Research on the distribution mode of Hema supermarket under the new retail background

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Abstract: *With the continuous development of big data, internet technology, and the ever-evolving consumer demands, the concept of "new retail" has emerged, imposing more rigorous standards on various aspects of retail businesses. As a critical component of "new retail," the delivery model is the main focus of this paper, with a specific analysis of the delivery model of Hema Supermarket. It examines the current state of the delivery model and proposes optimization solutions for Hema Supermarket's product delivery model. The goal is to enhance the efficiency of the delivery model, thus improving the economic benefits of Hema Supermarket and facilitating its growth.*

Keywords: *delivery； new retail*

1. Introduction

In recent years, the logistics industry in China has experienced rapid growth, with various sectors increasingly emphasizing the pivotal role of logistics. The rapid development of the internet has driven domestic demand and economic growth, leading to a continuous rise in consumer desires. Furthermore, to align with consumer trends, logistics is no longer limited to trade between businesses but now also plays a crucial role in the movement of goods from businesses to individuals. The rapid development and widespread adoption of information technology and the internet have greatly boosted online shopping, and the desire for quick, efficient, and convenient shopping experiences by younger consumers has had a profound impact on traditional retail.[1]

New retail refers to a business model where companies use the internet as a cornerstone and employ various technological means to create an entirely new retail experience. The "new retail" model integrates resources across various channels, sharing inventory and data to bridge the gap between online and offline shopping. It caters to customers' desires to shop anywhere, anytime, and through any means.[2] As consumer demands escalate in the context of new retail, businesses have been transitioning and investing in online operations. Some large retail enterprises have begun to establish and operate online stores, capitalizing on the advantages in product experience that online stores lack. They attract more young customers from the vicinity of their physical stores to shop online. Leveraging their extensive experience in managing physical chain stores, they use these stores as distribution centers for a certain range of online stores. When customers place orders online, the physical stores in the distribution center pick and provide delivery services within a defined area. This "product picking and delivery" service has gained popularity among the broad young market and has also brought added convenience to some elderly consumers.[3]

2. Current Analysis

2.1 Introduction to Hema Supermarket

Hema Supermarket is an enterprise launched by Alibaba and is a new retail supermarket created by Alibaba. Since the inception of the new retail concept, Hema Supermarket has been expanding rapidly. Hema Supermarket operates with a dual model, combining offline services and online experiences. It integrates elements of both offline supermarkets and an online app, creating a synergy between delivery, dining, supermarkets, and logistics. The store layout of Hema Supermarket mainly consists of a front-end consumer area, a rear-end storage and delivery area, and five central components: dining center, product center, experience center, delivery center, and fan member center. Thus, Hema Supermarket is referred to as "one store, two warehouses, and five centers." Consumers can make purchases in physical stores or place orders through a mobile app. Hema Supermarket sources products

from around the world through a global procurement system, offering unique fresh products like bluefin tuna, wine, and coconut crabs. Hema Supermarket's standout feature is its delivery service, with free same-day delivery within the "box zone" area, usually within 30 minutes. Hema Supermarket's offline stores are often located in commercial centers, and payments can only be made through the Hema Supermarket mobile app, with no cash transactions or other payment methods accepted. In reality, this serves as a means for Hema Supermarket to gather consumer data. In the future, Hema Supermarket can track consumer purchase behavior in real-time and provide personalized purchase recommendations using the power of big data. Through online research and on-site investigations, several key features of Hema Supermarket have been identified:

Integration of Store and Warehouse: Consumers can choose to experience products in physical stores and then make online purchases, with store staff handling the picking and packaging of products for delivery to specified locations. This enhances the customer experience and allows them to obtain their favorite products, experiences, and services at the most affordable prices. Physical stores become a crucial part of logistics activities, serving as distribution centers that can cater to a certain range of consumers, thus meeting local demand, efficiently utilizing store inventory, and reducing logistics costs.

Digital and Intelligent: New retail is highly digital and intelligent, using advanced technologies such as advanced calculations, artificial intelligence, and big data to integrate customer shopping preferences, buying capacity, and consumption habits. This data is then used to recommend products to customers, achieving better promotional results than traditional offline marketing and improving overall business efficiency.

High Integration of Online and Offline: Hema Supermarket deeply integrates online, offline, and logistics, resulting in significant changes in the logistics distribution model. In the context of online data integration, logistics distribution utilizes big data to understand consumer's personalized needs fully. For example, if a customer purchases specific items at certain times, the online platform processes this information through big data analysis, suggesting in advance that the store select and package those items.

Enhanced Shopping Experience: With the development of the internet and the rapidly evolving economy, consumers' demands have shifted towards personalization and diversity. Traditional retail was product-centered and no longer meets the diverse, personalized needs of today's consumers. New retail is customer-oriented, using offline stores as distribution centers to shorten the distance between consumers and products. This results in consumers receiving products within a very short timeframe, leading to an enhanced shopping experience.

