

Analysis of Food Delivery Market in China: A Case Study of Meituan

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ABSTRACT

It is indisputable food delivery enterprises have a big market potential with the development of science and technology. Meituan is a delivers food magnate that occupies a large market share in China, which is obvious a good case to study. In this paper, we investigated the current business model of Meituan, the method and reform of food delivery, and evaluated the future development in food delivery market. According to our analysis, Meituan will adapt to the development more quickly through a more diversified and comprehensive business scope, as well as the reform of traditional food delivery methods. The market demand for food delivery to enterprises is increasing since people are in pursuit of a more convenient life, i.e., the future will also have a broader market. On this occasion, the development and progress of food service enterprises will provide consumers with better service. These results offer a guideline for food delivery enterprises.

Keywords: *Meituan, Food Delivery, Online Shopping, Food Delivery Method, E-Commerce*

1. INTRODUCTION

With the rapid economic growth and the continuous improvement of residents' income level, the catering industry has developed rapidly and achieved a prosperous scene. As an old saying in China that "people take food for the sky", catering always plays an important role in people's lives. Contemporarily, with the vigorous development of science and technology in China, smart phones have become an important part of people's work and life. People use mobile phones to complete entertainment, consumption, work and study activities. With the development of mobile networks and the improvement of mobile phone intelligence, human beings are more dependent on mobile phones. Moreover, the network of mobile communication technology has evolved from 2G to 5G, and a large number of mobile phone applications and software are coming to the market. Nowadays, daily lives are filled with social networks, shopping websites and online service platforms. By the end of June 2012, the number of Internet users in China had reached 538 million, including 388 million mobile Internet users [1]. With the rapid development of mobile internet represented by 4G and the reduction of traffic charges, users' demand for

smartphones has changed from traditional information reading (e.g., portal websites, newspapers and books, instant messaging, etc.) to online games, video browsing, social interaction, payment and financial management. Users are becoming more and more accustomed to use smartphones as connecting devices between personal real life and the Internet, which makes online and offline integrated as never before.

Artificial intelligence is also rising on this occasion. Although China's artificial intelligence developed late, it gradually got on the right track after the reform and opening up. Nowadays, artificial intelligence has been widely used in medical treatment, entertainment and even daily life, e.g., food delivery service.

Besides, the rapid developments of the internet and smartphones have greatly promoted the growth of online to offline (O2O). O2O is to combine offline business opportunities with the Internet. Since 2013, the O2O e-commerce model has gradually matured. O2O perfectly connects the Internet with the ground store through the online shopping guide machine, which realizes the landing of the Internet, i.e., consumers can enjoy the online preferential price and offline personal service simultaneously. O2O mode is characterized by using

mathematical models to shape user characteristics via offline user identification and data collection. Then, in order to get through the online and offline information fusion, one can mine the vast amount of goods and services information without geographical boundaries on the Internet and make targeted recommendations. Since 2010, it maintained a high-speed growth, where the market size exceeded 166 billion yuan in 2016. In 2017, the market size of the take-away industry exceeded 200 billion, with a growth rate of 23% [2]. Supported by these distinct data, it is obvious that there is great potential for the development of China's take-out market., China's take-away market has great development potential.

According to the theory presented by Su's study [3], China's food delivery industry is ripe for robust growth, led by the changing consumption habits and higher spending power. In 2018, the food distribution platform generated a huge income of over 60 billion yuan, accounting for one-fifth of the national income of the food and beverage industry. Taking Meituan.com as an example, a substantial increase from less than 2% three years ago. In addition, in China's tertiary industry, the industries affected by the rise of the third-party digital platform (e.g., transportation, hotels, etc.) have the fastest development speed [3].

On this basis, Meituan took the express train and became the giant of China's catering distribution software. Meituan was established in 2010, and its business model was O2O group purchase at first. On December 23, 2011, the sales of Meituan in November exceeded 250 million, ranking first in the group buying industry [3]. With the development of the group purchase of Meituan and the continuous renewal of online to offline, Meituan came into being in November 2013.

