

Exploring the Feasibility and Challenges of Fresh Food E-commerce O2O Model

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Abstract. The O2O model entered a phase of rapid development, maturing and beginning to integrate on localized and mobile devices. However, unlike traditional retail goods and 3C products, the uniqueness of the fresh food market dictates that its implementation may be faster. Given the industry's rapid growth in cold chain logistics, the online shopping habit for fresh food is gradually forming. Online fresh food e-commerce companies want to expand their offline channels, while traditional offline fresh food retailers also want to enter the online channel. Therefore, the fresh food O2O model is a key breakthrough for fresh food ecommerce in the future. Integrating online and offline channels makes satisfying consumers' habits and needs easier and enhances their shopping experience. This paper also analyses the development status of supply chain concerns, the challenges of the standardized approach, and the O2O fresh food e-commerce business. It proposes feasible development solutions for fresh food e-commerce O2O models, such as self-cycling, pre-sale, fast delivery, and smart sharing models. Through in-depth research and analysis, this paper aims to guide the O2O construction of fresh food e-commerce enterprises and achieve the industry's sustainable development.

Keywords: Fresh Food, E-commerce, O2O Model.

1. Introduction

In 2016, the O2O model entered a phase of rapid development, gradually matured, and began the integration of localization and mobile devices [1]. However, unlike traditional retail goods and 3C products, the uniqueness of the fresh food market determines that its implementation could be faster [2]. As the cold chain logistics sector expands quickly, customers' online buying preferences for fresh food are likewise developing with time. Tmall, Jingdong, No. 1 store, Suning Tesco, COFCO I buy network, this life network, the daily orchard, Tuo Tuo Gongsha, Shunfeng Youxuan, have begun to enter the fresh market [3]. Yonghui and China Resources Vanguard, and other traditional supermarkets have additionally joined the online market for fresh food. Companies selling fresh food online aim to expand into offline outlets, while traditional offline fresh food retailers also want to expand into online channels [4, 5]. Therefore, the fresh food O2O model is a significant trend for the growth of fresh food ecommerce. The advantages of their respective channels apply to both online and physical channels, and each channel can only replace one another. Through the integration of online and offline channels, it's easier to meet the habits and needs of consumers and improve their shopping experience [6, 7].

Fresh food e-commerce O2O belongs to a new area of e-commerce, its business strategy is continually being researched and its future development trend is yet unknown. In addition, because of the characteristics of fresh agricultural products and the traditional consumption habits of consumers, for most people, online shopping for fresh agricultural products is still a new thing, and the industry is still trying to promote it. However, the fresh produce e-commerce's quick expansion has drawn significant interest from all spheres of society. The study of its development path has certain practical significance [8-10].

2. Fresh Food E-commerce O2O Mode Development

Only a few O2O companies can provide services that satisfy consumers. Therefore, O2O companies have made close cooperation with offline and online companies; on the one hand, they should fully integrate the relevant resources of offline companies to ensure that consumers can get the right information; on the other hand, they should carry out a variety of forms of online activities, so that consumers can participate in all of them, to increase their enthusiasm for shopping. Whether consumers can get satisfactory results in offline experience will directly affect whether they will repurchase their products and has a close connection with the development of O2O companies in the future. Therefore, the ability of O2O enterprises in terms of resources is mainly manifested in whether they can effectively and scientifically manage their merchants, comprehensively integrate their resources, and find merchants with high development potential or offline entities. At present, the platforms of fresh O2O include Kitchen Ease Times, Xu Xian, and Tuotuo Gongsha. The fresh O2O field is seen as a blue ocean of O2O, pursued by the capital market, many companies have tried this field, but they are all due to the impact of capital, logistics, etc., only support the use of some geographical areas, so only a small number of consumer stores, can provide online development can make consumers satisfied with the service.

In addition, fresh agricultural products supply chain refers to the combination of producers, intermediaries, and consumers related to fresh agricultural products, planning, organizing, coordinating, sending the appropriate goods to the destinations at the predetermined time, giving the consumers the most value at the lowest cost, and managing the linked logistics, business, capital, and information flow, to increase the overall supply chain's efficiency and, as a result, substantially increase the economic efficiency of all supply chain players. This will increase the effectiveness of the whole supply chain, which will ultimately lead to significant increases in the economic effectiveness of all supply chain members. Therefore, the chain of products and materials connecting suppliers, producers, and consumers that make up the supply chain for fresh agricultural products also adds value to the product through processing, packaging, transportation, and other supply-chain processes. The effective supply of agricultural goods may be improved by establishing a supply chain system with a realistic model, which can raise the product value of fresh agricultural products.

