The Present Situation of Online Food Delivery Services in China and its "Growing Pains"

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Abstract: The rapid development of online food delivery services has given consumers more choices in their lives. It is also supporting more opportunities for the platforms and businesses. To meet the needs of consumers, the platform and businesses also improve the dining experience of consumers through various ways to promote the increase of their order quantity. However, the "growing pains" in the process of rapid development are also accompanied and restrict the sustainable development of this industry, mainly including food safety problems, pollution and the platform's social responsibilities. Based on the current development situation, this paper describes these problems and puts forward suggestions from the social, platform and consumer levels.

Keywords: Online food delivery service, food safety, pollution, social responsibility

Paper type: Descriptive paper

Online Food Delivery Services in China

The online food delivery platform is a typical online-to-offline (O2O) industry. There are three main roles in this platform: restaurant, delivery clerk and customer. The consumer places an order on the platform, and the restaurant makes the corresponding food according to the consumer's needs, and then the distributor delivers the food from the restaurant to the consumer. This industry has attracted more and more consumers' attention and has gradually become one of the lifestyles of many consumers (Liu & Chen, 2020; Song, Zhang, Duan, & Xu, 2018). According to the latest statistics, the number of users of online food delivery services in China has exceeded 500 million by 2021(CNNIC, 2022), and this figure accounts for more than 1/3 of China's total population. Besides, according to their statistics, the total number of orders for online food delivery services in China in 2021 exceeded 20 billion (Chyxx, 2022). The average order quantity of each user in a year is about 40 times. This group of figures shows that

the online food delivery service has been accepted by many consumers and is gradually replacing many people's original habit of getting food.

However, behind the rapid development, some "growing pains" have gradually emerged. Behind the increasing order volume of online food delivery services is the frequent occurrence of food safety problems, the increasing number of disposable products consumed has caused more serious pressure on the environment, and the rights of practitioners cannot be guaranteed.

Considering this, this paper explains the reasons for the frequent occurrence of food safety problems behind the rapid development of online food delivery services, as well as the new pollution pressure on the environment, and the specific performance of the employees' rights that cannot be guaranteed. Some improvement directions are proposed for these problems.

Factors affecting the growing demand for choosing online food delivery services to meet the dining need

According to the data given, the main consumer group of online food delivery services is 18-34 years old globally (Statista, 2022), also similarly the main consumer group of online food delivery services in China is the 18-30 years old user group known as the younger generation (Chyxx, 2022), this figure is also familiar with the global. In other words, these consumers were born from 1992 to 2004, while China's Internet industry was officially connected to the Internet in 1994, and achieved rapid commercial development around 2001, followed by the development of social attributes, the rapid development of instant messaging, and now the deep integration of the Internet and various industries (Xiang, 2014). This development process is highly synchronized with the growth experience of the young generation consumer group. The reasons for doing so can be categorized as following six ways:

- Most people in this group are not married, so they may face living alone in the process of cooking may lack help from others, so it requires more energy. Therefore, many young people who live alone will choose to solve their dining problems through online food delivery services.
- Because many kitchen appliances have the problem of minimum capacity, the minimum capacity usually exceeds one person's meal quantity. At the same time, if a single person cooks too many dishes, it is easy to cause the problem of eating too much, which will lead to food waste.
- Most young people work or study at a fast pace and overtime is common, so they may choose to skip the cooking process to make more time for themselves to rest or work (Limin, 2016).
- The online food delivery service can provide them with more choices, achieve a small number of diverse dining experiences, and enable them to have a higher quality dining experience.
- Being affected by the Covid-19 epidemic, some policy restrictions may lead to difficulties for some families to obtain food, and in some cases, temporary activity restrictions may result in a long period of food singleness. Therefore,

online food delivery services can provide consumers with more choices and a better dining experience (Gavilan, Balderas-Cejudo, Fernández-Lores, & Martinez-Navarro, 2021; Zwanka & Buff, 2020).

- The last but important factor is that to attract more new users and improve the loyalty of current users, the online food delivery service platform provides many coupons to increase the number of users and user stickiness (Lai & Jin, 2018). This has also led to the fact that in some cases, the price of online food delivery service platforms is sometimes cheaper than dining in the restaurant while saving consumers the time to wait after ordering in the restaurant.