Meituan is developed based on Meituan group purchase, and Meituan brand provides brand endorsement for Meituan. In recent years, Meituan has advertised "Meituan, deliver everything quickly". With its fast and efficient distribution, Meituan has won wide acclaim, which is the largest trading platform for Chinese food delivery. In the past few years, competition among Chinese food delivery platforms has been fierce. Meituan and Ele.me launched a fierce price war in the Chinese food delivery market, vying for control of the Chinese food delivery market. Unsurprisingly, with Meituan's national recognition and convenient services, Meituan won this commercial battle with a 65% market share [4], which exhibits Meituan's ability in the Chinese food delivery market. Being able to occupy more than half of the market share in a market already has most of the rights. Therefore, we take the Meituan as our case study objective to explore the development of China's food delivery industry.

The sources of data are collected from some websites and professional academic paper. The aim of our paper is to analyze the business model, strategy and future challenge of Meituan, Besides, we try to extend the development of China's Internet and take-away

distribution market to the future prospects based on the case study. The next section illustrates the business background of the Meituan platform. The third section presents details of the operation of Meituan. Conclusion of our study will come in the last section.

2. BACKGROUND - RISE OF THE DIGITAL AGE AND E-COMMERCE MARKET IN CHINA

The impacts of the Internet on human society have been beyond the imagination of the father of the Internet. Today, the Internet has brought such great changes to the whole society. The remarkable feature is that the Internet has turned the whole earth into a global village. Almost all the information in the world can be found on the huge virtual platform of the Internet. Although the Internet is virtual, the carrying things are real. As long as human beings are involved in Internet activities, they have been connected with the human society. China's Internet development has become larger with the development of time, whose trend is to gradually diversify and combine the Internet with various industries on the spot. In addition, China's logistics industry is in a golden development opportunity period with steady and wonderful progress. E-commerce logistics continues to grow at a high speed, which expected to enter the era of daily average billion. E-commerce market and logistics market are interdependent and promote each other. With the rapid growth of the e-commerce market, China's e-commerce logistics service capability has been further improved. With the growth of the express delivery market, many express delivery companies have increased their investment in scientific research and transformed into technology companies. The research and studies have been carried out for unmanned warehouses, unmanned vehicles, unmanned aerial vehicles and other technologies, which lead to rapid development. Besides, the effect of big data technology on the upgrading and transformation of the express delivery industry has become increasingly obvious [5]. Since the 21st century, the rise of e-commerce has driven the overall upgrading and change of retail industry. Facing individual consumers, merchants advocate taking consumers as the central link and relying on new technologies (e.g., big data and artificial intelligence) to promote the transformation and upgrading of products in production, circulation and sales. In addition, it continuously improves the retail structure and ecological circle. Internet users' stickiness to online consumption is increasing, and online consumption has become their habit. Compared with other Internet industries, Chinese e-commerce users are increasingly dependent on online consumption. Overall, online consumption and e-commerce is normally in China, and the derived third-party payment industry will keep pace with the market and develop into the infrastructure of China's economy

in the new era. In such a situation, online payment delivery apps such as Meituan are rapidly emerging.

3. RESULTS AND DISCUSSION

Food delivery industry is an industry born under the influence of the era of scientific and technological innovation. Its huge influence on the society and the whole catering industry makes it one of the representatives of enterprises in the new era. In the world, food delivery enterprises have a large market in China. As a Chinese saying goes, "Food is the most important thing for the people". The rich and diverse cuisines of China and the unique requirement of the Chinese people for diversified food have all promoted the development of food delivery enterprises in the Chinese market. Meituan is a successful enterprise born under the promotion of this market demand. We will understand the current Meituan and its future development from three aspects: the current business model of Meituan, the way and progress of food delivery, and the future market of Meituan.

