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#### Research Article

# Role of E-Commerce Logistics in Reducing Operational Cost Prof. Prakash Chaturvedi,

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#### **Abstract**

This paper examines the evolution of electronic commerce, the logistics cost composition and characteristics, and the cost and characteristics of our country's content. The factors that influence the logistics cost in our country's electronic commerce development environment. How to utilize scientific methods to control logistics expenses by analyzing their impact variables. Electronic commerce to the advanced experience of foreign nations and the level from which we need to learn, in order to accelerate the growth of our country's electronic commerce logistics business. The logistics in the e-commerce development process played an indispensable part; both inseparable relationships foster mutually beneficial development, paving the path for the future of e-commerce to be more simple, fast, perfect, and healthy.

#### INTRODUCTION

With the arrival of the Internet era, the logistics industry's development has accelerated. New development prospects and space have come to China's logistics business. Electronic commerce of informatization, specifically the network product, drew widespread attention in the twentieth century due to its convenience, speed, and security.

Electronic commerce has had a favorable impact on the economy by changing not just the old business model, but also the merging of industry and the adjustment of the economic structure. With the advancement of internet commerce, an increasing number of traditional businesses are beginning to investigate the industry. It has long been acknowledged that logistics has evolved into a vital aspect in the smooth operation of internet commerce. The benefits of e-commerce can barely be effective development if there is no efficient, fair, and smooth logistics system. However, in the twenty-first century, each company, each sector, and each industry cannot replace economic ideas with a minimum of input to gain the biggest return. So, ensuring electronic commerce logistics efficiency, expediting premise, and lowering operational costs has become a critical issue. With the advent of enterprise e-commerce, logistics distribution is becoming more and more of a worry. E-quick commerce's growth and the logistics distribution system's sluggishness have become unavoidable issues. The success of e-commerce depends on the efficiency of the logistics distribution system; to break through logistics bottlenecks in the development of ecommerce, the top priority is to establish a social, industrial, and modern logistics distribution system with high efficiency and rationalization as soon as possible. E-commerce logistics cost uses modern information technology for the planning, organization, command, coordination, control, and decision-making of logistics cost based on modern communication, particularly the Internet. Logistics target cost control entails identifying discrepancies with the target cost early in the cost formation process, taking corrective measures based on guidance, restriction, and supervision, and implementing value engineering and cost analysis methods to improve the logistics process and distribution logistics service. The meaning of logistics cost management is to reduce total logistics cost and improve economic efficiency of a company by effectively grasping logistics cost, using benefits antinomy relationships between logistics factors, organizing scientific and reasonable logistics activities, strengthening the effective control of costs in the process of logistics activities, reducing the consumption of materialized labor and living labor in logistics activities, and strengthening the effective control of costs in the process of logistics activities.

## E-COMMERCE LOGISTICS COSTS

#### A. What does logistics cost mean?

The monetary expression of all types of work and manifested labor consumed in the process of spatial displacement is referred to as logistics cost (including static state). It is the total amount of labor, money resources, and material resources used in the various activities of the product physical movement process.

## B. The cost structure of e-business logistics-

As indicated in the diagram below, e-commerce logistics expenses may be separated into two categories: direct logistics costs and indirect logistics costs.

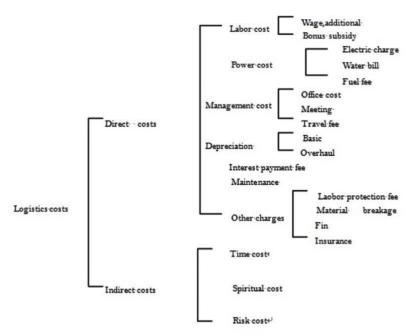


Figure 1. Classification chart of logistics cost

### III. THE ANALYSIS OF COSTS THAT AFFECT LOGISTICS

## A. Factors that influence logistics costs -

The logistics cost is influenced by a number of elements, the most important of which are the competitive factor, product factor, and space factor.

#### 1) Competition factor

The market is unpredictably volatile and rife with aggressive rivalry. In such a complex market context, businesses often respond to competition by lowering logistics costs.

- 2) Feature of the product
- a) The various types of products

According to statistics, the percentage of logistical costs in sales of several product categories (chemical products, wood, including furniture, textile, petrochemical and plastic products, rubber products, metal products, food and consumer goods) b) Product density

Because the density of the products is defined by their weight and volume, it has an impact on logistics costs. And there's the matter of the product's transportation costs.

#### b) The worth of the goods

Because the value of the products varies, so does the cost of logistics assistance. Despite the fact that transportation and warehousing costs are normally estimated based on weight and volume, the logistics costs of high-value products are significantly greater than those of basic products.

Stock control—if there is too much inventory, additional storage space is required, and too much inventory can result in overstocked funds and waste. As a result, inventory must be managed in accordance with changes in production and circulation demand.

B. The cost of e-commerce logistics can be calculated using the following methodology.

For effective logistics cost management, the approach to logistics cost management analysis must be well understood, and the following methodologies are often employed.

## 1) A comparative analysis

The comparison from the side: Calculate all of the enterprise logistics costs, including supply logistics, production logistics, distribution logistics, return logistics, and waste material logistics (which may include circulation processing and distribution), and then use horizontal comparison to find the part with the highest logistics cost.

The vertical comparison: compare all prior logistics expenses to this year's logistics costs, examine why and how much the logistics costs have climbed, and fix quickly if the increased logistics costs are ineffective.

Plan and real comparison: compare the year's actual logistical expenses to the original budget, examine the reason, and determine whether or not it was overspent. This is capable of recognizing the issues and weak connections in company logistics management.

