An Analysis of College Students' Satisfaction with Online Food Delivery (OFD)

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Abstract: With the growth of e-commerce, the global online food delivery (OFD) industry is expanding rapidly. The spread of the COVID-19 pandemic, in particular, has accelerated the popularity of OFD. As the OFD industry is low-margin, capturing market share is crucial for OFD platforms. At the same time, as the primary users of OFD, college students provide a significant reference for enhancing the overall service quality of online meal delivery. The X food delivery platform in China is used as an example in this study, which employs qualitative research methodologies to investigate college students' satisfaction with food delivery, using an interview and interpretive paradigm to collect and analyze the data. This study focuses on five factors of college students' satisfaction with food delivery, namely service quality, delivery quality, timeliness, completeness, and safety. The findings will serve as a suggestion for raising consumer satisfaction and improving the standard of OFD services.

1. Introduction

The rapid development of the mobile Internet, and in particular the emergence and popularity of e-commerce, has led to the rapid growth of the global online food delivery (OFD) industry. Today, the global OFD market is worth more than US$150 billion, more than tripling since 2017[1], and in the second half of 2008, OFD began to emerge in China under the influence of policies to expand domestic demand and boost consumption. At the same time, the advent of 5G networks has made it possible for people to order takeaway food online from mobile phones, tablets, computers, and other mobile smart devices anywhere and anytime. In addition, the emergence of the "home" phenomenon has made OFD a popular way of life for university students. The 49th statistical report on China's internet development released by China Internet Network Information Center shows that China's internet penetration rate reached 73.0% as of December 2021. At the same time, OFD users in China have also been climbing, having grown to 544 million, accounting for 52.7% of Internet users overall.

Globally, OFD is becoming increasingly popular among young people, and this trend is particularly evident in China[2]. According to research, in 2021, 40.3% of college students in China order OFD five to ten times per month; 37% order OFD 1-5 times per month; and 15% order OFD more than ten times per month; Only 5% of college students do not order OFD at all. Only 5% of college students do not order OFD at all. The college student consumer group accounts for a

significant share of the OFD market. This suggests that, as one of the main consumers of the OFD industry, the analysis of college students' satisfaction is particularly important for the development of the industry.

2. Background

A study in 2020 revealed that the rise of OFD is a global trend, with numerous nations having at least one significant OFD platform. China has the number one market share in the OFD industry globally, followed by the United States, with growing markets such as India and Brazil showing the strong performance[2]. People's lifestyles and purchasing patterns have undergone significant changes as a result of the COVID-19 pandemic, which has increased the appeal of OFD.

China's OFD market size reached 278.72 billion yuan in 2019, an increase of 14.70% compared to 2018, and will grow by 13.20% market size to 315.51 billion yuan in 2020 compared to 2019. Among them, solitary groups, college students, and office workers are more likely to order OFD[3]. At present, there are two main OFD platforms in China, namely X and Y. This paper will use X as the research object.

The growing market size and the continuous growth of OFD users have stimulated various takeaway catering platforms to seek development by capturing market share. In the process of rapid development, several problems have come to light, such as low market supervision, safety hazards in food safety, mishandling of after-sales issues in OFD, inconsistent quality of goods online and offline, and other issues affecting consumer experience. Consider X as an illustration. It has experienced tremendous growth in recent years, and in order to achieve better health and sustainable development, it is essential to increase customer satisfaction and maintain this consumer segment of college students' market share.

2.1 Problem statement

With the rapid development of e-commerce, OFD has become an increasingly popular choice for consumers. However, various problems have emerged that affect the consumer experience. The Black Cat complaint platform shows that the number of OFD complaints continues to grow, reaching over 140,000 in 2021, with food quality issues and quality of after-sales service being the most problematic aspects. In particular, young people under 30 years old accounted for 76% of the total number of complaints, and those with a college degree or above accounted for more than 80%.