2.2 Analysis of Hema Supermarket's Delivery Model in the Context of New Retail

Hema Supermarket currently employs a self-operated delivery model where all delivery personnel and equipment are procured and recruited by the company itself. The company utilizes its offline stores as distribution centers with a delivery range typically covering a 3km radius around the physical stores. Within this area, a supply and demand system is established, allowing customers to place orders during both daytime and evening hours. The delivery promise is within 30 minutes, with 10 minutes allocated for picking and packaging, and 20 minutes for delivery.

Hema Supermarket has adopted a "front store and back warehouse" model, distributing inventory to the store, effectively reducing inventory costs. Instead of shipping products from a large central distribution center, products are flexibly dispatched from the nearest offline stores, which function as new logistics distribution centers. The stores are equipped with intelligent devices, enabling picking personnel to complete product selection and packaging within 10 minutes.

When customers place orders online, Hema Supermarket's online cloud system sends the order information to the corresponding offline store. Store picking personnel then begin the process of selecting and packaging products, which are transported to the store's entrance using an intelligent suspended conveyor system. The products are handed over to delivery personnel who complete the final 20-minute delivery to the customer. However, this last 20 minutes can be influenced by various factors such as elevator waiting times, stair climbing, and customer availability, which can affect the overall efficiency of the delivery process.

Hema Supermarket's delivery model is currently in a development stage and faces some issues that require optimization. In this model, delivery costs are high, and delivery efficiency is low. The

promised 30-minute delivery timeframe is achieved under ideal conditions, but in reality, various factors such as weather and traffic congestion can cause delays. Additionally, Hema Supermarket often receives complaints about its delivery personnel's service quality, indicating a need for enhanced training efforts.

Hema Supermarket, born in the context of "new retail," is still in a developmental phase. The reasons for the issues it faces can be categorized into internal and external factors.

Internal Factors:Hema Supermarket's market positioning and store layout have led to high rental costs and substantial upfront capital investment. The company targets a middle to high-income demographic and primarily locates its stores in core commercial areas, resulting in high rental expenses. Store development also requires significant capital investments, including a spacious store area, a wide variety of products, as well as kitchen, dining, and storage space. This construction phase incurs substantial financial expenses, to some extent restraining the development of Hema Supermarket's delivery model.

In terms of pricing and delivery timeliness, Hema Supermarket offers first orders without delivery fees during the day without any minimum spend. This approach attracts customers but results in significant cost outlays. Compared to the typical delivery fees of 5-6 RMB per order on third-party delivery platforms, Hema Supermarket's cost per delivery is high. Regarding delivery speed, Hema Supermarket pledges to deliver within 30 minutes, with 10 minutes allocated for picking and packaging and 20 minutes for delivery. Within a short timeframe, a delivery person can handle only a limited number of orders, unable to simultaneously manage multiple orders, which ultimately reduces delivery efficiency.

External Factors:Competition from external market players: In the context of new retail, numerous companies are competing for market share. Competitors such as Suning's Xiaodian and Yonghui's Super Species pose significant external competitive pressures. Suning Xiaodian, due to its proximity to residential areas, quickly launched delivery services within a 3km radius, offering delivery from the nearest stores. Supermarket orders made online can be delivered from both the nearest store and a central distribution center. The location advantage of being near residential areas, coupled with exceptional product delivery and post-purchase service, attracts a substantial customer base. These competitors offer various value-added services, such as public transportation card recharging, package collection, and utility bill payments, which significantly appeal to customers.

Traffic and Weather: Due to Hema Supermarket's locations primarily being in core commercial areas, traffic congestion during peak hours is common and can lead to delivery delays. Additionally, Hema Supermarket often faces unexpected challenges such as sudden weather changes, new, less experienced pickers, slow delivery personnel, and strict entry policies in upscale residential complexes that prohibit Hema Supermarket's delivery personnel from entering the premises. Some residential complexes even discriminate against delivery personnel, denying them access to elevators. These factors collectively affect customers' ability to receive products within the promised 30-minute timeframe, sometimes necessitating customer self-pickup and influencing delivery efficiency.

In light of these internal and external factors, Hema Supermarket, being a new retail entrant, is facing challenges in its delivery model, which needs to be optimized for cost-efficiency and improved delivery experience.

3. Measures for Improving Hema Supermarket's Product Delivery Model

3.1 Strengthening the Training of Delivery Personnel

Delivery personnel play a crucial role as they are the direct interface with consumers. Every action they take reflects the image of the company. Any issues arising during the delivery process can be attributed back to the company. This can range from minor inconveniences that require apologies to more severe repercussions, potentially causing customer attrition and impacting the company's profits. Therefore, it is imperative for the company to enhance the training of delivery personnel. The following points highlight how this can be achieved:

Conduct Engaging Knowledge Training: Currently, Hema Supermarket's delivery personnel often struggle to grasp specialized knowledge, and they may have reservations about the training process. To address this, the company should revamp its training approach. Training should be conducted using engaging, easily understandable language to ensure a better training outcome and help delivery

personnel understand their job responsibilities. This approach should not evoke resistance from the delivery staff.

Provide Legal Knowledge Education: Regularly educate delivery personnel on traffic regulations and other relevant legal knowledge. By analyzing the implications from their perspective, the company can make them aware of the seriousness of adhering to these rules. Encouraging delivery personnel to voluntarily comply with traffic regulations can enhance the company's image and improve consumer sentiment.

