the poor service quality of express company, or even make big strikes, customers' satisfaction is too low, and users' consumption experience is not good. For example, on October 12, 2012, the first domestic online shopping express satisfaction monitoring report issued jointly by Logistics Magazine and Guangdong Chain Operations Association shows that the overall satisfaction of online shopping express delivery service is only 39.8%, and the "last 100 meters" service of express delivery is not optimistic, and the situation is particularly bad. Therefore, the survey data show that 14.5% of respondents have complained about express companies and suffered from unhappy express service. According to the National Post Office survey on express service satisfaction in the first half of 2013, the overall satisfaction of express service in the first half of 2013 was only 72.1 points. Among them, the satisfaction rate of express delivery time limit is 67.7 points, which is 1.3 points lower than that in 2012. The quality of service reflected by more than 30% of users is the delay of express delivery. The low punctuality rate is also a big problem. The average time limit of express delivery service is 57.16 hours. According to the national standard "domestic foreign fast service time limit" 72 hours punctuality rate is only 75.27%. In May 2013, the State Post Office accepted 14457 valid complaints, of which 14111 were related to express business, accounting for 97.6% of the valid complaints. Delay of express delivery, delivery service problems, loss of express delivery and shortage of internal parts accounted for 85.3% of the effective appeals in express delivery business. In November 2013, the tragedy of Yuantong's "poisonous express delivery" which caused 1 death and 9 injuries pushed the express industry to the forefront of public opinion. From the analysis of the actual situation of China's express industry, the above-mentioned problems of service quality and user experience are mainly concentrated in the terminal express link.
Construction of Innovative Model of Terminal Delivery in Express Industry

Overview of "Joint Distribution at the End of Express Company"

The terminal joint distribution of express companies is a solution to the current problems of urban traffic congestion, high logistics costs and serious environmental pollution. Several express delivery companies set up terminal joint distribution centers in various communities. After the logistics companies transport goods to the logistics centers of various cities, the express delivery in their respective areas is collected from the distribution centers of the logistics companies by the joint distribution centers, and then delivered to customers or allowed customers to go to the joint distribution centers to carry out self-delivery and other business.

End Express User Analysis

Joint distribution centers can be divided into three categories: joint distribution centers in University districts, joint distribution centers in residential districts and joint distribution centers in commercial districts. The reasons are as follows:

Firstly, for the whole logistics distribution, the most special and difficult task is the logistics distribution task in the University City. The characteristics of the University City are obvious: large distribution, obvious off-peak season, centralized pick-up time, and no formal management system. These characteristics are different from those of other areas, which need to be listed separately as a special area.

Secondly, apart from the University districts, the most densely populated areas are not more than residential areas. Because no matter how people go out to work, go to school, rest at home or how, they will eventually return to their respective areas of residence. However, the characteristics of these areas are generally similar, so a single list of residential areas to meet this demand.

Third, in addition to the above logistics and distribution tasks, logistics and distribution also has a big head is the logistics and distribution of business districts. Document express delivery, a small amount of cargo transportation and so on, these are the logistics distribution business that people will involve in their daily work. In order to meet this demand, the business district is also listed separately to meet the above needs.

After separating the above three types, basically all the logistics and distribution business may be involved in the business has been included, and some other business is relatively scattered, not enough to list a single category, if necessary, can be established according to its particularity.

Running Flow

According to the classification of terminal express users, in the University city, residential and commercial areas, several express companies can co-invest to establish a joint distribution center. After each logistics company transports the goods to the logistics centers of each city, the express delivery in the area under its jurisdiction will be collected from the distribution centers of each logistics company, and then distributed to customers by the joint distribution center. Or customers are allowed to pick up the express at the joint distribution center.
Because the express delivery volume of each express company is different, so the cost that should be borne is also different. Joint distribution centers provide indifferent services. Express companies bear the corresponding costs according to the resources occupied by joint distribution centers, i.e. express delivery volume.

Joint distribution center not only has the function of distribution, but also has the function of package because it is close to customers. Because the joint distribution center is funded by several express companies, how to distribute the package of the distribution center to the express companies is a particularly difficult problem to coordinate. The express delivery volume determines the performance of the express companies, so no one will step back on this issue. The simplest and best way to solve this problem is to give it to the market and let the customers choose for themselves. Each express company provides quotation, personalized service and other value-added services, and customers can choose freely according to their own needs.

Advantages of Joint Distribution Model

Compiling the Development Plan of Urban Joint Distribution. By planning and designing the service system of urban distribution, we can scientifically make decisions on the work of urban joint distribution space.

Constructing Information Service Platform of Urban Joint Distribution. We should adopt the market-oriented operation mode, attract the group companies with good foundation and high level of logistics informatization to participate in the construction and operation of information platform, scientifically build the main body of information platform construction and operation, realize the functions of information publishing, data statistics, online transactions, integrity certification, and realize the interconnection and information sharing with the pilot and related enterprise information platforms. Through GPS system and GIS system (geographic information), the functions of resource integration, transportation monitoring and management, vehicle management, real-time vehicle tracking and dispatching, regional and route optimization, and performance management are realized.

Constructing Distribution Network System. Coordinating urban and rural distribution
resources, through the rational layout of urban joint distribution nodes, the distribution network system of urban terminal distribution network is constructed. Support the innovation of distribution mode, cooperate with several express companies, reduce waste caused by repeated construction of online stores, and develop the mode of joint distribution in the service of residents' life. Network construction of urban terminal distribution, express delivery sites, integrated network delivery and property companies, convenience stores, pharmacies, integration of e-commerce, express delivery and residential household supplies, and other businesses, to promote online booking and fast and convenient distribution services. In the express sending and receiving intensive area, the terminal distribution network is constructed.

Other Positive Social Effects. Several express companies cooperate strategically to share part of the resources and protect the environment with low carbon. They integrate and process express information and optimize the routes to provide timely and accurate express information for consumers and realize information-based express delivery. At the same time, they establish community service stations to provide safe and humanized goods receiving services for consumers. They also build modern, scientific and intelligent sales. Post-service system. Optimize the working environment of express delivery personnel, increase their enthusiasm and initiative, and optimize the quality of service.

The "joint distribution" mode of the last kilometer of express delivery can effectively reduce operating costs, improve customer satisfaction, and guide express companies to develop in the direction of specialization, meet customers' personalized needs and seize the market. It is hoped that innovative express delivery companies can reach strategic alliances on end delivery and develop new distribution modes.

Summary

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