How to improve satisfaction with OFD has then become a necessary factor for OFD platforms and caterers to survive in this fierce competition. Literature in this area shows that younger single people are more likely to use OFD software. Studying the satisfaction of consumer groups is crucial for the development of the industry and for OFD platforms to capture market share. However, few articles have been written specifically on the consumer behaviour of college students, one of the main consumer groups, and their satisfaction with their OFD experience. In this paper, we will study the OFD consumption behaviour of college students as the main focus.

2.2 Significance of the study

The spread of the COVID-19 pandemic has hit the restaurant industry in various countries hard, and restaurant operators who want to survive in the harsh environment often need to seek opportunities to increase their profits and market share[4]. By drawing on the characteristics of OFD, and the research results of Chinese and international scholars on the factors affecting customer satisfaction, this paper redefines a new dimension of customer satisfaction applicable to X's OFD platform and establishes a suitable evaluation index system for X's delivery. In this way, the degree

of influence of different indicators on customer satisfaction with X's OFD is revealed.

This study not only tests the applicability of the previous scholars' research results to the consumer group of college students but also eventually expands the study of customer satisfaction and provides reference and reference for the study of college students' satisfaction with OFD, which has theoretical significance. At the same time, it helps the X platform to identify the current development problems and produce effective countermeasures for these problems. This is of practical significance to the healthy development of the enterprise, improving its core competitiveness and expanding its market share.

3. Literature Review

With the explosive growth of the global OFD industry, scholars have gradually been conducting more research on OFD satisfaction. In this chapter, the research paradigm of OFD satisfaction will be introduced first. This study uses the interpretive research paradigm of qualitative research methods. Secondly, theories and models related to OFD satisfaction will be introduced. Research on OFD satisfaction can be divided into two main areas: the first one is the study of satisfaction influencing factors, and the second is the construction of satisfaction models. Finally, a comparative analysis of currently existing research will be presented, including a comparative analysis between studies over time and a comparative analysis between different countries.

3.1 Theory and model related to the study

In the early years, customer satisfaction was mainly used in the context of marketing. The concept of customer satisfaction was first introduced by Cardozo[5], who argued that customer satisfaction was the state of feeling concerning whether a customer was satisfied with a service or product compared to his or her expectations.

Woodside et al. (1989) also define customer satisfaction as a post-consumer evaluation, which is also known as the customer's post-purchase liking or the customer's overall consumer perception based on the previous consumer experience[6]. American academic Fornell et al. (1996) created the ACSI model, which consists of six factors: customer loyalty, customer complaints, customer satisfaction, customer perceived value, customer perceived quality, and customer expectations[7].

According to scholars Zhong et al. (2014), customer satisfaction is a subjective emotional response that occurs when customers compare a product or service with a pre-desired product or service based on their previous consumption experience[8]. Wang et al. (2014) constructed a model of customer satisfaction from a psychological perspective, taking into account customer price sensitivity, and the results of the study showed that if customers experience a lower price after purchase than the expected price before purchase, then customer satisfaction increases and then decreases as the sales price increases[9]. Bao et al. (2014) concluded that the six factors affecting platform-based online retail customer satisfaction are information quality, price advantage, outlet design, product quality, customer service quality, and order fulfilment. Through an empirical study, they concluded that price advantage and product quality have a significant positive effect on platform-based online retail customer satisfaction[10].

3.2 Relevant past to current studies

Chinese scholars Yu and Liu (2015) analysed seven factors that influence OFD ordering customer satisfaction, namely brand image, customer access, service quality, marketing activities, payment features, website information, and platform ease-of-use, and quantified these factors, concluding that service quality was the factor that influenced the highest degree of food delivery

ordering customer satisfaction[11]. Jiang (2017) explored the relationship between user satisfaction and willingness to repeat consumption, using the empirical analysis of the Eleme platform to reach the following conclusions[12]. The higher the satisfaction of OFD users, the higher their willingness to repeat consumption and the four factors that influence OFD user satisfaction include convenience, service, price, and food quality. Wang et al. (2022) compared satisfaction levels between university canteens and OFD and concluded that food delivery offers a wider choice of dishes and a better experience[13]. However, the hygienic conditions of OFD are not up to the level of school canteens, so OFD businesses need to research to change the hygienic conditions of their meals.

