

The Influence Mechanism of the “Pinhaofan” Function on the Meituan Food Delivery Platform

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Abstract. Meituan Food Delivery innovates the takeout group purchase model through the “Pinhaofan” function. With its large user base and rapidly growing group purchase order volume, Meituan Food Delivery has demonstrated significant market potential. Although the continued expansion of China’s food delivery market has provided with broad development space, as the proportion of “Pinhaofan” orders increases, the platform faces the shortcomings of continued decline in average order value, imitation by competitors, vicious low-price competition, and food safety issues and other challenges. Based on SWOT analysis, this study showed that the “Pinhaofan” business has certain potential and good prospects. Meituan Food Delivery should broaden its focus from short-term high-volume to prioritising long-term sustainable growth, by strengthening internal supervision and fostering continuous innovation. This study contributes to both theoretical understanding and practical applications regarding the importance of group purchasing in the food delivery industry. It provides valuable insights into developing competition strategies for food delivery companies.

Keywords: O2O platform; Meituan Food Delivery; Business Innovation; SWOT.

1. Introduction

Meituan Food Delivery is one of China’s leading online food delivery platforms, highlighting the mission of helping everyone eat better and live better through a retail plus technology strategy. It exhibits characteristics of platform economics regarding its online multilateral market system. Users rely on mobile applications to conduct and manage food transactions online. More concretely, Meituan Food Delivery has successfully connected consumers, merchants, delivery personnel, and third-party service providers in a convenient and mutually value-added life service platform.

In 2017, Meituan Food Delivery’s average daily transaction volume was 11.2 million, with a transaction amount of RMB 171.1 billion. The annual revenue reached RMB 38.1 billion, making it the world’s largest food delivery service provider [1].

Competition among online food delivery platforms has always been fierce in China. In the past two decades, the significant increase in urbanisation rate and the rapid development of mobile Internet have greatly contributed to the catering and food delivery industry. In 2019, China’s urbanisation rate reached 60.6%, which indicated that urban consumption had become people’s daily life [2]. In addition, lower-tier markets were also growing at an alarming rate and driving force for user boost. Meituan Food Delivery’s order volume and value increased faster in lower-tier markets than in high-tier cities [3]. All these prove that it is difficult for the industry to make breakthroughs in existing mature markets. Therefore, all market participants are driven to innovate and differentiate continuously to enhance their competitiveness.

In July 2020, Meituan Food Delivery tested the “Pinhaofan” function in Wuhu, Anhui Province. The initial plan for this function focuses on low-price ordering, free delivery, and free packaging [4]. In 2022, the “Pinhaofan” function officially launched in first-tier cities in China such as Guangzhou, Shanghai, and Hangzhou.

The “Pinhaofan” function marks the emergence of a brand-new form of food delivery, takeout group purchase. This function targets users who order at the same restaurants with the same or close delivery addresses. Customers can enjoy the same service as regular-priced meals at a lower price when a certain number of “Pinhaofan” orders are reached. It encourages restaurants to promote their

signature dishes as value-for-money meals, thereby batch production of a single dish to fulfill multiple orders simultaneously. Food delivery riders could deliver bundled meal orders at once. In other words, “Pinhaofan” can significantly enhance efficiency across all Meituan Food Delivery platform stages, from food preparation to delivery. It reflects a keen sense of market demands and Meituan Food Delivery’s innovative capability.

In recent years, many functions similar to “Pinhaofan” have emerged. Nevertheless, there is still a lack of professional and detailed analysis. This study investigates the role of the “Pinhaofan” function in the Meituan Food Delivery platform and explores proper long-term development strategy for the group purchase function business. The study also tries to expand the discussion to the entire industry and analogies to speculate on the pros and cons of group buying in food delivery.

2. Literature Review

2.1. Previous Analysis Related to Food Delivery Business

Inspired by relevant previous papers, this study considers from a more comprehensive perspective, focusing on common issues such as service quality and food safety.

The goals of China’s O2O food delivery companies have changed significantly, from rapidly expanding the market to steadily increasing profits. The main strategy has evolved from simple discounts and subsidies to improving service through high-quality and differentiated functions. Besides, the public has always paid great attention to the food safety of food delivery platforms [5]. Any innovation needs to be analysed dialectically based on complex influences due to changes. A superficial analysis cannot determine whether the “Pinhaofan” function positively benefits customers and the platform.

Another study on last-mile delivery of on-demand food delivery highlighted the importance of delivery fees and order volume to profitability. Free delivery is economically unsustainable, and the average daily profit shows a linear positive correlation with the delivery fees. Batching orders can increase delivery density and positively affect profitability [6]. This means that the low delivery fee of the “Pinhaofan” function cannot be bottomless, and the pricing should be suitable and reasonable to meet both customer expectations and profitability requirements. Therefore, this study also involves the profitability pressure of the “Pinhaofan” function.

2.2. Analytical Method

The SWOT analysis method is widely used in company business analysis. It helps companies comprehensively and systematically evaluate their current status based on internal factors and the external environment [7].