Continuous expansion of service content

The initial service scope of online food delivery service in China is to deliver food from offline restaurants to consumers through the delivery man. However, with the continuous expansion of the user group, more and more businesses that do not have offline restaurants but have obtained business licenses to focus on operating online food delivery service platforms begin to join this market. There has also been a great expansion in the types of goods, from the distribution of food only. However, with the increasing demand of consumers, the number of merchants settling in has increased successively to supermarkets, pharmacies, flower shops, etc. Since some merchants have not settled in the platform, but consumers want to buy their goods, some platforms have integrated into the local delivery service. The delivery man helps the consumer to go to the store to buy goods and bring them to the consumer. To meet the needs of consumers as much as possible. In a conclusion, the online food delivery service platform has gradually become an O2O comprehensive life service platform.

Problems under the Background of Rapid Development

Food safety problems

Food safety has always been the most concerning problem for consumers because it directly affects their health of consumers. Especially in the context of the COVID-19 epidemic, consumers have higher requirements for food safety. The researcher divides consumers' concerns about food safety into three aspects. The first aspect is the safety of the food production process. The online food delivery service industry is also facing the problem of food safety, just like consumers are eating in restaurants. Specifically, consumers may worry about whether the raw material of food is purchased from qualified channels, whether the raw materials have exceeded the validity date before cooking, whether the chefs have relevant qualifications such as a health certificate, whether the cooking kitchen is clean, tidy and all cooking utensils are regularly cleaned and disinfected(Huang, 2022; Li, 2022). In the context of the COVID-19 epidemic, consumers may also put forward more detailed requirements for the food cooking process, such as whether the chef pays attention to their hand hygiene and wash their hands regularly, etc. The second aspect is whether the containers used are made of safe materials. Plastic tableware may be the material that consumers are most likely to worry

about. The possible harm to people's health caused by microplastic pollution caused by plastic packaging has not been confirmed yet (Deng et al., 2022). However, some businesses use poor plastic lunch boxes which may contain toxic ingredients to reduce costs. Therefore, the material of food containers will also become an important factor affecting food safety and consumer health. The third aspect is the delivery man, and it all depends on the quality and personal habits of the delivery man. If the former two aspects can be supervised by others, then this part is more difficult to supervise. Some news reports have reported that the delivery personnel ate the food of consumers secretly during the delivery. At the same time, during the delivery process, some delivery man may have irregular operations, which temporarily leave the sight of delivery man. In addition, in the season with high temperature, some food may have gone bad before being delivered to consumers due to long delivery time, which may have some negative impacts on consumers' health.

Pollution
Pollution is one of the biggest contradictions between the development of online food delivery services and the sustainable development of the environment. Plastic products play a very important role in the online food delivery service industry because of their low price and ease of use. However, Chinese consumers will use nearly 1.6 million tons of plastic waste in 2020 and this problem does not seem to have been solved and may continue to develop (Zhang & Wen, 2022). Because consumers' demands are more diversified, to improve consumers' dining experience, many businesses may separate different foods into different lunch boxes, which may require more plastic lunch boxes. Meanwhile, businesses may also put more tableware to facilitate consumers' use and to ensure the stability of the packaging, many businesses choose to use more than one bag to hold lunch boxes, to reduce the problem of food spillage (BJNews, 2022; X. Y. Zhao et al., 2021). Therefore, the online food delivery service industry is moving towards a more refined and high-quality development, but also produces more and more plastic garbage. This used tableware is difficult to be recycled and reused, and many plastic lunch boxes are difficult to be naturally degraded by the environment, which has caused serious environmental pollution (Guanghan et al., 2018).

The rights of delivery men and CSR
Eleme and Meituan are two of the largest platforms in China. Meanwhile, some local platforms also occupy some market shares. The growing market size has led to fierce competition among various service platforms. From the convenience of payment methods to customized ordering experiences based on big data, the service platform has attached great importance to the consumer's experience (Madani & Alshraideh, 2021). But a key step is that the efficiency of delivery personnel and delivery time are directly related to the consumer's experience. Some computer algorithm research (Guo, Li, Luo, & Zhang, 2021; D. Z. Zhao & Yang, 2018) has proposed data algorithms to improve efficiency and reduce delivery time. The fierce competition between platforms will also be passed on to the deliverer. The most direct embodiment is that the delivery time for the delivery personnel is continuously shortened, and the delivery man is required to

