

Research on Optimization of Intra-city Distribution Business Process of D Express Company under New Retail

Fenfang Ye*

Guangdong University of Science & Technology, Dongguan, China

*33007605@qq.com

Abstract

Since the rapid rise of the new retail model, the status of intra-city distribution has increased dramatically, but the current development of intra-city distribution has not kept up with the pace of new retail development. Therefore, this article explores the current situation of D Express Company's intra-city distribution business, optimizes the business process and analyzes the effect. This research can bring a certain reference to the business process transformation of intra-city distribution enterprises, and at the same time promote the development of new retail.

Keywords

new retail, intra-city delivery, big data.

1. Introduction

In 2016, Jack Ma first put forward the new retail concept of "online + offline + logistics" deep integration at the Yunqi Conference to satisfy customers with the lowest cost and the fastest speed. Its arrival has driven a major step change in China's business consumption model, bringing major opportunities and challenges to the corresponding intra-city distribution. At present, my country's distribution business has many problems such as waste of resources, low timeliness of distribution, and high cost. These are contrary to the concept and goal of "new retail". Therefore, optimizing the business process of intra-city distribution has become a top priority.

This paper takes D Express Company as an example to optimize the business process optimization problem of intra-city distribution under new retail. After market research, analyze the problems and their reasons in the distribution business of D express company, optimize its business process and analyze the effects on this basis. It can not only improve the work efficiency of intra-city distribution enterprises, but also help promote the development of the "new retail" model.

2. Analysis of the Current Situation of D Express Company's Distribution Business

D Express company takes bulk express as its core business, involving diversified businesses such as express delivery, vehicle delivery, storage and supply chain. Its cooperative customers mainly involve household appliances, household appliances, automobile and other industries. It is creating a new strategic growth point for express business, launching a new overall retail solution, and improving the rapid response ability and service competitiveness of new retail enterprises by building an efficient door-to-door bulk logistics and distribution system, so as to meet the integrated needs of the purchase, distribution and installation of large goods. Currently, the company has the following problems in its distribution business:

1.The business order volume forecast error is large. At present, the average error of the company's forecast is about 30%, leading to surplus in some areas and insufficient in some areas when it allocates various resources. The main reason is estimated based on historical business data.

2.Goods delivery timeliness is poor. Distribution usually arrives the next day, mainly including the allocation of human resources based on the business order volume forecast of enterprises, restrictions on urban road traffic, and the use of previous business processes.

3.High distribution costs. In order to ensure the delivery timeliness, the company stores a large amount of inventory in large warehouses to prevent shortages; due to its large business forecast errors, various resource allocations have been invested too much in certain areas.

4.The turnover rate is high. The company's annual turnover rate is as high as 28%, and front-line personnel account for 83%. The main reasons are as follows: low-tech content, high repetitiveness, and high intensity; low benefits for front-line personnel; lack of humanistic care; few opportunities for company promotion; working environment worse.

3. D Express Company's Intra-city Distribution Business Process Optimization

D express company's intra-city distribution business process optimization.D express company cooperation customers mainly relates to electrical appliances, furniture, automobile and other industries, this determines the best distribution model to make an appointment delivery, express company D the pattern of new retail operation mode is: client order booking, information platform to confirm the order, at the same time at the nearest store and D express company, sending the notice of appointment to the nearest store picking, due to the sending the notice of freight information platform, information platform to send single, express company after receiving order at the nearest store pickup, the products delivered to the customer, as shown in the figure 1.