4. Methodology

This chapter provides a detailed discussion of the methodology, including research design, participants, data collection and analysis, information quality, and ethical considerations. This paper adopts the interpretive paradigm used in qualitative surveys. The investigator, as the instrument of information collection and analysis, will be used for data collection in the form of semi-structured interviews, and the data will be analysed using ATLAS. ti software. Six participants will be interviewed for this survey: two male students, two female students, one food delivery worker, and one restaurant operator who is an online food platform entrant.

Based on the existing domestic and international literature on customer satisfaction and food delivery satisfaction, and concerning the analysis of domestic scholars on the factors influencing customer satisfaction in online shopping, online retailing, and food delivery, combining the characteristics of X's food delivery platform itself, researcher extracted five factors of college students' satisfaction with the delivery of X's food delivery platform, namely service quality, delivery quality, timeliness, completeness, and safety.

4.1 Participant and setting

In-depth interviews are conducted to identify shared perceptions of particular groups. The participant sample needs to be uniform and highly pertinent to the study's topics. Participants should be selected so that the data collected is rich and in-depth to address the research questions[14].

The main participants in this research paper are four college students who can think independently and respond authentically and effectively to issues in OFD at university. My brother is a college student, so I chose him as the first participant and used a snowball approach to find three other eligible college students. The four college students consisted of two male and two female students, and they were in different grades. The other two participants were one food delivery worker who regularly delivers food to college students and one restaurant operator who is part of a food delivery platform. This allowed the phenomenon to be analysed from different perspectives, making the data collected more comprehensive.

4.2 Data collection technique

For this study, non-probability sampling, which is more suitable for qualitative research, will be used in the selection of participants for the sample. A typical and convenient target sample will be selected for purposeful sampling. One college student in my family will be identified as the first participant, and then the number of participants will be expanded using a snowballing approach. Each participant will meet the developed sampling criteria.

Once the participants have been identified, the investigator will develop an interview protocol and conduct face-to-face semi-structured interviews with the participants one by one. The interviews will focus on the five areas of service quality, delivery quality, timeliness, completeness,

and safety, and will use more open, direct questions to elicit participants' narratives[14].

4.3 Data analysis

In this study, the collection of data and the analysis of the data will take place simultaneously. This will give the researcher a fresh perspective on the research question, which in turn will influence the sampling and subsequent research questions[14]. A phenomenological analysis of the obtained interview data will be conducted immediately after each interview. The ATLAS.ti software will be used in this study to assist the investigator in the segmentation and reassembly of the data. A common method is to use coding to mark text fragments, then group text fragments with similar content into different categories and finally distil them into major themes. In this study, three coding types will be used in sequence, from front to back: open coding, axial coding, and selective coding. Once the participants' interview data has been coded, several key themes will then be produced that will answer the research questions. Finally, a cross-tabulation analysis will be used to summarize the findings according to the themes.

5. Conclusion

From the perspective of college students, this paper, based on ACSI model and combined with the characteristics of X food delivery platform, constructed a delivery satisfaction evaluation index system in line with X food delivery platform. The data were obtained by questionnaire survey, and the reliability and validity of the dimension scale in the questionnaire were tested. The results of the questionnaire were reliable and valid. Finally, the index weight was determined by entropy weight method, and the satisfaction of X food delivery was analyzed by fuzzy comprehensive evaluation method.

The analysis results show that the overall satisfaction score of college students with X food delivery is 3.743, which is between general and satisfactory. From the perspective of first-level indicators, the degree of satisfaction of each first-level indicator is ranked as follows: security, service quality, timeliness, integrity, and delivery quality. At the same time, a new dimension scale is obtained through this study, which can subdivide and quantify the factors affecting the satisfaction of food delivery, and more intuitively measure the satisfaction of college students with X food delivery, and provide reference for the related research on customer satisfaction under the e-commerce model.

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