work on multiple tasks at the same time. This has led to traffic accidents caused by some delivery men not complying with the traffic rules rushing to the red light, driving in the opposite direction, riding too fast, viewing the order information on the phone in real-time and distracting their attention, and work for a long time, these factors are faced by the deliverer every day, and the probability of causing traffic accidents is high (Police, 2022). And the delivery man may face various unexpected problems in the process of delivering process, such as too many red lights, traffic jams, motorcycle failures etc. The algorithm only requires the delivery man to deliver the food to the consumers at the fastest speed, but it ignores various problems that the delivery man may face on the road. Hou (2022) mentioned that once the delivery time is later than the expected time, or there is a consumer complaint, they will be fined. Besides, this kind of management mechanism as almost harsh on the delivery man, and the time management was accurate to seconds. Furthermore, in Sun (2022) research, they pointed out that (1) the labour relationship between the platform and the delivery man is very complex, but to reduce the employment cost and avoid the potential employment risk, the platform usually does not sign a labour contract with the delivery man, which leads to their low social insurance payment rate, resulting in their inability to enjoy social insurance services. (2) Because of the low threshold of work, single content, and the lack of necessary training on the platform, the space for career development for most of delivery man is limited. (3) It is difficult to guarantee the social status of couriers, the platform lacks care for them, and the requirements of consumers are constantly refined, leading to a growing sense of alienation between many delivery men and their working cities.

Future Improvement Directions

Many consumers are enjoying the convenience brought to their lives by online food delivery services. At the same time, some problems mentioned earlier in this article also need to be solved urgently. Therefore, the researchers put forward some suggestions for the online food delivery service platform from the perspectives of society, platform and consumers.

From the societal level, the improvement of the legal system and industry standards will greatly promote the continuous improvement of the online food delivery industry. Firstly, for food safety issues, the management department should improve the audit standards for the access qualification of new businesses, increase the punishment for illegal acts, as well as strengthen the test frequency of foods on sale (Huang, 2022), to find possible problems promptly and minimize the damage to consumers' health. Secondly, the government and some environmental protection organizations should also do a good job of publicity and training for employees and consumers, reduce the use of disposable tableware and plastic lunch boxes, and promote self-prepared tableware and simple packaging. Thirdly, government departments should constantly strengthen the protection of the legal rights of delivery men, and improve the basic social security for delivery men in this profession. At the same time, from the aspect of

occupational safety, set an efficient but "safe" delivery time limit for the delivery man, and adopt a reasonable way to assess the delivery man's performance, instead of relying solely on algorithms and setting unrealistic assessment methods.

For the service platforms, In the existing research, more suggestions are given to the online food delivery service platform in terms of motivation and satisfaction and other variables from the perspective of customer (i.e., (Hong, Ya'Nan, & Wang, 2016; Ito, Inoue, & Higuchi, 2022; Madani & Alshraideh, 2021)). However, few studies have been conducted from the perspective of the social responsibility of online food delivery service platforms. Thus, this study hopes to give online food delivery enterprises some directions for future improvement from the perspective of platform social responsibility. First, the platform needs to strengthen the supervision of food safety issues not only in raw material procurement, cooking and delivery but in more ways. For example, some cities have begun to supervise the food safety and health of the businesses during the meal-taking process by inviting delivery men as supervisors (Guangmingwang, 2022). However, the online food delivery service platform still needs to explore more ways to strengthen the management of food safety in the process of food production and delivery. Secondly, the platform should actively undertake the social responsibility of environmentally sustainable development. Specifically, the platform needs to strengthen the cultivation of environmental protection awareness of businesses, and also provide and encourage consumers with low-carbon and environment-friendly dining options, to reduce the impact and damage to the environment. Thirdly, the online service platform should actively fulfil its responsibilities to employees, actively improve the salary and social security system, and develop a sustainable career development path for delivery men. Furthermore, when improving the delivery men's work efficiency, the platform also needs to consider more about the delivery men's work experience and their actual work efficiency and avoid setting KPIs for delivery men only through big data algorithms, while ignoring the actual and cold assessment methods. Delivery men as a service-providing group, the platform also need to care more about their life difficulties, provide them with warm help within its power, and constantly improve the professional experience and social status of the delivery man.

From the perspective of the consumer. Consumers should not only enjoy the convenience brought by online food delivery services, but also actively reduce the use of disposable tableware, and order according to their actual demands during the meal ordering process to avoid waste. To reduce the pressure on the environment. In addition, consumers need to give more patience and care to the delivery man while the waiting process and fully understand non-malicious delivery lateness or other problems.

Conclusion

The root cause of many problems caused by the rapid development of online food delivery services is that this new industry has ignored many existing problems in traditional industries in the development process. The issues of food safety, pollution, and the protection of the rights of practitioners mentioned in this paper have been

widely and frequently mentioned in many traditional industries in the past, but some valuable experiences of traditional industry development has been ignored in the process of new industry development. On the premise of expecting rapid development and user scale growth, the platform should also consider the current problems facing the industry from a dimensional perspective, and analyze the problems from multiple dimensions of society, platform self, and consumers, In order to better help the platform enterprises long-term and sustainable development.

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