3. Problems in the Development of Fresh Food E-commerce O2O Model

3.1. Insufficient Web User Stickiness

Not only the fresh food e-commerce market many years ago but also all the fresh food O2O fields in the current stage of development are continuously investing in users' consumption habits. Users are intimidated by fresh food O2O but love it; they worry about high prices, good quality, untimely delivery, product safety, etc. Therefore, more discerning people will spend more time buying fresh food through e-commerce. This can be partially solved quickly, but it is a problem that every fresh food O2O business has to face, and only in this way can it promote the development of the whole industry. But most of the customers' requirements are reasonable and not too high, for example, some customers need to order products before going to work, and such requirements are reasonable. After meeting such requirements of users, their satisfaction with the website will continue to increase, and they will have more trust in such a way of shopping.

3.2. Supply Chain Issues

The supply chain is complex, and it is difficult for merchants to ensure that the supply of goods is always sufficient. The supply chain is an important issue in the development of fresh food O2O enterprises, which includes the following contents: quality, goods resources and so on. For fresh O2O users, supply chain issues, food shelf life, and inventory consumption are linked; quality food shelf life is longer, you can reduce inventory time, improve consumer turnover, word of mouth and trust in the enterprise, and the proportion of user returns will also be reduced. Since consumers have high

expectations for fresh items, the majority of O2O fresh businesses will leverage organic and green products as selling features to draw customers. Still, because the fresh products themselves have high requirements for the source, the quality of the source must be guaranteed. Some fresh e-commerce companies need the means to ensure that the supply source is sufficient and fresh. Then consumers will be greatly disappointed in fresh food e-commerce.

3.3. Standardized Model

The reason is that the standardization model contains more aspects, so it takes time to achieve quickly. For the development of fresh food e-commerce, only the establishment of the basic law of standardized development to ensure its advantage in the competition; e-commerce standardization contains many aspects, such as simplifying the return process, unified distribution process, to ensure the quality of the product, to ensure that each product has an adequate supply and so on. However, at this stage of the specific situation, most of the fresh food e-commerce business belongs to the entrepreneurial type of company, which is aimed at the user's consumption rate is low. Most of the users are more concerned about the product's price and the product's high-quality requirements. Therefore, there will be a relatively large supply and demand contradiction between the supply and consumption products, so it is difficult to establish a standardized development model within a relatively short development stage. As a fresh O2O enterprise, you can start from the distribution, product quality, product price and other major content to solve in a not fully mature market; if the main contradiction is properly resolved, then the secondary contradiction will not become a limiting factor for consumers to repurchase the product, this focus on the major aspects, while temporarily ignoring the minor aspects, is a short-term solution, although out of necessity, but also is an It is a better solution and all the elements in the standardized model of fresh food O2O must be given full attention.

4. Fresh Food E-commerce O2O Model Feasibility Development Program

At present, the key operational differences between the fresh food e-commerce businesses or platforms are in online, offline, logistics, and other areas. After analyzing the major typical fresh food e-commerce companies and dissecting their upstream supply, the construction of midstream online platforms and warehousing and logistics, and the downstream offline physical stores and distribution layout, this paper proposes several feasible fresh food e-commerce O2O models in combination with different fresh food e-commerce companies' O2O models.

4.1. Self-cycling Model

To reduce energy loss and ensure product safety and quality issues. First of all, in the supply of fresh products, enterprises can invest in the construction of their farms, on the one hand, by promoting the uniformity of fresh product manufacturing and the cultivation of organic items, standardization and specialization, and more importantly, is conducive to ensuring the quality and safety of products. In addition, some of the products their farms cannot provide can be co-operated with local, high-quality agricultural bases and directly sourced from them.

4.2. Pre-sale and Fast Delivery Mode

To reduce loss to reduce waste. Customers book the required products on the official website and APP of the fresh food enterprise one day in advance, that is to say, the categories and quantities of fresh food products to be prepared by the enterprise on the next day are determined, which prevents the problem of high wastage of fresh food products from the starting point of the supply chain. Enterprises build their own modern cold chain logistics and distribution system and cooperate with local agricultural bases, according to the categories and quantities of the previous day's orders, direct procurement from the agricultural base, testing, sorting, packaging, and then by the self-constructed cold chain logistics system, distribution to the major communities set up in the community offline

intelligent freezers for customers to pick up the goods, or according to the customer's needs to the base of the direct delivery, delivery to the home to achieve the next day of unified procurement and distribution, reduce intermediate links, reduce the number of intermediate links, and reduce the loss of fresh products. It can realize unified procurement and distribution the next day and reduce intermediate links and waste of fresh products.