3.1. Business Model of Meituan

The background information, business scope and marketing strategy of Meituan will be introduced in this subsection. As a giant of online take-out and food delivery in China, Meituan has made its way to success and victory step by step. Specifically, there are the development goals and corresponding implementation schemes of the Meituan Company in China. Besides, the market share and market value of Meituan are also discussed. Meituan is undoubtedly one of the fastest-growing enterprises in China's Internet industry in recent years. In just eight years, it has become the largest e-commerce platform for local life service.

Meituan Company was founded on March 4th, 2010, keeping the concept of consumers first in mind. In this case, Meituan Company has won a good reputation in the industry and can be said to be the best group buying enterprise. Meituan group buying client browses smoothly and operates simply. Additionally, it has done a series of functions and experiences for mobile terminals, providing consumers with excellent services at ultra-low prices. Start with group purchase, the Meituan Company led by Wang Xing is strong in execution and pioneering. It has successively expanded its territory in various fields (e.g., catering, hotel reservation, travel, movie ticketing, take-out, travel, and fresh retail). The business development of Meituan seems to have no boundaries; At the same time, the outside world joked that half of the Internet corporations are the enemy of Meituan Company. The mission of Meituan Company is to help everyone eat better and live better. As the leading e-commerce platform of life service in China, the company has apps familiar to consumers (e.g., Meituan,

Public Comment and Meituan Takeaway). At present, Meituan focuses on Food + Platform, building a multi-level scientific and technological service platform from the demand side to the supply side in the life service industry with "eating" as the core. Meanwhile, Meituan is making efforts to build itself into a social enterprise. It hopes to build a smart city and create a better life via in-depth cooperation with party and government departments, universities and research institutes, mainstream media, public welfare organizations and ecological partners.

Wang Xing defines Meituan as a borderless company with user service as the center, and all businesses are extended and migrated according to the needs of users. Although the Meituan Company has the position of the first entrance of local life service e-commerce today, almost all its businesses have no first-Mover advantage at present. Whereas, its core business has gradually turned itself from a follower to a leader through several beautiful battles. Meituan Company looks prosperous generally, but it is not without hidden worries. The new business represented by travel, fresh and new retail and catering supply chain is always a big burden for the Meituan Company. These new businesses, which are constantly being explored, will continuously consume the living resources of the Meituan Company, and even cause a heavy burden on the sustainable profit of Meituan Company. After the break and short-term decline after the listing, the third pioneering project after Meituan Review Network and Fanbu. After the stock price of 03690.HK (hereinafter referred to as "Meituan"), which is "a thousand groups left with Meituan", Meituan has become the first platform for group buying with more than 60% market share. Going higher, from the lowest point of HK\$ share (40.25%) on January 3, 2019. In February 2012, Meituan launched Meituan Film, which was renamed Lu Sheng in January 2013. It reached the highest point of HK\$ 116/share on January 14, 2020, with the highest peak of "Cat's Eye Movie", which became the largest online movie ticketing platform in China in the future. The amplitude is 188%. In 2013, Meituan Hotel and Meituan Takeaway started successively with Ctrip, respectively. On February 4, 2020, the total market value of Meituan was 587.2 billion [6]. Meituan is undoubtedly one of the fastest growing enterprises in China's Internet industry in recent years. In just 8 years, it has become the largest e-commerce platform for local life services.

3.2 Method of Food Delivered

In this subsection, the way we order takeout and the method of food delivery will be demonstrated. It mainly explains that most of the traditional ways of ordering takeout will be completely replaced by the mobile APP of takeout aggregator. Moreover, it puts forward the possibility of injecting fresh blood into the takeout market by the way of robot delivery.

Convenient food delivery services are one of the many new industries that have emerged on the Internet. Food delivery occupies a certain market share in the global food market. China's food delivery apps have the largest customer base, covering 650 million people. China's food delivery app revenue exceeded US \$51.5 billion in 2020 and is expected to reach US \$100 billion by 2025 [7]. The huge size of the market makes China a world leader in food delivery. Meituan is one of the largest food delivery apps in China. As the market matures, Meituan has the greatest potential to enter the global market and change the balance in the West. Food delivery has a very considerable market prospect, and the next two food delivery methods can be implementable and will also further promote the development of Meituan.

