Research on Guiding Consumer Behavior Based on App Information Management of Fresh Food E-commerce in the Post-epidemic Era

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Abstract. With the advent of the post-epidemic era, China's nascent fresh food e-commerce industry has given people a new way to buy fresh products, and through this novel marketing model, it has alleviated the unsalable and short shelf life of fresh products. Taking the Hema Xiansheng APP platform in Shenzhen as an example, the questionnaire survey method is used to analyze the consumption motives and consumption behaviors of consumers to analyze the consumption dilemma and reasons of the company, and propose improvement measures: formulate commodity price standards; improve product quality; strengthen corporate branding Optimization; optimize the links of the logistics chain; attach importance to the personal experience of customers. It is demonstrated that by analyzing the consumption motivation and consumption behavior research of consumers and giving proper guidance, the efficiency of business operation can be improved. At present, the research and exploration of the fresh food e-commerce industry outside China is at the basic stage. Based on the research on the relationship between the consumption motivation and consumption behavior of Chinese consumers in fresh food e-commerce, it effectively expands the long-term confusion of Chinese agricultural products. The "last mile" of the terminal market and the promotion of fresh food e-commerce enterprises have certain practical value and significance.

1 Introduction
At the end of 2019, the once high-profile fresh food e-commerce company Dairadish declared bankruptcy, and the fund chain of Yiguo Fresh Food and Miao Life platform broke...Many small and medium-sized fresh food e-commerce platforms have "thunderstorms" one after another. However, after 2020, Chinese fresh food e-commerce companies have rewritten the trajectory of their fate and brought back to life in the epidemic. At the same time, Chinese community group buying has brought strong soldiers to the wind, from fresh food delivery to homes to community self-pickup products. Behind the commercial phenomenon of rising are the formations of top players. What followed were the familiar thousands of regiments battles, money-burning subsidies, users who were squeezing wool while being anxious, and voices of doubt from the disrupted market. According to data from the National Bureau of Statistics of China, the fresh food market is expected to reach 331.07 billion yuan in 2020. Among them, the fresh food e-commerce user stickiness reached 25.70% in the first half of this year, an increase of 6.2% over last year. In the second half of 2020, there will be a sudden rise in popularity, and community group buying will also become one of the hottest tracks. According to data from iiMedia Consulting, the size of the community group buying market is expected to exceed 102 billion yuan in 2022. As shown in Figure 1 (unit: 100 million yuan).

Fig1. The size of the community group buying market in 2020 increased by 112% year-on-year (unit: 100 million yuan).

2 Theoretical Summary
2.1 Overview of Fresh Food E-commerce
Fresh food e-commerce refers to a series of consumption activities in which enterprises use e-commerce technology to sell fresh agricultural products to consumers online. Some scholars also believe that the online marketing products of fresh food e-commerce should not only consist of fresh agricultural products and aquatic products, but should include plants with fresh vitality, such as garden...
potted plants and flowers. Compared with other e-commerce industries, fresh agricultural products have many characteristics that ordinary products do not have, such as extremely short shelf life, difficult storage, and special cold-chain logistics for transportation, so fresh e-commerce has a relatively favorable rating. Common commodities are low, marketing costs are high, and transportation costs are high.

