

Reducing Costs to Enhance Profits for Logistics Companies: Strategies and Best Practices of JD Logistics

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Abstract. With the development of big data and technology, the competition among e-commerce enterprises is becoming increasingly fierce. Reasonable integration of modern products into the operation of enterprises to obtain higher efficiency, and lower costs, will obtain greater competitive advantages. This paper studies how to reduce the enterprise supply chain's operation, transportation, and other costs. What can draw from the analysis is that enterprises need to progress with The Times. Apply big data to the supply chain management of enterprises. Moreover, use modern technology to replace part of the manual work to improve efficiency and reduce costs. Big data management and supply chain management are beneficial to all enterprises. Take JD Logistics as an example to see the big picture. This can give more ideas for the development of the enterprise. It also promotes the development of big data and technology in reverse.

Keywords: Logistics Companies, Cost, Profit, JD Logistics.

1. Introduction

The high cost of logistics companies is a problem faced by many companies. A big part of the problem lies in the supply chain. Production cost management, inventory cost management, logistics cost management, procurement cost management, sales cost management and management information construction [1]. With the development of big data, more and more enterprises have begun to pay attention to the role of big data, use big data management, and realize scientific decision-making. In the context of big data, e-commerce enterprises should pay more attention to the penetration and utilization of big data technology in all links. By using big data technology, e-commerce enterprises can improve the informatization level of enterprises, realize the transparency and openness of internal information, timely discover the problems in each link of the supply chain, and strengthen the effectiveness of the internal control system, which can effectively reduce the cost [2]. JD Logistics created its own logistics system as early as 2007 and established its logistics Group in April 2017. It is committed to technological innovation in the supply chain, reducing logistics costs, and improving user experience. JD Logistics is an electronic sales enterprise, and procurement cost, inventory management cost, sales cost, and distribution cost are the main components of its supply chain cost. Procurement cost mainly includes the cost of purchasing goods and the cost of warehousing goods; inventory management cost mainly includes warehousing cost and salary of inventory management personnel; sales cost mainly refers to marketing cost, including online and offline advertising cost; distribution cost mainly refers to the cost of logistics [3].

2. Literature Review

With the development of the e-commerce industry, the logistics industry has also achieved unprecedented growth. Many logistics enterprises have been established one after another, which makes the competition in the logistics industry increasingly fierce. Based on this, this paper analyzes the problems in the logistics industry and puts forward corresponding countermeasures. If logistics enterprises want to achieve long-term development, they should do a good job in logistics cost control, reduce enterprise costs and improve enterprise profits [4]. Many scholars began to study the management of costs, with lower and more reasonable costs, to obtain more profits. According to the relevant literature, big data technology has been hot in recent years. However, few articles are written by scholars on this aspect, especially on the issue of supply chain cost. What is needed now is research

on the supply chain cost control of e-commerce enterprises in the context of big data [5]. Yan made an in-depth analysis of the problem of enterprise cost control. From the importance analysis, existing problems and effective strategies to analyze the enterprise cost control. It is concluded that if the enterprise wants to do a good job in cost control, it should thoroughly combine the actual situation to make scientific decisions and truly promote the operation and development of the enterprise [6]. Yang analyzed the cost management of the supply chain from the internal supply chain and external supply chain. Based on the background of big data, he narrated the problems and reasons of the supply chain and gave suggestions for optimizing supply chain cost management. Enterprises should establish awareness of the application of big data technology and mine and integrate the data generated by each operation link of enterprises. Actively find the problems existing in the internal supply chain and external supply chain of the enterprise, comprehensively analyze the causes of the problems, and make targeted improvements to the missing links existing in cost control, so that the enterprise can reasonably control the cost in procurement management, marketing management, and logistics management [7].

3. Case Analysis

This paper investigates the effects of the cost of logistics companies on profit using the case study of JD Logistics.

One important component is the cost of storage. With little profit, JD Logistics Mall primarily offers electrical goods. The revenue would drop and the cost of items will rise if the dealers' products are not handled properly. Yet, JD Logistics will continue to purchase goods from merchants, creating a vicious cycle. The need for increased warehouse space is closely related to the need for quick resolution of numerous after-sale returns. Cost accounting and redelivery are also necessary for the returned orders submitted for the second time. Once the items have been returned or replaced, the company's brand will suffer, and the returned items can only be stored in the warehouse. The capacity of the warehouse decreases as more products are returned, using up a lot of public resources and possibly affecting the logistics process. Hence, finding a solution to the issue of excessive sales and return orders is vital.

