

The Relationship between Logistics Selection and Enterprise Cost Control

Yingting Chen*

School of Economics and Management, Shanghai Maritime University, Shanghai, 200135, China

*Corresponding author's e-mail: g6chiii@gmail.com

Abstract: This paper mainly studies the relationship between logistics selection and enterprise cost control through multiple angles and case studies of different enterprises. In the paper, the concept and segmentation of cost control, as well as the current logistics model in China and the applicable types of enterprises are introduced. Finally, it is concluded that more large enterprises can choose the self-operated logistics model, and small enterprises, especially self-employed enterprises, are more suitable for the model of cooperation with third-party logistics.

Keywords: Cost control, Enterprise cost, Logistics selection.

1. Introduction

With the rapid development of e-commerce, Chinese e-commerce has presented many new characteristics. Under the influence of these new characteristics, China's e-commerce is booming, and on the basis of analyzing the current situation of China's e-commerce and logistics, combined with the new characteristics of e-commerce development, many problems in the logistics operation of Chinese e-commerce can be effectively solved.

2. Literature Review

2.1. Research objectives

This thesis mainly analyzes the relationship between logistics selection and enterprise cost control from three variables, namely enterprise cost control, enterprise self-operated logistics mode, and logistics company cooperative logistics mode. Cost control is also taken as a variable to form a triangular relationship, and the relationship between variable changes between enterprise cost control, self-operated logistics mode and logistics company cooperative logistics mode is explored.

2.2. Research background

2.2.1. Cost control

Cost control is the work to ensure that the cost of an enterprise is within the budget estimate. Actual costs are detected against estimates, actual or potential deviations are flagged, forecasts are prepared and measures are given to keep costs in line with targets. When controlling the cost of the enterprise, it must also be combined with its scope control, schedule control, quality control, etc. The choice of logistics is one of the key factors that have an impact on cost control. In the era of the rise of e-commerce platforms, more and more individual portals and enterprises have to carry out long-term cooperation with logistics companies, and choosing the appropriate logistics methods and partners has a non-negligible impact on the cost of enterprises. [1]

2.2.2. Cost control for logistics and transportation enterprises

The cost composition of logistics and transportation enterprises comes from a wide range of sources, such as lines,

fuel, endpoints, maintenance, labor and other links of costs, mainly concentrated in logistics and transportation inventory costs, warehousing costs, transportation costs and management costs, etc., can produce variable dynamic changes with the size of logistics and transportation volume, and the cost control quality effect of these aspects directly affects the economic benefits and profits of logistics and transportation enterprises. In terms of cost accounting, the accuracy of logistics and transportation enterprises needs to be improved; The combination of cost control and cost calculation is not enough, showing the phenomenon of mutual separation; The analysis of the cost components of logistics and transportation enterprises is not comprehensive enough, and it is easy to omit or double calculate some cost items. [2]

2.2.3. Enterprise logistics path selection and cost control

Logistics path and logistics cost control are particularly important in enterprises. Through the detailed analysis of the relationship between the logistics path and cost control of the enterprise, it is concluded that the scientificity of the logistics path selection is directly related to the level of final logistics cost control, so the enterprise should pay attention to the development of logistics work.

In the past, the total cost of domestic social logistics was equivalent to 24% of GDP, and with the development of the times, the proportion shrank to 18.5%. The cost compression problem of enterprises in the logistics link is large, and enterprises need to pass the comprehensive assessment of multiple links when choosing logistics methods. To do a good job in the selection of logistics routes and cost control of enterprises, we should improve them from the following aspects: (1) scientifically build a relatively unified logistics cost system; (2) Build a more robust cost control framework; (3) Improve the comprehensive quality of logistics staff. [3]