2.2 Research status

In recent years, many experts and scholars have begun to research and analyze the impact of different factors on consumers’ online shopping from the perspective of consumers. Scholars such as Wu Ting (2014) believe that fresh food e-commerce is a blue ocean in the e-commerce industry. Coupled with the government's promotion of fresh food e-commerce, this industry must have an excellent development in the future. (1) Scholar Zheng Yaqin (2014) believes that there are four main factors that affect consumers' shopping on fresh food e-commerce platforms, which are the basic attributes of the product, the price level, the efficiency of logistics distribution, and the brand effect. (2) Scholar Ji Aihong (2011) will likely affect consumer product characteristics, such as prices, product types and consumers. Cross-examination of factors such as possible curiosity and the efficiency of logistics and distribution, and finally concluded that most of the factors that affect consumer behavior are characteristic factors of e-commerce platforms. (3) Scholar Zou Jun (2011) analyzed the influence of multiple factors on consumers’ online purchase of e-commerce products, and a series of studies have resulted in the freshness of fresh products, the number of types of products, and the ease of purchase on the platform. The degree will affect consumers’ willingness to shop. (4) Scholar Cui Yanhong (2016) studied the impact of perceived risk on consumer behavior. Peirce L.M., Tang T. (2012) researched that brand effect. (5) The research of Enrique B.P. (2016) shows that the quality of goods and the credibility of the company in the sales market will affect the buying behavior of the masses. Research suggests that the authenticity of information on shopping platforms will affect consumers' purchase intentions. (6) In short, current scholars have a lot of research on the developing fresh food e-commerce platforms, but they are mainly researches on the cold chain logistics transportation optimization of their fresh food e-commerce, and there are few studies on consumers' shopping behaviors on e-commerce platforms. And analysis. Therefore, this article will conduct a series of researches on the relationship between consumers' consumption motivation and consumption behavior in the fresh food e-commerce industry by analyzing the current research status of Chinese foreign scholars on the fresh food e-commerce industry. Correctly understand the relationship between the large number of consumers and the factors affecting their online buying behavior, whether it is to make adequate preparations for the future expansion of the fresh food e-commerce industry, or to make up for China’s The lack of research in this area has certain significance and value.

3 Consumer motivation analysis and consumer behavior research

3.1 Introduction to Hema Fresh

Hema Xiansheng is a fresh food e-commerce supermarket under Alibaba. It encourages consumers to place fresh products online on the Hema APP to achieve a three-kilometer free home delivery service. Consumers can also choose to buy and eat at the store. The new retail model of Hema Fresh Food greatly shortens the delivery time of fresh food, and effectively reduces costs and avoids problems such as damage to food during transportation. When consumers use the fresh food e-commerce platform, Ma Xiansheng has well integrated the shopping advantages of online shopping and offline transportation, and is a pioneer in the new retail of fresh food e-commerce.

3.2 Consumer behavior survey on Hema Xiansheng APP

| Serial number | Survey item | Statistical analysis of data | Remarks |
|---------------|-------------|-----------------------------|---------|
| 1             | The gender of the online shopping experience | Male 263 people |         |
|               |             | Female 270 people           |         |
| 2             | Age of using Hema Fresh App | 16-35 years old 45% |         |
|               |             | 36-49 years old 34.5%       |         |
|               |             | 50 years old 20.5%          |         |
| 3             | Occupation | Students 46.55% |         |
|               |             | Office workers 37.41%       |         |
|               |             | Freelancers 16.04%          |         |
| 4             | Monthly Income | 3000RMB or less 15.58% |        |
|               |             | 3,000 to 5,000 RMB 49.4%   |        |
|               |             | 5001,000 to 7,999 RMB 32.5%|        |
|               |             | 8,000 RMB or more 2.52%    |        |

This article mainly uses the "Questionnaire Star" website to distribute the questionnaire in electronic form. The survey objects are mainly consumers in Shenzhen, Guangdong Province. A total of 650 questionnaires were distributed. About a week later, 597 questionnaires were returned, and 542 valid questionnaires were returned. The statistics and analysis of the data collected by the questionnaire are shown in Table 1. First, gender, second, age, third, occupation. The fourth is income. The gender, age, occupation and income data of the surveyed population in this study are universal and conform to the basic characteristics of the masses.

3.3 Consumer motivation

It can be seen from Figure 2 that most of the 9 to 5 office
workers will choose to use the fresh online platform of Hema Xiansheng APP for consumption because of lack of shopping time or seeking convenience to save traffic time. In addition, the Hema Fresh App allows consumers to quickly find the fresh products they need to buy in the search bar. At the same time, there is also online customer service that can give cooking advice in time. This is where consumers are willing to choose fresh food e-commerce. The main consumption motivation of the platform. From the cross-analysis chart in Figure 3, it can be seen that the consumers as a whole are still relatively willing to use traditional channels to buy fresh foods, while young consumers are more willing to use traditional channels for shopping and are more capable of accepting new things. Try and accept new shopping channels. After all, the door-to-door delivery of fresh food e-commerce will save them more time.

