

Malaysian E Commerce Journal (MECJ)

DOI: http://doi.org/10.26480/mecj.01.2019.34.37



ISSN: 2521-0505 (online) CODEN : MECJBU

REVIEW ARTICLE

RESEARCH ON LOGISTICS DISTRIBUTION OF RT-MART

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ARTICLE DETAILS

ABSTRACT

Article History:

Received 10 August 2019 Accepted 18 September 2019 Available online 14 October 2019 With the rapid development of chain retail trade in China, logistics distribution has become a key link in the process of chain enterprises core competitiveness. But supermarket chain in China starts late, the logistics distribution system is still in its infancy, most of the logistics distribution center cannot achieve process automation and mechanization. The current distribution system behind the supermarket chain has become a bottleneck in the development of. So, improve the supermarket chain logistics distribution mode, improve the efficiency of distribution, has become the key problems needed to resolve at the present stage our country supermarket chain. This article first introduces the chain business enterprise and the related concepts of logistics distribution, on the basis of analyzing the rt-mart supermarket chain logistics development present situation, pointed out that the current rt-mart supermarket chain in the logistics distribution link the existing main problems are: the low efficiency of logistics distribution, distribution mode is not reasonable, logistics has not formed the scale and distribution technology facility backwardness, backward logistics information system. According to the above problems, this paper gives the corresponding measures and solution.

KEYWORDS

Rt-mart, logistics, distribution.

1. RESEARCH BACKGROUND

With the rapid development of supermarket chains, the demand for logistics increases accordingly. Logistics distribution as consumers at the end of the logistics, it is a bridge to link between producers and consumers and the foundation of chain operation and the important guarantee. At present, the distribution system becomes the competition focus of supermarket chain. However, we should be aware that the development of China's logistics distribution system and the development of supermarket chains are not in sync. China's supermarket chain logistics distribution mode is still in its infancy, compared distribution mode of foreign large supermarket also backward, many chain supermarkets are not grasp the true connotation of chain operation, thought in just created a new marketing channel flow form, they ignore another important part of commodity circulation, logistics distribution, high cost of goods, prices of the enterprise management, enterprise benefit not beautiful mostly because of the lack of material distribution function [1].

2. THE STATUS OF LOGISTICS DISTRIBUTION MODE ADOPTED BY THE RT-MART

2.1 Logistics distribution of fresh goods

The characteristics of fresh food limit the selection of goods and suppliers in supermarkets. Generally, food perishable and shelf life is short, so food storage, transportation and distribution must be carried out under certain temperature conditions. However, it is difficult to distribute the food logistics with temperature requirements, which should be suitable for cold chain logistics such as low temperature transportation equipment or fresh facilities. Fresh food logistics distribution is also in accordance with the principle of multiple frequency, small batch delivery, sorting to fast, distribution to timely, but because of fresh food shelf life is short, slightly deviation may affect food quality, make consumers suffer. In the distribution process of many commodities of the supermarket chain, the cost of fresh food logistics distribution is very high, and the optimization of each link is impossible to realize the high efficiency. Therefore, we

should outsource the logistics of raw and raw materials, cooperate with third party logistics, and gradually improve the logistics distribution of fresh food.

2.2 Household appliances distribution

There are two kinds of appliance distribution mode in the Rt-mart. On is store distribution, both in accordance with the order of each branch by self-built distribution center is equipped with the goods, and then through their own logistics system will be required for goods sent to the store, this form of distribution mode is mainly used in small appliances. Second, delivery for customers, for customers at Rt-mart stores to buy the home appliance goods, finished in the customer checkout and need of distribution, store the goods type, specification, type and other information through the distribution system to the distribution center, distribution center and then integrate all kinds of orders within a specified area demand, classified summary, reasonable distribution scope, and then make unified nuclear inspection, picking, outbound, the final delivery to customers according to customer requirements [2].

2.3 Commodity distribution of commodities

For the distribution of most daily necessities, the supermarket chain has adopted the distribution mode of self-built logistics distribution. Commodities variety, the form is cumbersome, but transportation and storage is not easy, using self-built distribution center is reasonable. This distribution mode can ensure that the distribution scale of the enterprise, can reduce the distribution cost, improve the management benefit.