Transportation costs are also an important part. High cargo loss rate and empty load rate lead to high logistics costs. According to incomplete statistics, Chinese industrial enterprises' average cargo loss rate in logistics operations is slightly higher than 2%. The cost caused by the cargo loss rate is still the main component of logistics costs. The annual loss caused by improper handling and transportation is up to tens of millions of yuan, and the loss caused by improper packaging and storage is also huge. Self-transport vehicles account for 70% of the goods in transport vehicles, and the empty load rate is as high as 45%. One-way transport is the main method, and logistics costs have increased significantly.

The management of costs also plays a significant role. One pays an enormous amount of expenses on their own, such as land rent, salary, and so forth. JD Logistics has required additional funding recently in order to grow. Hence, funding is necessary for the development of a logistical system. If the functioning of the funds proceeds smoothly, there will be an adequate supply of funds, leading to the collapse of the funds and other events. As a result, JD Logistics' capacity to withstand market risks will gradually decline, while the likelihood of a crisis will grow. JD Logistics' express delivery volume is a little less than other companies'. Since its express outlets also depend on e-growth, commerce's an increase in external demand is all but certain. Distribution at JD Logistics needs to be strengthened. The great bulk of the cost is related to warehouse distribution, and the service efficiency is below average for the sector. It is challenging for customers to accomplish effective needs because of its lower position. Any link issues will cause more issues for both customers and businesses, and unrealized third-party methods and end users would virtually raise customer hazards. The capital chain may put strain on JD Logistics' current large-scale development of the express delivery range.

JD Logistics is a comprehensive online retailer in China. Since its establishment, it has been very popular among consumers. It mainly sells digital products, such as mobile phones, computers, cameras, and other products with guaranteed quality, and some furniture and household appliances can be selected from it. JD Logistics held 26.51% of the B2C online retail market share in 2019, according to the 2019 China Online Retail Market Data Monitoring Report. JD Logistics has a definite advantage in logistics distribution in China's e-commerce business because to a whole supply chain that is low cost and high efficient. Almost all of China is covered by the 1,300 warehouses and services provided by JD Logistics [8].

Currently, JD Logistics is China's largest white-label e-commerce company. Almost 50% of independently run e-commerce sales in 2013 were made by JD Logistics. The business of JD Logistics is split into two segments: self-operated business and knock platform. JD Logistics has gone through two periods of development: the offline stage, which lasted from 1998 to 2003, and the online e-commerce stage, which lasted from 2004 to the present.

The company gradually discovered enormous commercial prospects in the web industry during the SARS crisis in 2003. The business entered the Internet market in 2004 and focused on advancing e-commerce. The company developed JD Logistics into the biggest self-operated e-commerce platform using the 3C primary product, which has a high unit pricing. It is expanding at a 200% yearly rate. To give customers the finest and quickest online purchasing experience possible, JD Logistics Mall conducts business online and eliminates intermediary intermediaries. JD Logistics has made significant investments in Beijing, Shanghai, Guangzhou, Wuhan, and seven other cities to establish substantial logistics facilities that correspond to the company's development to progressively obtain an edge in the competitive e-commerce market. JD Logistics is favored by foreign investors due to its exceptional accomplishments and rapid growth. JD Logistics Mall's growth has attracted a lot of investment, and on May 22, 2014, it was listed on NASDAQ in the United States, making it the largest Internet company among Chinese groups listed there at that time in terms of market value. JD Logistics uses two strategies: autonomous logistics in big cities and regions and interactive collaboration with outside logistics firms in outlying, low-density third- and fourth-tier cities.

JD Logistics needs some help with its operation. JD Logistics has a large volume, which requires a large amount of capital to purchase warehousing equipment, logistics vehicles, distribution personnel, and other materials. Meanwhile, operation and maintenance also require a huge amount of capital, which makes its logistics cost relatively high—limited distribution capacity. Although JD Logistics covers the whole country, it still needs more urban coverage and additional services. Especially in non-first-tier cities and remote areas, delivery capacity and speed are limited, making it difficult to provide timely logistics services. Peer competition is intense. The competition among peers in the e-commerce industry is exceptionally fierce—the challenges from Alibaba, Pinduoduo, Meituan, and other competitors. The rapid changes in the industry, as well as the huge impact of market share, make JD Logistics logistics must always maintain innovation and optimization. JD Logistics needs many workers to support the logistics demand, but human resources are currently facing a severe shortage. At the same time, the complexity of the logistics process and the high level of technical requirements also make JD Logistics need more elite talents to improve quality and efficiency.

4. Suggestions

4.1 Increase Operational Efficiency

JD Logistics has established a complete supply chain system and logistics network and cooperated with suppliers to deliver goods directly, reducing the cost of intermediate links and improving efficiency. It has implemented lean management models to reduce operating costs by improving personnel efficiency, reducing activity costs, and optimizing processes. In addition, we strengthen cooperation with brand owners to promote our brands, reduce procurement and supply costs, and improve sales profit margin. By investing more resources in new media such as the Internet, SMS,

and social media, JD Logistics reduces labor and advertising costs through intelligent marketing. Moreover, it has introduced intelligent technologies in logistics and warehousing, such as face recognition and robotics, to improve efficiency and reduce costs.