2.2.4. The type of business logistics model

At present, there are several types of logistics distribution of enterprises in China: (1) self-operated distribution mode: this logistics mode is more suitable for commercial enterprises with strong capabilities, and their performance can be improved by adopting the strategy of self-built logistics system development; (2) Outsourcing logistics mode: If logistics is not the core business of the enterprise, the outsourcing strategy can be reasonably used to achieve the

purpose of improving logistics capabilities and strengthening the performance of the enterprise; (3) Mutual distribution mode: this mode is for a number of commercial enterprises to unite to form a logistics alliance, in order to achieve the overall rationalization of logistics distribution, under the guidance of the principle of mutual benefit, jointly fund the construction or lease of distribution centers, formulate a common plan, jointly distribute to users in a certain area, and jointly use the distribution mode of distribution vehicles; (4) Supplier distribution mode: It is a logistics activity in which production enterprises directly deliver the goods purchased by commercial enterprises to various stores and even to shelves within a specified time range, and is often used in the logistics selection of large-scale production enterprises. [4]

3. Methods

3.1. Case study 1

Firstly, the following factors are analyzed through the analysis of the relevant data of the financial statements of the

Table 1. Total revenue and operating expenses between Jingdong and JD Logistics.

	Jingdong	JD Logistics
Total revenue	2430 billion	367.28 billion
Operating expenses	2074 billion	350.93 billion

The above table(Table 1.) compares the total revenue and operating expenses of JD Logistics and JD.com in the first quarter report of 2023, of which JD Logistics' operating expenses account for about 17% of JD.com's total operating expenses.

Table 2. Total revenue and operating expenses between Jingdong and YTO Express.

	Jingdong	YTO Express
Total revenue	2430 billion	129.14 billion
Operating expenses	2074 billion	118.10 billion

3.2. Case study 2

IKEA is a furniture company focusing on providing home decoration solutions, due to the particularity of its products, IKEA for large furniture and customer-customized products for self-operation distribution model, IKEA from the perspective of "full logistics cost" to study its unique logistics network. IKEA has more than 30 offline stores, 4 distribution centers and 7 distribution centers in Chinese mainland. Among them, the distribution center undertakes the key functions of supplying the mall and providing safe storage for the warehouse, and IKEA quickly opened a regional distribution center by choosing the rental warehouse mode before building its own distribution center, which quickly realized the optimization of IKEA's China distribution center network. [5] IKEA's self-operated warehouse operation model in China still strictly adheres to the workflow and standards of the European headquarters, and realizes a 'light and efficient' warehouse management structure by using energy-saving and emission-reducing electric forklifts and electric heavy trucks, which also saves costs for IKEA in warehousing. In addition, the equipment purchased by suppliers has strict procurement standards in IKEA distribution centers, and in one distribution center in China, suppliers have proposed many methods for equipment placement and selection that can reduce environmental pollution. It can be seen that the self-operated logistics mode

case enterprises: (1) From the perspective of logistics companies, the cost difference between third-party logistics cooperation and self-operated logistics between enterprises in the same industry is studied; (2) From the perspective of suppliers (garment factories, beverage factories, etc.) who need to concentrate large-scale logistics transportation in the supply chain, analyze what logistics mode they adopt in logistics cost control to achieve their goals; (3) Analyze the proportion of internal logistics costs in the total cost.

At the same time, qualitative methods are used appropriately to analyze the difference in costs under different modes by comparing the logistics modes of existing enterprises in the market horizontally and vertically comparing the logistics choices of the same type of enterprises.

Jingdong is a typical self-operated logistics enterprise, consumers in the Jingdong Mall purchase goods are contracted by JD Logistics, it has its own warehouses in various places, most of the goods in the online mall are JD logistics distribution.

YTO Express is a well-known third-party logistics company, and its total revenue and operating expenditure data reported in the first quarter of 2023 are shown in the table below(Table 2.), of which YTO Express's operating expenses account for 91% of the total revenue.

can not only control all links of the warehouse, but also save costs from the selection of equipment and reduce expenses in logistics and transportation.