3. PROBLEMS EXISTING IN THE LOGISTICS DISTRIBUTION SYSTEM OF THE RT-MART

3.1 Low efficiency of logistics distribution

The supermarket chain is developing rapidly and the number of stores is growing fast. It is also a retail chain property, so the order frequency of each store is relatively high, the distribution volume fluctuates greatly, the

requirement of time is relatively strict. The sales volume is influenced by human factors and other random factors, which makes the distribution of stores fluctuate greatly. Such as some small stores, warehouse storage, available storage conditions is limited, so must rely on the distribution of high frequency distribution center to meet the demand, but also high to the requirement of delivery time and delivery quantity. Moreover, the logistics distribution system of the supermarket chain is lagging behind, and the technical level of the whole distribution system is not high, resulting in high logistics distribution cost, difficulty in operation and low delivery efficiency [3].

Besides, there are many kinds of commodities run by the supermarket chain, which involve furniture home appliances, household goods, fresh, food, daily necessities, imported goods and so on. Because the items are sold more retail is wide, so is also high to the requirement of logistics distribution, such as for a lot of fresh food in the process of storage and transportation need specific health conditions and suitable temperature. Rt-mart supermarket chain using self-built distribution center distribution and supplier delivery mode, due to the low degree of specialization of self-built logistics distribution center, for a wide variety of goods distribution management is poor, causing low distribution efficiency. Also, because the supplier's delivery capacity and distribution scope are not guaranteed, the logistics delivery service provided by the supplier is not ideal, which cannot meet the requirements of the supermarket.

3.2 Unreasonable distribution mode

The supermarket chain is mainly self-owned and seldom adopts the social distribution mode. And there are many logistics distribution centers that are converted from traditional warehouses, with low levels of mechanization and automation. There are also many self-built distribution center distribution is very unreasonable; distribution scope is unreasonable. For example, the distribution center is very close to the supplier distribution center, which leads to the repetition of the distribution area, which wastes the distribution resources greatly. Some distribution center cannot meet the needs of the close of the customer's purchase, such as: I am now living in Anshan city, Liaoning province, today in Rt-mart online mall to buy a box of cherry, want to know when can the arrival of the goods, so ask customer service is the latest Anshan distribution center or TieDong Rt-mart stores and distribution. But the result was unexpected, and the answer was that it took two or three days to get to the distribution center in Liaoning province, and the higher rate of poor rating was also supported. The reason is the unreasonable distribution model. Rt-mart supermarket chain in the process of logistics distribution mode choice, excessive emphasis on self-built distribution center, the socialization of logistics distribution mode choice is small, and ignored the self-built logistics distribution center of the improved and perfected. Resulting in low overall distribution efficiency of supermarkets.

3.3 No scale of logistics distribution

The self-built logistic distribution center of the supermarket chain has a small role and small distribution. Many capital distribution center, the construction scale is small, imperfect infrastructure, vehicles, loading and unloading handling tools and other equipment update is slow, most of the distribution center of logistics each link also need manual operation, operational efficiency and distribution efficiency is very low, to complete the work is limited, can undertake distribution range is small, cannot reach the supermarket distribution requirements, not form scale. Currently eighty percent of Rt-mart supermarket chain distribution center for goods stores management still have not reached 100% of the distribution, the average distribution efficiency is only $65\% \sim 75\%$, and the level of distribution efficiency is limited to the big city or a particular region. If the market is larger, the distribution efficiency will be lower. In addition, the communication and communication between the various logistics centers of the supermarket chain are not smooth, and the ability of logistics information system sharing and pooling is low, resulting in the difficulty in forming distribution center delivery scale [4].

3.4 Distribution facilities lag behind

With the advancement of science and technology, the application rate of high technology in various fields is higher and higher, and in the field of logistics distribution. Some large logistics distribution centers have realized the high degree of mechanization and automation, and there are a few e-commerce logistics distribution to realize the omni-directional automation in small areas. The robot distributes the goods, the manipulator handle goods and so on the high technology content of the distribution technology to be able to apply. But most of the small and medium-sized Rt-mart supermarket chain logistics distribution center of the city's infrastructure equipment technology content is low, distribution facilities lag in technology, equipment update is slow, most distribution work link need manual operation, low degree of mechanization automation, seriously affected the efficiency of distribution, and artificial cost is high, lower the supermarket distribution center economic benefits. The backward distribution facilities is one of the important reasons for the low efficiency of logistics distribution. If it is solved effectively, it can greatly improve logistics distribution efficiency.