Logistics companies should establish a classification system. In China, seven logistics centers are located in regional centers, and small logistics centers are set up in each provincial capital. Distribute high-volume items in small distribution centers. This can as far as possible in the country to achieve efficient logistics. To do so would require huge financial support. Moreover, it needs to be in various places to consider consumption. Otherwise may greatly increase the cost of storage. The cost control of the supply chain emphasizes close cooperation with the upper and lower levels, closer contact with downstream users, and preventing customer loss to achieve the effect of cost control [9].

4.2 Reduce workforce cost

The best strategy to cope with rising labor costs is to adopt technological improvements, automate machines, improve production efficiency, and reduce labor costs. For example, JD Logistics can adopt robotics to automate production processes, enhance product quality and reduce labor costs. In addition, JD Logistics can also take diversified labor management measures to improve employees' skills and improve work efficiency to reduce labor costs. Finally, JD Logistics also can adopt a flexible Labour management policy, improve labor efficiency, and reduce the waste of the labor force, thus reducing labor costs.

This requires enterprises to keep up with the development of technology and continuous innovation. Use existing technology to create products that can be used. As labor costs continue rising, enterprises should use more scientific and technological developments to replace repetitive labor. Scientific and technological innovation can reduce labor costs, improve logistics efficiency, and satisfy consumers. Using some innovative technologies to promote the development of the logistics industry, as for the problem of high logistics cost, start from the perspective of the industrial chain, carry out strict management, and pay attention to the training of talents in logistics [10].

4.3 Improve logistics management

To adapt to the current competition situation, the logistics management department must carry out the process reengineering oriented by the market and customers and change the functional management into the process management; Through process reengineering, establish a process that is market-oriented, customer-oriented, takes customer evaluation as the result of service assessment, and reflects operation efficiency and effect, to meet customer needs better. Supporting process reengineering also includes transitioning from the original performance evaluation index based on functional departments to the performance evaluation index system based on business processes. The modified performance evaluation index system should adequately reflect the enterprise's overall operation status and the operational relationship between the node departments of the process. To promote the efficient flow of capital flow, information flow, value flow, and workflow on the whole logistics system and then realize the unimpeded and efficient operation of the whole logistics system. In practice, it is found that many enterprises only stop at a certain functional activity to reduce the cost of logistics but need to pay attention to the integration of logistics activities. Due to the existence of benefits between various logistics activities requires managers to study the overall benefits, take the cost as the core, use the system theory point of view according to the requirements of the lowest total cost, adjust the contradictions between each subsystem, organically connect them, become whole, to minimize the total cost of logistics, to achieve the best benefits of the enterprise. Controlling logistics costs for an organization involves more than just maximizing the effectiveness of its logistics. Yet, it should take into account the economic effectiveness of logistics throughout the entire supply chain process, from the production of the product to the final consumer. Enterprise management should concentrate on controlling the "internal supply chain" moving forward to manage the "full supply chain" from customers to suppliers in order to significantly reduce the logistical costs of businesses. Production companies implement integrated management of the entire process, from the

acquisition of raw materials to the sale of their products, build strong working relationships with suppliers and customers, create a supply chain that is nearly perfect, reduce the "middle level," deliver products directly to the final customers, lower costs, and manage resources more efficiently—all without having to pay for storage and inventory management. Enterprises must rely on the development of contemporary information systems, the internal functional components of the logistics system, and external strategic partners effectively linked to form a logistics rapid response system because the optimization of local logistics efficiency cannot guarantee the cost advantage of enterprises in the competition. Through the network transmission of business order intention, quantity, price, and other information, the entire production process, circulation of businesses or departments to share the benefits brought about by this, full satisfaction of the various needs that may arise, and then alter the business plan and behavior between various businesses, further achieve the overall reduction of logistics costs.

5. Conclusion

Competition among e-commerce companies is becoming increasingly fierce. The key to expanding competitive advantage and realizing profit lies in cost control. Under the background of the era of big data, how to efficiently process the data of each core stage of the supply chain and realize the full utilization of big data by enterprises is the breakthrough point of the current supply chain cost control. This paper uses JD Logistics as an example to analyze how to reduce various supply chain costs. Cost is an important issue in the competition of e-commerce enterprises. With the development of big data and technology, enterprises can strengthen the control of storage costs, realize the diversification of marketing models, optimize personalized services, strengthen cooperation with third parties, and reasonably develop logistics systems through robot distribution and computer assignment of tasks. With the continuous development of science and technology, a complete service chain completed by computers will eventually be formed to maximize efficiency and reduce operation and labor costs.

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