Previous papers on food delivery platforms have applied the SWOT method, providing a basis for this paper’s research methods. For instance, a case study on Swiggy, an online food delivery platform in India, is based on secondary data and SWOT analysis to evaluate its competitors, business model, marketing strategy, and financial performance, dissecting the reasons for its rapid development and the key to its success [8]. In addition, another study that dialectically analyse Malaysian online on-demand delivery applications on last-mile delivery also employed the SWOT method [9]. Meituan Food Delivery is highly similar to the research objectives in these studies regarding the service model. Consequently, they could provide methodological references.

Combining the SWOT analysis with real-life cases, the study examines the internal benefits or losses and the external environment changes brought by the “Pinhaofan” function. Overall operations evaluation can reveal its influence on Meituan Food Delivery.

3. Analysis and Discussion

3.1. Strengths

Data related to the “Pinhaofan” function indicate that Meituan Food Delivery’s aggregation ability matches its profitability. Additional revenue from the increased users results in stronger profitability and the commercial scale shows a sustained growth trend.

3.1.1 Success in “Pinhaofan” function

“Pinhaofan” has consistently received positive feedback, with high consumer recognition and strong demand since its launch. In the first quarter of 2024, the average daily order volume of “Pinhaofan” reached a new high of 5 million orders, accounting for around 10% of the total daily orders last quarter [10]. Moreover, its peak daily order volume achieved a new high of 8 million orders in the second quarter of 2024 [11]. It has become a new factor driving the growth of many small and medium-sized restaurants, helping chain restaurants improve efficiency and attract young consumers. This shows the unique position of the “Pinhaofan” function in Meituan Food Delivery’s business and strong continuous growth in the future.

3.1.2 Increasing platform participants

The number of participants on the Meituan Food Delivery platform has steadily increased, revealing a strong network effect that can support the development of new functions.

In 2023, the annual purchasing users continued to grow, with a steady increase in mid to high-frequency users and their purchase frequency [11]. Approximately 7.45 million food riders were on the platform, showing a rise of 19.4% compared to 2022 [12]. In 2024, the “Pinaofan” function expanded to more cities and significantly increased the number of registered brand merchants [12], further strengthening the network effect. The high attention to the “Pinaofan” function is partly due to substantial platform traffic, in return, the function also attracts customers and consumers, reinforcing Meituan Food Delivery’s network effects. In other words, this innovation directly generates economic benefits and contributes to the overall business growth of Meituan Food Delivery in the long term.

3.2. Weaknesses

The biggest barrier to the “Pinduofan” function is the low average profit caused by low prices, which not only weakens the attractiveness to merchants but also limits Meituan Food Delivery’s pursuit of sustained high growth in revenue.

3.2.1 Reduction in average order value

In 2023, the average order value (AOV) of Meituan Food Delivery showed a downward trend, mainly due to the continuous growth of the proportion of “Pinhaofan” orders. Another influencing reason is that in 2021, many merchants that focused on low-priced meals gradually resumed operations. The most direct influence of the reduction in AOV is that Meituan Food Delivery has been under greater profit pressure. Lower revenue weakens its competitiveness in attracting merchants and its ability to negotiate commission rates for merchants joining the platform.

3.2.2 Revenue growth stasis

Although the “Pinhaofan” function has attracted some consumers with its low prices, the frequency of consumption by consumers would not increase indefinitely due to the limited variety of dishes and fixed restaurants. After the sales boom at the beginning of the function launch, it is difficult to exceed the primary goal of low profit and high sales in the long run, and the total revenue growth of this project may stagnate.

Meituan Food Delivery should invest additional funds and manpower resources to operate and manage the “Pinhaofan” business, involving communication and coordination with merchants, order allocation and tracking, customer service, etc. The cost of running the “Pinhaofan” function will not

be significantly reduced, and it is hard to increase profits. Faced with severely compressed profit margins, it is complicated for Meituan Food Delivery to increase the commission rate. Dissatisfaction among merchants may lead to a systemic collapse, causing plenty of merchants to withdraw from the platform. Similarly, Meituan Food Delivery cannot arbitrarily increase the overall prices, as any changes may affect the purchasing intentions of users with high price sensitivity. Moreover, when consumers become accustomed to low-priced meals, they may develop resistance towards higher-priced regular takeout, which is not conducive to total revenue growth.

3.3. Opportunities

The opportunities that the external environment brings to Meituan Food Delivery are reflected in the growing market and the continuous expansion of the customer base that is highly compatible with the “Pinhaofan” function. Reasonably utilising resources to operate the “Pinhaofan” function can seize expansion opportunities and gain huge potential benefits.

3.3.1 Growing food delivery market

The scale of China’s online catering industry tends to expand continuously. This is mainly reflected in the growth of consumers and online catering sales. As of June 2024, online food delivery application users have reached 553 million, accounting for 50.3% of the total Internet users in China. Compared to December 2023, the number of users has increased by 8.5 million [13]. Online catering sales increased by 29.1% year-on-year, and its proportion in total catering consumption increased to 22.2% [14]. This shows that food delivery is becoming increasingly important in the catering industry and is gradually serving more Chinese consumers.

