

The Innovation Research of Takeaway O2O Based on the Concept of Service Design

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Abstract. With the status of service industry in the social and economic increasing, service design is received widespread attention. Touch point is an important part of service design, that is the dynamic interaction between the user and the service system, which affects the user's overall perception of the level of service. Takeaway Online to Offline as a vertical kind of special life service, the essence of which is to meet the needs of users, providing the most optimized dining solution. But there are many problems in the process of development of Takeaway Online to Offline, for instance, the food is not delivered on time, the food is not health, which seriously affect the quality of service. In order to explore the optimization direction of the Takeaway Online to Offline service, this paper, basing on the theory of touch point, fully analyses the touch point of the process of takeout online to offline service from the perspective of service design, and puts forward the methods and suggestions of optimization of service experience, which includes two aspects. On the one hand, from macro level, that is establishing reasonable division system, shaping brand image and perfecting the mechanism of evaluation. On the other hand, from micro level, that is establishing food community and reward system, indicating the operating state of peak period of business operators, and designing behavior of personnel distribution.

Keywords: Takeaway from online to offline · Service design · Touch point

1 An Exploration of Service Models of Takeaways O2O

With the increasing prevalence of smart phones and rapid development of internet, O2O service has gradually entered people's lives. At present, Takeaway is the most popular O2O service. According to permanent data, Takeaway is expected to amount to RMB120 billion in China in 2015, and there will be more than 0.2 billion online users [1]. Stimulated by such market environment, internet companies have successively made plans and practised. In 2013, "Alibaba" Group launched a mobile catering platform known as "Taodiantian". In the mean time, "Meituan" launched its takeaway services online based on its advantages in group purchase. In 2014, "Baidu Waimai" (Takeaway) was launched online, and the website "Dianping" strategically invested 80 million US dollars to become a shareholder of "ele.me". The takeaway industry that has been constantly invested has tended to

achieve explosive development. Internet enterprises try to connect users with sellers in all possible ways, so competition has become extremely fierce (Fig. 1).

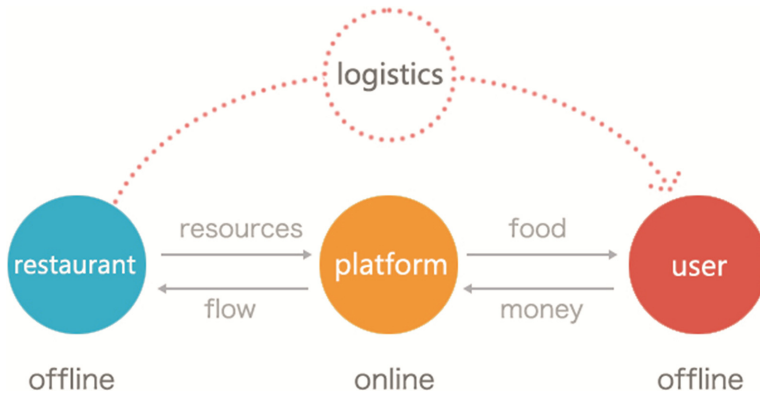


Fig. 1. Takeaway O2O platform

Table 1. The brief introduction of the development model of Takeaway O2O

Takeaways	Target	Model	Brief introduction
Ele.me	Universities	Platform	Online/offline integrated operation
Meituan	All	Platform	Take advantage of resources of group buying
Taodiandian	All	Platform	“Taobao + Tmall” model
Baidu waimai	All	Platform	Map-based takeaway platform
WaimaiChaoren	White-collars, foreigners	Platform + logistics	Global food ordering platform
Shanghai Daojia	Urban families	Platform + logistics	Delicious takeaway food for families
Line0	Urban white-collars	Platform + logistics	Catering service providers
Etaoshi	All	Platform + logistics	One-stop platform of catering functions
SHBJ	All	Platform + logistics	LBS-based SHBJ catering services
Dianwoba	Middle/high-end	Platform + logistics	Extensive takeaway websites
Yes, I Deliver	White-collars	Platform	Ordering takeaway by cell phone

Due to uncertainties of takeaway products and complexity of target groups, takeaway market is still highly fragmented. According to availability of independent logistics distribution system, its service model may be divided into two categories as follows. One is light platform represented by Meituan (i.waimai.meituan.com), [ele.me](http://www.ele.me) (www.ele.me) and Baidu waimai. Concerning this model, services are provided through platforms without logistics and food processing. They deliver orders received online to sellers and have food distributed by third-party logistics companies. The other is heavy model represented by platforms such as “WaimaiChaoren”, “line0” and “etaoshi”. As regards this model, platform and logistics services are provided without food processing. Apart from these mainstream models, differentiated service strategies are also explored by some platforms to seek breakthroughs for making profits. By connecting sellers with users through thematic dating activities, the website “5qnc” hasn’t only enriched UGC (User Generated Content), but also made users’ social relationships closer and services stickier (Table 1).