#### 2) Exclusion

In the field of logistics cost management, there is a technique known as Activity-Based Management. One approach is to divide logistics-related activities into two types: value-added activities, such as in-out warehouse, packing, loading, and unloading, which are directly related to the owner, and non-value-added activities, such as meetings, change processes, and mechanical equipment maintenance, which is not directly related to the owner.

#### IV. AN APPROACH TO REDUCING THE COST OF LOGISTICS FOR E-COMMERCE

A. Creating the framework of a modern company logistics organization.

To address the issues of disparate internal logistics functions and challenging coordination, we must first restructure company organizational structures and construct contemporary enterprise logistics organization structures. There are numerous logistics organization structures for businesses to choose from at the moment:

First, there's the classic organizational structure.

Basically, set branch according to function based on traditional functions of specialization; the logistics activity is truly dispersed across a variety of relevant professional activities, which are controlled by upstream authorities.

Second, the organizational structure of a set of functions. Integrate the logistics functions inside the many professional departments, based on tradition; highlight the logistics activity in the organization, to make planning, control, and coordination of all departments easier.

The organization structure's independent function is the third. Separate the basic functions of material distribution and material management and create a professional sector that is equal to the finance, manufacturing, and marketing departments.

The integration of organizational structure is the fourth step.

The following are the main characteristics of integration: Each section is joined together to form a single linear operation unit. Because of the clear definition of duty field operated as an operation unit, manufacturing support, and purchasing and material distribution support are regarded equally.

#### B. Construct a high-performing logistics system.

According to the logistics cost trade-off hypothesis, the key to lowering logistics costs is to evaluate logistics as a whole rather than focusing on specific parts. To put it another way, design and manage all parts of logistics as a logistical system, giving full play to its system functions and efficiency with the greatest structure and cooperation, and achieving total logistics rationalization. All logistics-related activities, such as commodity supplemental, warehousing, storage, inventory management, logistics operations, shipping, distribution, and information management, are included in the logistics system. Clearly, enhancing the quality of logistics, increasing the speed of logistics, lowering logistics costs, and reducing unnecessary waste and loss, as well as establishing an enterprise logistics system and operating efficiently, are all important in order to improve the quality of logistics.

Obviously, the logistics system's high-efficiency operation requires the assistance of an information system. Only full information and rapid sharing allow enterprise logistics to be genuinely efficient and function at high speeds. After the logistics system is established, it must be re-evaluated and improved on a regular basis in order to maintain the system's efficiency, which includes plan filing, implementation, and performance checks. Begin by considering "if the system can perform very well" and "whether activity efficiency and accuracy may be increased further," then examine and improve using a number of evaluation criteria. Through these revaluations, better systems can be established. Furthermore, changes in market patterns result in changes in client demand, as well as changes in transportation.

#### C. Business logistics management that is cutting-edge

The goal of logistics management innovation is to use modern logistics concepts and advanced logistics technology to effectively control, supervise, and improve enterprise logistics activities based on the current situation, with the goal of increasing logistics efficiency and lowering logistics costs. Adopt a new approach of logistics management. The goal of introducing activity management is to regard logistics as a collection of activities, with the goal of eliminating all needless processes and lowering operational costs. All parts of the enterprise logistics management process include activity management. The design of an activity system, as well as timely activity and activity quality control, are crucial. The activities of diverse logistics operating system designs, with varying targeted activities and consumptions, and logistics expenses are caused by the activities of different logistics operating system designs.

In general, 60 percent to 80 percent of logistics expenses are identified during the system design phase, with minimal room for cost reduction once the system is operational. Logistics costs are incurred during the process, but they have their origins in the logistics system design. Early considerations affecting logistics system design might acquire a competitive advantage in logistics cost management. Outsourcing logistics for businesses (using third party logistics). Enterprises, particularly small and medium-sized businesses, do not need to establish a logistics subsidiary organization; however, this does not rule out the possibility of outsourcing logistics to a third-party logistics firm (social professional logistics companies).

As the social division of labor gets more defined, a great number of professional logistics companies emerge. Because logistics is the core business of these professional logistics organizations, they have professional logistics technology and management processes and focus solely on logistics management. External professional logistics organizations can handle all or part of the enterprise logistics management function, which might range from standard transportation and warehousing services to complete logistics operations. On the one hand, entrusted logistics outsourcing can help a company get rid of its complex logistics business, focus on developing its core business, and improve strategic consistency; on the other hand, entrusting a specialized logistics company can take full advantage of its professional advantages.

#### V. CONCLUSION

Under the e-commerce environment, the rapid rise of the modern logistics industry is greatly promoted, and logistics can also improve the efficiency and effectiveness of electronic commerce, coordinate the goal of e-commerce, expand the market area of e-commerce, realize the integration of supply chain based on e-commerce, integrate the trade flow, information flow, and cash flow of e-commerce, and thus prompts e-commerce to be the m-commerce. The increasing development of electronic commerce places greater and greater demands on traditional logistics businesses in our country, necessitating a shift from traditional transportation and storage businesses to modern logistics businesses.

So, while focusing on electronic commerce, construct a fundamental logistics platform system and e-commerce distribution service system with more vigor, gradually develop our country's logistics platform, and establish a modern logistics sector. China has recently transitioned from a seller's market to a buyer's market; through learning and communication, we can move beyond the primary stage of logistics development in developed countries and into the fast lane of logistics development by leveraging information and network technology that is nearly synchronous with the rest of the world, as well as drawing lessons from advanced technology in foreign logistics development.

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