4.3. Intelligent Sharing Mode

With the network's continuous development, social sharing has been widely used in all aspects of life. Fresh food businesses may build their platform for fresh food e-commerce by combining display, sales, and social sharing. They can also enhance the functionality of the online ordering platform. In terms of upstream supply, the company realizes regional cooperation by cooperating with local formal fresh food retail stores; when customers purchase fresh food products on the website that the fresh food e-commerce firm established, the platform should provide a variety of ordering and payment methods, making it more convenient for users to place orders online. In addition, provide fast response customer service and thoughtful pre-sale and after-sale service. In the delivery link, according to the location of the consumer's receipt of goods, the principle of proximity is adopted to complete the last kilometer of delivery by the nearby fresh food brick-and-mortar stores. On the one hand, the mode of localization of offline fresh food e-commerce is because the shortening of the distribution distance can make the distribution more efficient and timely.

On the other hand, it can also reduce the loss of fresh products. On this basis, big data provides personalized shopping advice to customers by tracking their shopping behavior. After using a service, consumers can use the platform to provide feedback and use it for social sharing. Through this feedback, service quality can be improved, user satisfaction can be enhanced, user stickiness can be increased, and social sharing can be utilized for brand communication.

5. Conclusion

In recent years, O2O has become a new e-commerce mode, and more physical enterprises have begun to pay attention to this field. The introduction of O2O for fresh agricultural goods has, to some extent, satiated consumer demand from a variety of demographics and integrated the market's fragmentation. And distribution is an important factor that restricts its development. Thus, choosing an appropriate fresh food distribution model has become an urgent problem for fresh food e-commerce enterprises. Although domestic fresh food e-commerce development is relatively fast, the overall fresh food distribution could be better. The development of fresh food O2O is uneven, so there is no completely successful model as a reference, so we can't unilaterally think which model is the best. E-commerce enterprises must combine with their development reality and constantly adjust their fresh food distribution system to adapt the fresh food business model to the O2O development of fresh agricultural products. Development.

The O2O ecommerce market of China's fresh produce sector is yet untapped for owners of fresh produce e-commerce businesses. This cutting-edge strategic option has a lot to offer businesses. The O2O model offers customers a fresh method to buy for food, one that can be made more enjoyable by combining in-person interactions with online transactions. This essay contends that as more and more people turn their attention to this "blue ocean," fresh produce e-commerce will evolve into a mature industry and a crucial component of the emerging Internet economy. Therefore, this paper will sort out the literature on O2O e-commerce in the fresh produce industry to guide the O2O construction of fresh produce e-commerce enterprises.

References

- [1] Zhu, Xiaoming, et al. The O2O model-from online/offline to the O2O model. *Business Trends in the Digital Era: Evolution of Theories and Applications*, 2016: 191-212.
- [2] Rong, Aiyong, Renzo Akkerman, and Martin Grunow. An optimization approach for managing fresh food quality throughout the supply chain. *International Journal of Production Economics*, 2011, 131(1): 421-429.
- [3] Han, Jia-Wei, et al. A comprehensive review of cold chain logistics for fresh agricultural products: Current status, challenges, and future trends. *Trends in Food Science & Technology*, 2021, 109: 536-551.
- [4] Zhao, Kaiqi, et al. Fresh produce E-Commerce and online shoppers' purchase intention. *The Chinese Economy*, 2021, 54(6): 415-429.
- [5] Jiang, Yi, et al. Sustainable management for fresh food e-commerce logistics services. *Sustainability*, 2021, 13(6): 3456.
- [6] Wang, Ou, Simon Somogyi, and Sylvain Charlebois. Food choice in the e-commerce era: a comparison between business-to-consumer (B2C), online-to-offline (O2O) and new retail. *British Food Journal*, 2020122(4): 1215-1237.
- [7] Liu, Xiaodong, and John Walsh. Study on development strategies of fresh agricultural products e-commerce in China. *International Business Research*, 2019, 12(8): 61-70.
- [8] Yang, Qing, et al. Contract coordination of fresh agri-product supply chain under the O2O model. *Sustainability*, 2022, 14(14): 8771.
- [9] Wang, Xiaohuan, Jingchao Xie, and Zhi-Ping Fan. B2C cross-border E-commerce logistics mode selection considering product returns. *International Journal of Production Research*, 2021, 59(13): 3841-3860.
- [10] Zhu, Yongming, et al. Consumers' continuous use intention of O2O E-commerce platform on community: a value Co-creation perspective. *Sustainability*, 2022, 14 (14): 1666.