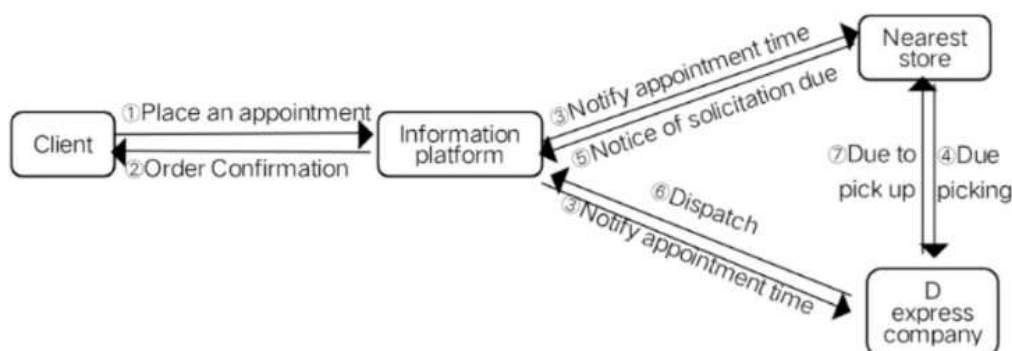


Figure 1. New retail operation mode under appointment delivery

As can be seen in Figure 1, D express company involves two links: sourcing and delivery. Among them, the service effect of soliciting is mainly affected by factors such as work flow, weather and road conditions, while delivery is affected by factors such as weather, road conditions and delivery routes. Among the influencing factors, weather and road conditions are objective factors and cannot be optimized, but the work process and delivery routes are controllable and can be optimized. D express company has a history of more than ten years, and its operation process and distribution route are relatively optimized. Therefore, it can achieve the goal of new retail by integrating corresponding resources to optimize the distribution process.

1. Configure front warehouse

Configuring the front warehouse is an important part of the implementation of the new retail model. A lead position is simply a physical store with both retail and storage functions, which needs to be close to the customer consumption scene. New retail enterprises can overcome the difficulties of traditional warehouse deviation and "the last mile" difficulty in fast delivery only by allocating the lead position. Therefore, D express company operates the new retail mode together with the cooperative enterprise. The cooperative enterprise needs to install the lead warehouse in the place near the consumption place or convert the original physical store into the lead warehouse, set up the SKU safety inventory, and realize the integrated store-warehouse mode. Besides sales, the lead warehouse clerk also takes into account the warehousing management.

2. Integrate and optimize information systems

Information sharing among cooperative enterprises is conducive to improving the management efficiency and economic efficiency of enterprises, enhancing the competitiveness of enterprises, and more conducive to promoting business innovation and reform among enterprises. Therefore, D express company and cooperative enterprises need to integrate and optimize the information system to provide strong technical support for the operation of the new retail model. In general, information systems include front office business and back office support. As can be seen from Figure 1, the front desk's business mainly includes: accepting customers' orders for appointment, confirming orders, notifying the nearest physical store and D express company to make an appointment, receiving the notice of soliciting goods from the nearest physical store, and sending orders to D express company. Backstage support mainly includes financial management, human resource management, information construction management and design management. Under the premise of information sharing, the system integrates customer information, physical store inventory information, online product information and sales information, and D express company information through Internet of things technology.

3. Using advanced technology

At present, big data, cloud computing, blockchain and other technologies have become "synonyms" for advanced technologies. Their application not only enables customers to obtain more convenient, more efficient and more personalized services, but also enables city-matching enterprises to make more accurate prediction, lower cost and higher efficiency. Therefore, D Express Company uses advanced technology to do the following analysis: First, analyze customers' purchasing habits, requirements and hobbies, accurately match customers' demands, predict the direction and quantity of customers' orders every day, reduce prediction errors, and further allocate various resources, especially human resources; second, apply big data technology to analyze the densely populated areas of the city, select locations to set up front warehouses, improve the layout of offline front warehouses, and optimize distribution routes; third, use RFID for distribution management.

4. Optimize staff incentive mechanism and training system

People are the continuous power and soul of an enterprise to keep its vitality forever. An excellent enterprise must know how to select, train, appoint and retain excellent talents. Therefore, D Express Company further optimized the employee incentive mechanism and training system in response to the high turnover of personnel.