So far, ordering food offline and taking away from the restaurant still occupies a large market share, followed by ordering food by dialing the restaurant and then being delivered by the restaurant [8]. The last is ordering through mobile food delivery apps, and the two main ones are food aggregator apps (e.g., Meituan or Uber Eats), as well as business-owned food delivery apps (e.g., Starbucks and McDonald's). Food delivery already has a mature market in most countries. In the best scenario, one will see mobile apps in the form of food aggregators replace all other food delivery methods. Mobile applications like Meituan route orders received from customers to restaurants, where they are prepared and then delivered to Meituan's own logistics network to deliver the food with maximum transparency and convenience. In the whole process of food delivery, Meituan Takeout can locate the specific location and estimated delivery time of the delivery man. A good solution to the business without their own distribution system or irresponsible distribution of food and other problems. It is possible to replace other traditional food ordering methods with this type of food delivery process and methods.

With the development of technology and the increase of market demand, robots replacing artificial food delivery will not only be an idea. The first is drone delivery. Drones have become sophisticated enough to scan the barcodes on packaging and know where to deliver items. And in this case, the greenhouse gas emissions of drone delivery are much lower than those of conventional delivery vehicles [9]. At the same time, in most of the more prosperous cities and the commercial areas easy to traffic jams, this method of food distribution will further reduce the time of food distribution, to ensure the freshness of food as much as possible. Then there is robot delivery, with several American states allowing delivery robots to drive on sidewalks [10]. Influenced by the epidemic, the demand for food delivery to the market has greatly increased, the zero-contact method of food delivery should be promoted and applied and robotic delivery will enter a completely contactless era. The

robot's direct location of the delivery address is more accurate and can save the need for manpower. Most of the bad reviews on Meituan are from customers who are dissatisfied with the delivery staff's attitude or delivery time, which can be avoided by robot delivery. We can first selectively invest in several cities and try the business model of robot delivery.

3.3. Prospect Analysis of Meituan

The following paragraphs explain the future development of Meituan, a brief description of the robot delivery service, and the big data management and analysis to prove that Meituan has good future prospects.

Meituan's prospects for development can be said to have unlimited possibilities. Today is the era of rapid development of modern technology. People's acceptance of online consumption cannot be said to be 100%, but we believe that more than 60% of people need to use mobile phones and computers every day. As the author mentioned in the article about food delivery market's different in 5 years, "But launching a delivery offering is no easy feat, experts say, and restaurants and third-party providers are working together to meet the needs better of a growing on-demand economy" [11]. This is exactly the significance of Meituan's existence and popularization to the people of the whole country and even the world. It is indeed not an easy task for Meituan to build a takeaway service platform. Nevertheless, in order to meet the increasing demands of people, Meituan should do it "anytime, anywhere". No matter when people need a meal even ordered at noon in an office building, Meituan should deliver it to the guests in time. In the future, Meituan should always strictly require its own corporate platform. After the end of the service, it can receive five-star praise service feedback on the mobile phone or on the web.

In the idealized situation in the future, funds and social supports are ought to be obtained from investors and management departments. Robots can fully replace manual services to complete the work of takeaway delivery. As mentioned in the publication of Robotics Online Marketing Team, "Companies are investing in delivery bots because those living in cities expect immediate or scheduled delivery for almost everything" [12]. The robot will have a dedicated channel to move, and scan in both directions when crossing a road or crossing a crosswalk. The Meituan app will be still utilized to see the working status of their food delivery robots in real time.

With big data management in the method of food delivery, Meituan will lead most of China's food delivery service market. According to Ref. [13], "Meituan strategically decided not to monetize the food delivery business, rather to focus on its connection with other low-frequency yet high-margin segments". This platform will

continuously optimize the quality of the food delivery service industry and improve itself in accordance with the needs of customers. We believe that Meituan will have unlimited prospects for development.

