

Navigating Modern Logistics: Innovations and Challenges in the Era of New Retail

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Abstract: This study explores modern logistics innovations and challenges in the new retail era. With the rapid development of science and technology, the traditional logistics model can no longer meet the market demand. Consumers' demands for speed of product delivery, service quality and personalization are constantly rising, and traditional logistics processes and management methods can no longer adapt to this fast-changing market environment. As a result, companies need to innovate and reform to improve logistics efficiency, reduce operating costs, and respond more flexibly to the challenges of globalized competition. Through literature review and empirical analysis, this paper provides an in-depth analysis of the problems faced by the modern logistics industry, including the inefficiency of the traditional model, the promotion of digital intelligence, and the need to improve the level of logistics in the new era. On this basis, targeted recommendations include strengthening standardization, promoting digital intelligence improvement and optimizing the supply network. This study is expected to provide useful reference and guidance for developing the modern logistics industry.

Keywords: Logistics, Supply Chain, New Retail, Innovation, Challenges

1. Introduction

In an era of rapid technological advancement, the traditional logistics industry has struggled to meet the market's demands. Enterprises have put forward new expectations and requirements for logistics and supply chains, hoping to improve efficiency, reduce costs, and better adapt to the intensity of globalized competition through innovation and reform. The wide application of Internet technology has made the logistics industry face unprecedented opportunities and challenges. From e-commerce to the Internet of Things (IoT), from big data to artificial intelligence, these emerging technologies are revolutionizing the traditional logistics model and business processes. Enterprises need to improve their supply chain management models through innovation and redesign and optimize their logistics systems to meet consumer demand more efficiently and flexibly. At the same time, enterprises are under pressure to accelerate the upgrading of logistics services as consumers continue to improve their service quality and delivery speed [1]. Therefore, under the fast-changing market environment, this study analyses the current situation and problems in the logistics industry, aiming to provide more feasible solutions for enterprises to achieve sustainable development and progress in the logistics industry.

2. Literature review

E-commerce is a business model that has emerged in recent years. With the popularity of smartphones and the Internet, customers are becoming increasingly used to online shopping and mobile payments [2]. After nearly 20 years of development of the Internet economy, e-commerce has become more and more mature, and it occupies a dominant position in the market in the new retail era [3]. According to the White Paper on China's Digital Economy, the average annual growth rate of China's economy in the past ten years is as high as 15.9% [4]. In the new retail era, consumers' demand for fast delivery is increasing, which requires the supply chain to have an efficient and timely distribution network and services. The variability of e-commerce also makes inventory management more complex. Therefore, the supply chain needs to predict demand more accurately and optimize inventory to reduce costs [5].

3. Methodology

With the development of big data and artificial intelligence, the online and offline integrated sales model, called retail, was born. To better cope with more and more customers and orders, improving the effectiveness and efficiency of supply chain management has become a key factor in competition. The logistics system used at this stage has shown the characteristics of systematic, standardization and relatively stable. Most logistics businesses are contracted to several fixed third-party logistics companies. Due to low competitiveness and relative saturation of the market, the logistics business capacity of these companies has stagnated for a long time. Policies are also leaning towards helping the development of the logistics industry. According to the 14th-Five Year Plan, it is necessary to promote the innovation of modern logistics technology, promote the coordinated development of the industrial chain and supply chain, realize green logistics that save energy and reduce consumption, and promote China's logistics to become international [6]. The overall development trend of the logistics industry is stable and thriving with the help of the times, but there are still many shortcomings. The current logistics system is a little outdated. It is based on the traditional logistics model and is better in theory than practice, which makes the modern logistics system not as strong as it should be.

Because the basic composition of logistics includes transport, stockpile, load and unload, carry, pack, circulation processing and logistic information processing, any part of the business trip will cause a chain reaction and have a deeper impact on the other parts. The problem in the logistics system needs to be solved urgently. The problems in the modern logistics industry are as follows.

3.1. Inadequate Efficiency of the Traditional Logistics Model

The single service mode and low-level service. Because several third-party logistics companies cover China's e-commerce logistics business, these companies are satisfied with the status quo and lack the motivation to improve. This makes the whole industry lack vitality and choose to use existing methods and technologies to deal with all the problems, even if these ways no longer apply to the trends of the times. The overall development level of logistics in China is not high enough. Most logistics enterprises only have a single service model. The business scale is small, the management level is low, and the service scope is narrow. It isn't easy to provide customers with comprehensive logistics services [7].

Delivery efficiency and customer satisfaction are low. With the rapid development of e-commerce, the demand for logistics distribution has shown a rapid growth trend, and higher requirements have been put forward for logistics network construction and infrastructure construction [8]. The current transportation cycle is in "days", but in the context of new retail, transportation services in "hours" or even "minutes" can meet the needs of customers. The existing logistics infrastructure is relatively

backward, making logistics capacity and efficiency difficult to meet today's broader needs. Due to the limited comprehensive strength of China's logistics industry, it is difficult to provide personalized service to customers, which has caused customer dissatisfaction.

They seriously damaged goods and poor after-sales service. Due to the lack of strict market supervision, loss and damage often occur, but logistics companies and merchants shirk their responsibilities to each other, which makes customers feel very helpless. The vague insurance coverage makes this phenomenon more prominent. Customers have nowhere to claim, and they still have to pay postage for the damaged goods, which makes the customer's shopping experience very bad and hinders the development of the new retail industry. For most e-commerce companies, logistics is only an accessory to their products, but it does affect the customers' shopping experience and product evaluation.