3.3. Case study 3

Fresh cold chain e-commerce is a common supply chain in the current society, and its logistics distribution mode exists in the market both self-operated distribution mode and third-party logistics model, such as the Hema fresh supermarket set up in major cities in China, enterprises support consumers to buy fresh cold chain food online and distribute it. [6]They use the self-operated distribution model, the supermarket is a community store, the delivery order is almost for the family, logistics distribution is similar to the takeaway delivery model, the use of self-operated logistics mode can avoid the information gap between third-party logistics personnel, resulting in the problem of delivery errors. Hema Fresh Supermarket adopts the distribution tools selected by the management and its own delivery personnel, which can effectively reduce excess intermediate costs and provide customers with higher service quality.

In addition, some fresh cold chain e-commerce will sell their products on online platforms, that is, third-party platforms, such suppliers because of their small scale, most of them adopt the model of cooperation with third-party logistics companies, suppliers only need to be responsible for product output and related services, outsourcing logistics, making up

for the shortcomings of their small number of people and limited costs, if the self-operated distribution model is adopted, there will be a risk of exceeding the budgeted cost.

4. Study Results

Self-operated logistics and third-party logistics are the demanders of logistics business for production and circulation enterprises, that is, two competing logistics service providers, production and circulation enterprises must have considerable investment in self-built logistics, and these fixed cost inputs must be fully digested into the logistics business of the enterprise. The advantage of self-operated logistics is that the company's own information can be fully grasped without bearing the costs related to business contracting and transactions. For example, in the operation of JD Logistics, after consumers place orders, the staff will sort and deliver orders at the warehouse closest to the consumer's delivery address, and the whole process is managed and carried out by JD.com's internal employees, without the need to dock with third-party personnel. Save training and management costs for external employees. But for most merchants who operate online stores, they will choose to use professional third-party logistics for cooperation. First of all, the business scale of online mall merchants is not as large as JD.com, which has self-operated logistics, there is no need to build large-scale warehouses in various places, and there is not enough cost to build warehouses scattered across the country, they only need to build their own independent warehouses, or even share a warehouse with other merchants to achieve the purpose of reducing management costs. After packaging the goods, they are handed over to the third-party logistics company for follow-up work, which can not only reduce the cost of the company's operating costs, but also improve its performance.

For larger enterprises, self-operated logistics is a more cost-effective option. Self-operated logistics is more conducive to the control of operation costs and market costs and can reduce costs to a certain extent, such as in order processing, warehousing management, goods inspection, etc., enterprises can better grasp real-time information and can make timely adjustments to emergencies. Since the costs of warehousing, operation and maintenance of larger enterprises are higher than those of small online stores, choosing the self-operated logistics model can save the intermediate costs incurred in cooperation with third-party logistics companies. For example, most of the online shopping malls, furniture malls, food factories, garment factories, and fresh cold chain enterprises that have their own complete systems have direct

cooperation with factories. Most of the self-built sales channels and logistics channels of enterprises using self-operated logistics are built simultaneously, and the handling, loading and unloading, storage and other links of sold goods are operated in the same way, so as to improve distribution efficiency and reduce the costs generated by intermediate transactions. At the same time, if the enterprise has a distribution center and regional warehouses nationwide, through the management's own selection of equipment in the site and the control of each process, it can achieve a different business model from the third-party logistics company to achieve the result of reducing logistics costs, and better control and manage the logistics costs of the enterprise.

5. Conclusion

Combining the existing research results and the results of this thesis, the following conclusions can be drawn: for small stores and offline self-employed individuals who operate by themselves online, the business model of cooperation with third-party logistics is the best choice. For large online shopping malls, furniture malls, food factories, garment factories, fresh cold chain enterprises and most other enterprises that have direct cooperation with factories, choosing the self-operated logistics mode can help them save more costs and grasp warehousing information in a timely manner. In the future, it is hoped that more supply chain academic researchers can conduct in-depth research on the impact of logistics on enterprises, and come up with a set of formulas applicable to most enterprises for logistics selection.

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