(1) Optimization of personnel incentive mechanism

Appropriate incentive mechanism can improve employees' enthusiasm for work and their sense of identity with the company. Therefore, D Express Company needs to optimize the incentive mechanism for employees. First, provide employees with reasonable career positioning and salary remuneration, in the past, D Express Company used working hours to

calculate employee compensation, but the actual workload and scope of the employees far exceeded the job requirements. This kind of mechanism is often not conducive to mobilizing employees' enthusiasm for work. Employees accept work passively instead of actively completing work. To change the attitude of employees, it is necessary to consider from the perspective of "employees' interests" and formulate new job content and salary structure. For example, delivery staff not only get paid for delivery, but can also open up customers to get bonuses, so that the income of delivery staff will increase, and at the same time, their work content will also change. Secondly, to establish a "people-oriented" corporate culture, companies can hold birthday parties for their employees, just as companies do a monthly exchange meeting. Finally, strive to provide employees with more opportunities for promotion channels, and each promotion position needs to have clear job responsibilities.

(2) Optimization of training system

First of all, the training time should be staggered, and everyone should be able to receive a systematic and complete training every year or even every quarter, following the strategic, long-term and sustainable three principles, which can also create a "people-oriented" business philosophy and improve the corporate image; secondly, the training should be result-oriented, focusing on the final training effect, rather than a formalization and transition. Therefore, employee training should be closely aligned with organizational goals, and actual work conditions can be considered as training results; Third, the main body of training must be forward-looking and far-sighted, teach as needed, and apply the principle of consistent learning. Finally, the content of employee training can include but is not limited to the following aspects: knowledge training, skill training, thinking training, concept training, and psychological training.

4. Evaluation

1. Management benefit analysis

(1) Simplify the distribution business process. The original business process of D express company includes goods storage, in storage management, picking, outgoing, and distribution. After business reorganization, the business process is simplified to two links: picking and delivery, and its business process reduces warehousing management business.

(2) Improve the decision-making ability of enterprises. On the one hand, D express company uses big data technology to predict business order volume, and the error is reduced to some extent, which will improve the accuracy of enterprise resource allocation decision. On the other hand, companies also use big data technology to select locations and plan distribution routes, which will help improve the optimization of their decisions in these two areas.

(3) Improve work efficiency. The integration of the information system makes the entire work flow intelligent, convenient and simple, and its overall work efficiency has also been improved.

(4) Reduce the proportion of personnel turnover. The optimization of the incentive mechanism and training system of D Express Company has improved the enthusiasm of front-line employees and enhanced their sense of belonging, reducing the turnover rate of employees.

2. Economic efficiency analysis

(1) Reduce operating costs. Under the new retail model, it simplifies the distribution business process of D express company, saves manpower and material resources to a certain extent, and greatly reduces operating costs.

(2) Improve customer experience. The delivery time has been shortened, and the timeliness can be perfectly controlled. Therefore, in the delivery link, customer satisfaction can be improved, thereby enhancing customer experience.

5. Conclusion

This paper first briefly analyzes the problems existing in the distribution business of D Express company and their causes. Secondly, according to its current situation, it proposes the content of optimization of the distribution business process. Finally, the feasibility of business process reengineering is confirmed through the effect analysis from the management and economic aspects. This paper can provide some reference for the business process reengineering of urban distribution enterprises and promote the further development of the new retail model.

References

- [1] Wen Zhengjian. The meaning, model and development path of "new retail"[J]. China New Telecommunications, 2019(8):205.
- [2] Chen Zhonglong. Research on common delivery route optimization of traditional e-commerce and takeaway O2O[D]. Dalian Maritime University, 2017.
- [3] Fu Pingde. The construction of a smart logistics information platform based on big data technology[J]. Logistics Technology, 2018(2):123-125.
- [4] Xia Yujiao, Jiang Xuemei. Based on the research of logistics development in the era of "new retail"[J]. Electronic Commerce, 2020(9):1-2.
- [5] Zhao Rao. Research on the Development Strategy of Urban Logistics Distribution under the New Retail Environment [J]. Business Economics, 2019 (6): 91-93.