Establish Reward Mechanisms: In view of the service awareness of distribution personnel, enterprises can establish a reward mechanism, understand the service situation of distribution personnel through the regular return visit to consumers, select several of the most praised by consumers, and give certain cash rewards or welfare. To encourage more distribution personnel to do a good job of service to consumers.

Enhance Promotion and Career Advancement Opportunities: The company should work on improving its career advancement system, eliminating nepotism, and providing ample opportunities for growth, thereby attracting and retaining more talent. Furthermore, offering better benefits and allowances for experienced delivery personnel based on their tenure can help reduce employee turnover.

3.2 Optimizing Hema Supermarket's Delivery Model with "Third-Party" and "Community Parcel Lockers"

3.2.1 Transition from "Self-Operated" to "Self-Operated + Third-Party" Delivery Model

To reduce delivery costs and enhance efficiency, the company should consider shifting from a "self-operated" model to a "self-operated + third-party" delivery model. Currently, Hema Supermarket primarily employs a self-operated delivery model, which involves significant upfront capital investments, particularly in store development and operations. While this approach has advantages, it can lead to challenges in handling risks and unforeseen events.

To capture a larger market share, Hema Supermarket expanded its physical store presence in major Chinese cities. This aggressive expansion strategy has incurred substantial capital expenditures. Furthermore, the company offers free delivery for daytime first orders without any minimum spending requirements, which attracts customers but leads to significant cost outlays. The typical cost of delivery on third-party platforms is around 5-6 RMB per order, while Hema Supermarket's self-operated delivery model results in higher delivery costs. Moreover, delivery personnel operating under this model can only handle a limited number of orders within a short timeframe, impacting delivery efficiency.

Integrating third-party logistics providers can lower the company's delivery costs and provide flexibility in handling high-demand periods. By using third-party logistics, Hema Supermarket can cut down on fixed expenses related to the hiring and salaries of delivery personnel, as third-party logistics often employ a per-order compensation system. Overall, adopting a "self-operated + third-party" model would not only reduce costs but also improve the company's capacity to handle orders during peak periods. It's crucial to select third-party logistics partners carefully to avoid compromising service quality and the company's image.

3.2.2 Transition from "Door-to-Door" to "Door-to-Community Parcel Lockers" Delivery

To address the efficiency of the last-mile delivery, Hema Supermarket should consider transitioning from a "door-to-door" model to a "door-to-community parcel lockers" model. In traditional "door-to-door" delivery, the waiting time for deliveries can be quite long due to factors like customers not being at home, the need for repeated delivery attempts, waiting for elevators, and other variables that diminish the delivery efficiency.

Shifting to a "door-to-community parcel lockers" approach can significantly improve delivery efficiency. With this method, deliveries are made to community parcel lockers, which can aggregate consumers within a particular community. Over time, consumers can become accustomed to this delivery method. Community parcel lockers are strategically located and can save time by eliminating various factors that affect "door-to-door" delivery, such as waiting for elevators, climbing stairs, and waiting for customers to answer their doors. Delivery personnel can directly place the products in the parcel lockers, improving efficiency and making optimal use of the personnel's time.

Community parcel lockers operate around the clock, providing consumers with accessibility and privacy. After making a delivery, the delivery personnel can send a notification via an intelligent cloud-based system to inform consumers that their products are available in the parcel lockers. Consumers can then retrieve their items using a pickup code, providing a convenient and secure experience. Additionally, this approach overcomes the issue of consumers not being at home to receive their products.

3.3 Feasibility of the "Self-Operated + Third-Party + Community Parcel Lockers" Delivery Model

Hema Supermarket's current product delivery model is predominantly "self-operated." To address its delivery challenges, introducing a "self-operated + third-party + community parcel lockers" delivery model presents a reasonable level of feasibility.

Firstly, it can reduce delivery costs and enhance efficiency. The "self-operated + third-party" model ensures that Hema Supermarket maintains a prominent role in its delivery operations, preventing over-dependence on third-party logistics providers. Incorporating third-party logistics can lead to reduced capital expenditures, significant cost savings, and improved capacity to handle orders during peak periods. Delivery to community parcel lockers can substantially enhance delivery speed, reduce delivery times, and optimize the utilization of personnel.

Secondly, it can improve consumer sentiment. By strengthening the training and service orientation of delivery personnel, the company can offer better service to consumers. The convenience and accessibility of community parcel lockers, offering 24/7 service, can enhance the consumer experience. This approach provides convenience to various working professionals and safeguards customer privacy. Delivery to community parcel lockers mitigates traffic congestion, reduces population mobility, supports normal community order, and addresses challenges related to insufficient personnel and surges in orders during peak times.

4. Conclusion

Addressing new retail demands is closely linked to logistics and delivery. After a detailed examination of Hema Supermarket's current delivery model, an analysis of existing issues, and the identification of root causes, optimizing the delivery model is necessary. The integration of "third-party" logistics and "community parcel lockers" can effectively reduce delivery costs and enhance the efficiency of Hema Supermarket's delivery operations, resulting in tangible benefits for the company.

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