4. CONCLUSION

In summary, we systematically investigate the case of Meituan to analyze the progress and prospects for China food delivery market. Specifically, we first introduce the E-commerce background that stimulates the developments of food delivery companies. Subsequently, the business model and food delivery schemes of Meituan are discussed separately. Afterwards, the prospect analysis is presented for Meituan. Based on our results, Meituan become the market leader owing to the appropriate strategies (e.g., “consumer first”, high-tech driven delivery, etc.). For the catering industry, the state-of-art applications of software can greatly reduce costs, which are considered an investment. Nowadays, consumers are more and more accepting of online consumption, and Meituan will undoubtedly become the first choice when ordering food in the future. China’s food delivery market and catering industry will also develop better and better. These results summary the recent progress of the market and pave a path for future development.

REFERENCES

- [1] Jin Wu. (2014). Analysis on the Development of online to offline under the Wave of Mobile Internet. *Market Weekly*, 05:58-59 (Chinese). Available at: <https://www.ixueshu.com/document/466acba9d1aca3e97f72e20b4996c593318947a18e7f9386.html>
- [2] Meisong Wang. (2018). Analysis on the Development Prospect of Catering Takeaway Industry in the Internet Era. *Times Finance*, 699(06):298 (Chinese). Available at: <https://www.ixueshu.com/document/22cde1e97521595becdf0b6225f8299318947a18e7f9386.html>
- [3] Renhua Su. (2017). Analysis on the Profit Model of O2O Platform —— Taking Meituan.com as an Example. [Online] Retrieved. April, 6, 2021, from <https://www.ixueshu.com/document/10a911bfed7419cee677e0c6e5388da8318947a18e7f9386.html>
- [4] Chen, Yujie. (2020). “The Explosion of China’s Food Delivery Industry.” *Bot Populi*, <https://botpopuli.net/the-explosion-of-chinas-food-delivery-industry>
- [5] Weirou, Chen. (2018). Cooperation and win-win to create inclusive logistics services in the digital age. [Online] Retrieved April,5, 2021, from <https://www.ixueshu.com/document/22cde1e97521595b62011a6ca152d39b318947a18e7f9386.html>
- [6] Longfei, Su. (2020). How did Meituan leap into the third largest Internet company with market value? [Online] Retrieved April, 5, 2021, from <https://www.ixueshu.com/document/2e1c32172b661dd8e06f5676004866a1318947a18e7f9386.html>
- [7] David Curry. (2021). “Food Delivery App Revenue and Usage Statistics.” *Business of Apps*, 15 Feb. 2021, www.businessofapps.com/data/food-delivery-app-market/.
- [8] Hirschberg, Carsten, et al. (2019). “The Changing Market for Food Delivery.” *McKinsey & Company*, McKinsey & Company, www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-changing-market-for-food-delivery.
- [9] Melissa Maintin-Shepard, Rapporteur. (2020). “Read ‘Innovations in the Food System: Exploring the Future of Food: Proceedings of a Workshop’ at NAP.edu.” *National Academies Press: OpenBook*, www.nap.edu/read/25523/chapter/6#45.
- [10] Palmer, Maija. (2021). “Europe’s 6-Wheeled Delivery Robots Begin Invasion of US Campuses.” *Sifted*, 4 Sept. 2019, <https://sifted.eu/articles/starship-robot-delivery/>
- [11] Littman, Julie. (2019). “Why the Delivery Market Will Look Different in 5 Years.” *Restaurant Dive*, 28 Jan. 2019. www.restaurantdive.com/news/why-the-delivery-market-will-look-different-in-5-years/546936/
- [12] Robotics Online Marketing Team. (2019). “Food Delivery Robots Take to the Streets.” *Robotics Online*, www.robotics.org/blog-article.cfm/Food-Delivery-Robots-Take-to-the-Streets/212
- [13] Future Insight. (2020). Meituan: A Ten-Year Journey to the Leading Super APP for Local Life Services in China, www.fhub.io/blog/meituan-a-ten-year-journey-to-the-leading-super-app-for-local-life-services.