3.2. Advancement of Digital Intelligence in Supply Chain Evolution

Big data and artificial intelligence can help analyze and improve. The new retail supply chain uses big data, artificial intelligence and other technologies to detect and analyze data, such as inventory, sales and consumer demand, so that the enterprises can manage inventory more accurately, adjust production and procurement strategies promptly, and provide customers with personalized product recommendations and services. Under the background of the "internet+" era, more and more consumers choose to shop online. Therefore, the new retail supply chain has entered a stage of rapid development. Throughout the world, China's Internet economic development is also in a leading position [9]. The development of science and technology will promote optimizing the supply chain and upgrading the overall logistics industry.

Information is more useful today. Knowing more information before others means more opportunities and wealth in the information age. A timely grasp of market dynamics and the correct prediction of the direction of market changes are decisive factors for enterprises to make breakthroughs in modern times. Because e-commerce is a virtual economy, the opening of physical stores and the cost of supplies such as labor are low, and the time and space constraints on sales are relatively small, resulting in a sharp increase in the number of e-commerce and fierce competition[10]. Mastering advanced information means mastering the industry's development opportunities.

Changes in consumption patterns and ideas. The target group of the logistics industry is consumers, not merchants. Meeting the needs of customers is the ultimate goal of logistics services. The basic logistics service capacity is mainly inspected for delivery accuracy, transportation timeliness, intact delivery rate and customer satisfaction[11]. To meet the market demand, develop the logistics services consumers want more, obtain a more stable source of customers and expand the market. For example, the Freshippo, which takes the flow of people in various regions as the entry point, lays out the supply chain according to the consumption habits of people in different regions and purchases directly from the source of the product, which reduces a large number of intermediate logistics links, saves logistics costs, and enable consumers to get the best consumption experience [12].

3.3. Rising Demands for Enhanced Logistics Capabilities in the New Era

Larger logistics demand better management and service systems. With the continuous development of the e-commerce industry, supply chain management is characterized by increased complexity, risk and uncertainty [13]. Efficient management of the supply chain has become particularly important at this moment. The current logistics and supply chain system needs to be updated in time to meet higher demand. The volume of logistics is increasing, the requirements of customers are getting higher and higher, the supply chain creates much more value than traditional trade, and the logistics industry urgently needs improvement.

Take consumer demand as the starting point. Consumers are the ultimate source of income for enterprises. Catering to customer needs rather than merchants can maximize customer satisfaction. Everything the enterprise does is to meet the needs of customers. The online-to-offline O2O model adopted by Freshippo has increased the online transaction rate and user stickiness to a certain extent. Adopt a perfect self-operated logistics model so that Freshippo can easily manage and control logistics links, directly collect consumer reactions, reduce the damage of third-party logistics to the reputation of the enterprise itself, and enable Freshippo to optimize the sales process and control logistics-related costs [14].

Adjust production and supply in time. The less inventory, the lower the cost of the enterprise. Supply chain management aims to maximize supply chain performance by reducing the conflict between cost minimization, customer service, optimization, total cycle time minimization and logistics quality optimization. Zero inventory is the ultimate goal of logistics. This goal is more important in the new retail industry. The demand for new retail goods is changing rapidly, making it difficult for outdated goods to get attention again. Reduce inventory as much as possible so that production sales are balanced to the greatest extent.

4. Suggestions

Strengthen the construction of standardization and improve the customer-centered concept. Use big data analysis technology, combine the traffic situation and distribution site, optimize the distribution path, and reduce the distribution time. In addition, through the analysis of cargo liquidity, the distribution area can be reasonably divided to improve distribution efficiency and coverage. At the same time, an intelligent scheduling system is established to optimize the scheduling scheme according to order information, resource distribution, etc. and automatically adjust to the optimal route and schedule [15].

Keep pace with the times and carry out digital intelligence improvement. The upgrading speed of science and technology and time is too fast. All industries have entered the stage of rapid development by taking advantage of the continuous optimization of the environment. Use big data to analyze user consumption habits, product sales and trends, adjust inventory and marketing strategies in time, find business problems, optimize the quality of products and services, improve customer satisfaction and loyalty, and maximize business value [16].

Improve the supply network and have targeted tactics. Modern logistics has shown a trend of networking and grid. Strengthen the connection between various departments, realize omni-channel information-sharing cooperation, and promote the development of the new retail O2O model. Comprehensive use of big data, intelligent Internet of Things, automation and other logistics systems to optimize and match people, goods and venues, from the supply chain and warehousing to the logistics system, to improve the quality and efficiency of logistics [17].

5. Conclusion

This study obtains the following main findings from the literature and the current state of the logistics industry. Firstly, logistics and supply chains have been stuck in the traditional mode for a long time and need more innovation and change. Secondly, business people must adjust their strategies to adapt to market changes to achieve higher economic returns. Finally, with the rapid development of high technology, the logistics industry faces great challenges and opportunities and needs to respond positively and make necessary changes.

This study concludes that, in the context of new retail, the relationship between people, goods and places is getting closer and closer. The construction of logistics networks and the optimization of supply chain models are particularly important in the era of e-commerce. Choosing advanced supply

chain strategies, updating business concepts promptly, taking customers as the core, strengthening service standardization construction, and using high technology to create a smart logistics platform are the keys to developing China's modern logistics industry.

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