**4 The dilemma of consumers in the Hema Xiansheng APP consumption line**

**4.1 Consumers expect product prices**

![Fig2. Reasons why consumers choose to use Hema Xiansheng APP for consumption.](image)

![Fig3. Whether consumers are willing to use online shopping instead of traditional channels to buy fresh products (Blue yes, red no).](image)

![Fig4. Consumers' comparison of prices between Hema Xiansheng and supermarket chains.](image)

**Table II.** SWOT analysis of Hema Fresh

| Internal factors | Internal advantage (S) | Internal disadvantage (W) |
|------------------|------------------------|--------------------------|
|                  | 1. The leader of fresh food e-commerce platform has certain | 1. The cost of the product is high, and the price is higher than that of |

| External factors | External opportunity (O) | SO strategy | WO strategy |
|------------------|--------------------------|-------------|-------------|
|                  | 1. Favorable government policies, such as "Internet +" and other favorable policies for e-commerce companies. 2. The market is not saturated and there is still great room for development. | Relying on the good competitiveness of the enterprise and the advantage of the mass base of consumers, use this current favorable policy for e-commerce to vigorously accelerate the development. | Taking advantage of the huge room for development of fresh food e-commerce companies, for the long-term development in the future, increase capital investment to optimize APP software and cold |

| External threat (T) | ST strategy | WT strategy |
|---------------------|-------------|-------------|
| 1. There are constantly new competitors joining the industry, increasing competitive pressure. Consumers' consumption habits have not yet been fully transformed into online consumption. Slow market growth. | Relying on the advantage that the fresh food e-commerce platform has a certain audience base, it gradually allows consumers to accept online consumption while promoting the brand, and relieves the pressure of competition through the original financial foundation of the company. | Provide services based on customer needs and increase product types through marketing methods and big data statistics, while effectively enriching product categories, reducing unnecessary hidden costs and waste, and increasing sales profit margins. |
It can be seen from Figure 4 that more than half of consumers believe that the price of fresh produce in supermarket chains is higher than that of Hema Xiansheng, and less than one-fifth of consumers believe that Hema Xiansheng products are cheaper. Generally, low prices are more attractive to consumers. Therefore, consumers have expectations of lower prices when facing products with relatively higher prices. Using the SWOT model analysis method in Table 1, analyze the environmental factors of the Hema Fresh Food Enterprise from the advantages and disadvantages of the internal factors of the company and the opportunities and threats of the external factors of the company. From Figure 5, it can be seen that consumers with a higher frequency of daily cooking will also purchase fresh ingredients online relatively more frequently. From Figure 6, poor product quality: 33.80%, 29.58%, 36.62%, 69.72% other: 35.2%, it can be seen that consumers' low acceptance of Hema fresh food is mainly due to the delivery speed and expectations.

5 Conclusions

It is undeniable that in the age of love and the post-epidemic era, the vigorous development of China's e-commerce has led to the rapid development and continuous expansion of the online transformation of countless traditional fresh food companies. In early 2021, fresh food e-commerce companies competed in vicious competition. If you want to stand out in many industries and remain invincible, you must thoroughly study the consumer's motivation and behavior. Therefore, fresh food e-commerce companies should take the consumer as the center, understand the consumer's motivation, such as to save transportation time and simplify the shopping process, and then study the factors that promote consumers to conduct a series of consumer behaviors, such as preferential prices, Multi-category, fast logistics, new retail models resulting from the integration of online and offline; secondly, a series of programs such as APP are continuously strengthened to attract customers. Through the integration of online and offline, to bring consumers more convenient, better cost-effective, and better consumer experience, they can effectively improve consumer satisfaction, increase consumer loyalty to the brand and consumer stickiness, and enhance the efficiency of the enterprise, continuously build the core competitiveness of the enterprise.

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