3.5 Backward logistics information system

Logistics distribution is dependent on the logistics information system, each shipping will be made based on the information provided by the system, for supermarket chain, the logistics information system of internal information sharing is very important also. The logistics information system of the supermarket chain has the drawbacks of communication and communication. For example Rt-mart supermarket chain, head office and each branch of information sharing, because each outlet is no accurate fit with their actual situation is plan with its own characteristics information, when the headquarters group purchasing, can't do adjust measures to local conditions, according to the information system can't supply and marketing road. Consequently, some goods are unmarketable. Behind a lot of data information system, but also led to a serious mistake, Rt-mart hq and most of the branch store inconsistent database is serious situation, appeared a lot of data information deviation, more can't be Shared.

When the headquarters information system prompts for replenishment, the branch often does not need to be replenishment, and when the real need, the headquarters information system shows that the situation does not come out. Since the development level of each city is different, the development of the information system of various logistics distribution centers is uneven, and the information between each distribution center is not Shared. Some stores have mistakenly kept their information as a competitor to other stores because of management problems, further hindering the sharing of information between stores. Prevented the regional distribution center according to the area of each store within the goods quantity reasonable allocate, eventually led to the distribution is not reasonable, resource waste, reduces the circulation of commodities speed, reduce the economic benefits of the supermarket [5].

4. IMPROVE THE LOGISTICS AND DISTRIBUTION EFFICIENCY OF THE SUPERMARKET CHAIN

Based on the research on the logistics distribution of the supermarket chain, some strategies to solve the logistics distribution problem of the supermarket chain are obtained. We hope to improve the logistics distribution ability and efficiency of the supermarket chain.

4.1 Improve and perfect logistics distribution mode

Chain supermarket logistics distribution is generally divided into four modes: the establishment of joint distribution center with suppliers, distribution of third-party logistics, own logistics distribution center and distribution of suppliers. Several distribution modes have their own characteristics, and the distribution mode of the supermarket chain should be rationally selected based on the size of the supermarket, the state of capital and the prospect of development. According to its own situation and the distribution characteristics of all kinds of goods, the detailed distribution mode is classified as a whole. The self-built distribution center is suitable for a chain supermarket with abundant economic base and a certain scale. Such distribution center provides reliable guarantee for the benefit of supermarket chain.

The logistics distribution of third-party logistics is highly specialized, which can save the cost of chain supermarket operation. With suppliers to establish joint distribution center can greatly strengthen the connection between the supermarket chain and suppliers, but requires supermarket

chain, has a strong information processing ability and cooperation ability with suppliers. The premise of distribution by supplier is that the sales volume must be large, and the supermarket chain can easily conflict with the supplier. Rt-mart supermarket chain with self-built logistics distribution mode is given priority to, the socialization of logistics distribution mode selection is less, and because the money does not reach the designated position, lack of management factors such as condition, the efficiency of the self-built distribution center is hard to play out. Through research, I suggest that the logistics distribution mode of the supermarket chain should adopt diversified and socialized distribution modes to improve its ability and efficiency in logistics distribution.

4.2 Realize logistics distribution scale

The purpose of the establishment of a distribution center is to reduce the total logistics cost of the whole system by increasing the distribution level, so as to maximize the economic benefit. The failure to achieve unified delivery means that there is no unified purchase, and no unified purchase can be achieved without the advantages of supermarket chain operation. It is necessary to control and improve the various parts of the logistics distribution system to realize the unified logistics distribution and to form the appropriate scale of logistics distribution. First to realize various outlets and Shared information systems, both individual stores and head office, perfect logistics information system, with accurate information, effectively is the key measure to realize scale distribution. Rt-mart supermarket chain at the same time to have a system of management idea, realized commodity distribution scale, form a unified goods distribution network, so as to make the purchase requirements of each branch can get timely, rapid processing, also allows the headquarters to more accurate and efficient overall procurement. To realize real logistics distribution scale, the advantages of chain supermarket logistics distribution can be realized.