2 Outstanding Problems with Development of Takeaway O2O

To maximize interests of users and businesses, takeaway platforms strive to provide the best services. In spite of different service models, they have met some common problems that greatly impact quality of their services in the course of their development.

1. Worrying Safety and Hygiene of Takeaway. Food safety and hygiene have been always pain points of takeaway industry. For instance, to rapidly expand their scale, Takeaway O2O platforms like “[ele.me](http://www.ele.me)” haven’t developed strict procedures to review food providers joining in their platforms. As a result, these platforms are mixed with some merchants who are unqualified for providing food. Additionally, administrative departments’ supervision over takeaway platforms is inadequate that they fail to appropriately cope with users’ complaints. After investigating and analyzing takeaway platforms, it is discovered from the perspective of collaborative innovation that a complete scientific food and beverage safety and hygiene management system, including some incentives and legal regulations, focusing on internal drives of service platforms and supported by external supervision, shall be established, in order to improve users’ acceptance of takeaway safety, on the grounds that takeaway safety and hygiene don’t only impact brand image and business performances of takeaway platforms, but also arouse people’s worries about the whole industry of Takeaway O2O.

2. Backward Construction of Logistics Services. At present, light model is major service model of mainstream companies of Takeaway O2O. In other words, only platforms are built, while food and beverage are delivered by third-party logistics companies. In this case, food delivery is completely out of companies’ control. As a result, problems about untimely food delivery and food safety may be easily caused. Users complain about these problems most frequently, which happen for several reasons as follows. On one hand, it is so complex and time-consuming to make independent logistics distribution available that takeaway companies are reluctant to invest money in that respect, but concentrate more on increasing their online orders. On the other hand, crazy

price subsidy has consumed most cash of companies, so no more capital is available for logistics construction. However, food delivery is an important part of online services and a major factor for users' perceived experience of services. Therefore, it is a crucial aspect to be explored in creatively designing services of Takeaway O2O.

3. Crazy Price Support and Unreasonable Resource Allocation. As a high-frequency and low-price industry, Takeaway O2O is highly attractive for users in terms of its price, so all takeaways consider price support as an important development strategy. It is just because of this that takeaways have cost much money for competition in this respect. For instance, the website “[ele.me](#)” has launched an event of free lunch for 200, 000 people together with Focus Media. In addition, it adopts policies of differential subsidy like RMB10 off for a consumption of RMB20 and RMB30 off for a consumption of RMB50. According to measurements, this platform spends a huge amount of about RMB0.1 billion every month in such events. Besides, both Baidu Waimai and Meituan are crazy about another round of financing. Thus, such “money-burning wars” becomes increasingly more intense and never appears to be suppressed at all. Although such crazy acts of “money burning” make the Takeaway O2O appear to be quite bustling, it is actually crisis-ridden. First of all, it is impossible to develop customer loyalty by price support. Once these subsidies are suspended, users will turn to other catering platforms. Next, price support is an unsustainable means involving no technologies, because much money is invested for subsidizing price of food and beverage that corresponding companies will permanently suffer losses and this will be unfavorable for sustainable development. Furthermore, insufficient resources are available from other parts of takeaway services to improve construction and lead to poor quality of the services on the whole. Price support may merely contribute to temporary rapid increase in orders, but can't be permanently practised in a sustainable manner. Only improving quality of differentiated catering services is the right development strategy for Takeaway O2O. For this purpose, resources, particularly money shall be allocated by takeaways more reasonably and efficiently. In terms of resource output, priorities are given to optimizing technologies and systems and considering core pain points for “rapid delivery” of takeaway services.

Current Takeaway O2O is still a growing market facing various problems. In the mean time, core pain points of Takeaway O2O haven't been effectively solved, and development strategies differ among takeaways. Although quality of takeaway services has been improved to certain extent after fierce market competition, on the whole, many innovative aspects of such services are worthy of exploration. Therefore, with constant expansion of businesses, better seamless experiences of catering services will be brought to users if online and offline services can be better integrated. This will not only become a key concern of takeaways, but also an important driving force for development of the whole Takeaway O2O towards correct directions.

3 Analysis on Touchpoints of Takeaway O2O

3.1 Service Touchpoints and Customer Journey Map

Like system design, service design highlights being user centered and concerned about situation of the whole service system. In the field of design, there is still no unified definition of service design. According to definition of the International Association of Societies of Design Research, service design means setting services from the standpoints of customers for the purpose of guaranteeing service interfaces. From users' points of view, services may be classified into useful, usable and good services, while they may be categorized to be efficient and distinct by service providers [2]. However, enterprises like IBM consider that service design means designing different touchpoints of users based on timeline via creative methods and processes while making constant adjustments of interactions between service providers and ultimate users. LIVE WORK, as a famous service design company in England, pointed out in 2010 that in designing services, existing design ideas, technologies and methods were incorporated into the field of services to develop innovative ideas that could effectively satisfy users' requirements for all elements by comprehensively considering multiple dimensions such as environment, products and emotions.