3.3.2 Highly suitable target consumers: college and university students

The campus population is geographically concentrated with high sensitivity to prices. Their attributes and demands are highly consistent with the combination of group buying and low price.

Abundant surveys demonstrate that college and university students are important takeout consumers. Drawing on data from iMedia Research, in 2021, 40.3% of college and university students in China ordered takeout 5-10 times per month on average and 37% ordered 1-5 times a month. The proportion of students who order more than 10 times monthly is 15.2%. Only 5% of students do not order takeout [15]. Based on an official user survey from Meituan Food Delivery in February 2023, 23% of Generation Z students ordered takeout almost daily and 64% of students ordered every week in the past three months [16]. Beyond the high frequency of orders, the number of on-campus undergraduate and junior college students has been increasing in the past decade, which further hints at potential growing orders. These data suggest that the “Pinhaofan” function has great potential to be promoted on campus.

3.4. Threats

Through the “Pinhaofan” function, Meituan Food Delivery has led a new takeout group buying trend for the industry, which brings competitive advantages and exposes more potential risks. Maximising the competitive advantage brought by innovation and avoiding controversies are key external challenges that Meituan Food Delivery needs to address.

3.4.1 Uncertainty about long-term competitiveness

Value, rareness, imitability, and organisation are four critical indicators to evaluate the potential of a firm’s resources to obtain sustainable competitive advantages [17]. Based on this VRIO analysis framework, the study found that although this function has high economic value and rarity, it performs mediocly in terms of inimitability and organisation. Therefore, “Pinhaofan” can only bring a temporary competitive advantage since it is simple and low-cost for competitors to imitate and operate similar functions.

The biggest competitor, Ele.me., also entered the market early, possessing first-mover advantages and extensive industry experience. Its parent company Alibaba can provide sufficient funding sources

for Ele.me [18]. These advantages enabled Ele.me to respond quickly to market trends and launch “Ele.me group buying” accordingly. This suggests that the takeaway group-buying function may fail to provide a long-term competitive advantage and exacerbate the industry’s internal competition. Further, this may reduce the rate of return on the “Pinhaofan” project, prompting Meituan Food Delivery to consider investing funds and resources in other aspects.

3.4.2 Possibility of law violations

As a new takeaway function, “Pinhaofan” is under stringent external supervision by the public and government. Group purchasing functions rely on high cost-effectiveness to attract orders, which may lead to market participants lowering prices without a bottom line. Such malicious competition behaviour greatly harms the sustainable development of the food delivery industry and companies may be punished for violations of regulations and laws. In 2022, the Hangzhou Municipal Market Supervision Bureau summoned food delivery platforms including Meituan Food Delivery and Ele.me and strictly prohibited catering businesses from engaging in vicious price competition [18]. Low-price products are normally accessed through cost compression, accompanied by potential food safety issues. At the beginning of the official launch of the “Pinhaofan” function, some merchants were exposed to food safety issues, which triggered much discussion on social media. These cases prove that if Meituan Food Delivery fails to carefully review qualifications, properly manage merchants, and guide healthy competition, it will face potential legal problems, damaging its brand reputation and customer loyalty.

4. Future development and suggestion

As an innovative new function, “Pinhaofan” deserves in-depth development and continuous optimisation. Meituan Food Delivery should seize expanding opportunities in a growing market. Specific actions include actively improving the order dispatch system and operation strategies and expanding the business scope of the “Pinhaofan” function to more cities. Meituan Food Delivery should strengthen and optimise the network effect, which helps enhance user loyalty and alleviates the risk of users exiting the platform due to public opinion. Although AOV will continue to decline as the “Pinhaofan” function becomes popular, it can still increase self-exposure and attract more users to ease profit pressure. Furthermore, Meituan Food Delivery should improve its cost control, efficiently supervise merchants, and establish a good brand image.

5. Conclusion

This study has conducted an exhaustive evaluation of Meituan Food Delivery Company and the operation environment after the launch of the “Pinhaofan” function. Data revealed that consumers widely recognise this function and strengthen the network effect. In the face of the constantly growing Chinese food delivery market, as long as Meituan Food Delivery can withstand profit pressure and attach importance to internal supervision, high-quality group buying food delivery services will steadily benefit the platform. These findings not only shed light on the pros and cons of the “Pinhaofan” function but also underline the significance of the group purchasing function in obtaining competitiveness for food delivery platforms. By exploring the real case from China’s biggest food delivery platform, this research provides valuable insights into competitive strategies for the food delivery industry. It is of reference value for enterprises to grasp market trends and respond to competition. From a forward perspective, innovating trends in food delivery service would continue to shape the landscape, presenting both opportunities and challenges. Consumers, practitioners, and policymakers should remain proactive in navigating the market changes. Mutual benefits can be achieved if stakeholders jointly maintain the healthy and sustainable development of the food delivery industry. Besides, future studies could delve into the latest and hottest service forms and promotional strategies of food delivery platforms, thereby enhancing the understanding of business optimisation trends.

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