4.3 Establish an efficient information system

The information system of distribution center should be carried out in combination with the application of logistics information system construction and logistics information technology to realize high level logistics resource information of logistics distribution center. Namely distribution center logistics resource information. The main procedures include graphic, text, digitization and visualization of logistics information. Among them, digitalization is the fundamental of the logistics information system, such as the bar code of the goods, the shelves in the warehouse, the equipment, the coding of the cargo bits and so on, all belong to the distribution information system digitization. In order to carry out the information storage of goods, equipment, facilities, personnel, documents, etc., the information identification, processing equipment and technology shall be provided.

Logistics information infrastructure construction is completed, to further implement the height of the distribution center logistics information integration, but also the distribution center within each department and each link of the logistics information integration and connected. Internal implementation of each link in the Rt-mart distribution center logistics information highly effective management information system, need to complete the main work includes information standardization, information processing procedure, to ensure the accuracy, timeliness and completeness of the information. The integration management of logistics information can realize the optimal flow of logistics in the distribution center and improve the logistics distribution efficiency [6].

4.4 Update the equipment of distribution facilities

For Rt-mart supermarket chain, should be in the area is larger, all the logistics distribution center location is reasonable and fully functional aspects of updating logistics facilities, shall be provided with and update the automatic sorting machine, automatic electric elevator, conveyor belt, vacuum packing machine and other mechanical equipment, and automated management information system and automation system, to realize the fast delivery service. By using specialized loading and unloading, storage equipment and modern information system, the logistics distribution can achieve high automation and mechanization level. Improve the distribution efficiency of supermarkets. Equipped with

mature computer management system, establish strict rules and regulations, equipped with more advanced logistics facilities, strive to realize the accurate, timely and fresh goods in the delivery process. Instead of using the stacking card manual, the distribution center's merchandise is connected electronically to the computer. According to the corresponding button, the goods will be automatically recorded and sent to all relevant departments, such as statistical settlement, car matching and other departments. Accelerate circulation speed, improve economic efficiency, reduce circulation cost.

4.5 Actively apply and update modern logistics technology

To improve the efficiency of logistics distribution, fundamentally should do is to strengthen the study and the modernization of logistics technology, can from the following aspects into consideration: one is the application of automatic identification technology, in today's information age, fast and effective information collection, processing, and services for the enterprise becomes the key to efficient chain retail enterprises. Therefore, the supermarket should actively update the bar code technology and RFID technology. The second is to apply and improve automatic sorting system. The distribution center of automatic sorting system should be applied actively, and the system of sorting and sorting should be further improved and updated to improve the level of automation. The operation flow of the distribution center includes the warehousing - custody - order picking - sorting - temporary shortage - out of the warehouse and so on. It is difficult to achieve high efficiency because of the high quality of products, low volume and frequent ordering characteristics. Therefore, the large distribution center should use the electronic label picking system extensively, speed up the updating speed of the automatic sorting system, and improve the efficiency and accuracy of the sorting process. Third, adopt and improve the automated threedimensional warehouse. Automated stereoscopic warehouse is to use multilayer shelves for goods storage.

The stacker carrier to transport the goods, and through the surrounding ground handling equipment under the control of the computer and communications systems automatically access homework for ins and outs of modern warehouse; The large embellish distribution center should adopt automatic three-dimensional warehouse to improve distribution efficiency and reduce distribution cost. The four is the automatic replenishment system, which connects suppliers, logistics distribution centers and supermarket information systems, and combines the production, supply and marketing network with the ECR efficient customer response system. The big fat distribution should adopt and perfect the automatic replenishment system to realize efficient information integration and improve the efficiency of distribution. Five is computer intelligence technology, the application of computers in the aspect of logistics distribution is into intelligent era, such as distribution center plan for vehicle scheduling and match the car computer management software, through the intelligent selection and scheduling, can greatly improve the efficiency of distribution and delivery, thus more reasonable distribution of dividing area, also can improve the efficiency of distribution center of the vehicle use [7].

5. CONCLUSION

Logistics distribution system is closely related to the economic benefits of supermarket chains, therefore, on the basis of the predecessors of Rt-mart supermarket chain logistics distribution system. I discussed in detailed studies, after do enough analysis, five major problems were raised, and corresponding solutions and methods were given to these problems in order to achieve the goal of sustainable development.

ACKNOWLEDGMENT

The project supported by Anshan city social science research project: Research on Enterprise Performance Improvement in Anshan City under the Innovative Business Ecosystem(as20193079).

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