In the process of designing services, concept of service design is always involved no matter what methods and means are adopted. As key points for interactions between users and service systems, service touch points have significant impacts upon users' perception of services [3]. Based on forms, touch points may be divided into physical touch points, digital touch points, emotional touch points, invisible touch points and integrated touch points. A service system may have multiple such touch points. Once a user consecutively experiences several touch points of a platform, he or she will have an overall impression on services of the platform. It is thus clear that touch point design is essential for designing services of a platform.

As a major tool for designing touch points, customer journey map is a graphic method for displaying information. A complete and effective customer journey map generally includes requirements, scenarios, interactions, users' mental state and system state and so on. This method is helpful for designers to understand real feelings of users to discover pain points and opportunities of services in different stages of experience, so as to make the entire service system user-centered [4].

3.2 Analysis on Touch Points of Takeaway O2O and Innovation Strategies

After analyzing and summarizing touch points of Takeaway O2O service system, they are visually presented through a customer journey map, as shown in Fig. 2. Three modules of systematic innovative design are gained by summing up and analyzing seven main touch points.

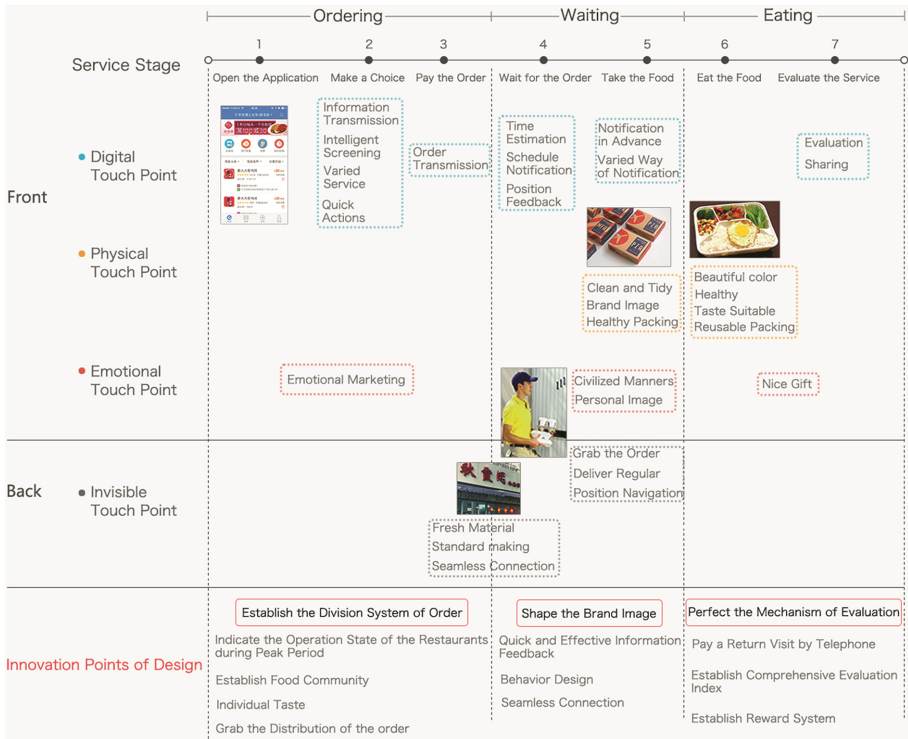


Fig. 2. Customer journey figure of Takeaway O2O

(1) Establishing an Information Diffuence Mechanism for Food Ordering. In users' waiting for food, the major pain point consists in unpunctual delivery of takeaway. This problem shall be solved from a systematic perspective. To be exact, a reasonable diffuence mechanism shall be established for the stage when users order food. It may be specifically executed from three perspectives. Firstly, a function shall be set up for food reservation by means of marketing, in order that users won't order food in rush hours. Secondly, state information of catering service providers is displayed on a real-time basis. Operation state of a catering service provider may be divided into two categories, including good and crowded. In this way, users may have certain psychological expectations in ordering food, and can accept even if food delivery is postponed. Operation state of a catering service provider may be known from data feedbacks of orders. Thirdly, sub-platforms shall be constructed for delicious food and beverage to accumulate content of users and explore characteristic delicious food for small groups of customers, so as to reduce their ordering pressure in rush hours. Meanwhile, personalized food may be customized according to tastes of users. Additionally, information about takeaways shall be effectively communicated. For instance, information of pictures shall be real and presented as far as possible, so as to help users make quick decisions. No matter what mechanism is utilized, the major objective is to minimize

risks and make users take initiatives to improve natural experiences from takeaway platforms.

(2) Shaping Brand Image. Takeaway platforms don't only deliver delicious food, but also living standards [5]. Therefore, it is necessary to make more efforts to shape brand images. This may be started with two keywords, including speed and emotions. Concerning speed, catering manufacturers will immediately get order information from takeaway platforms once users place orders, and then food will be cooked according to standard procedures. Users may know about the food cooking process according to the cooking schedules displayed on platforms. Once food is cooked, it will be delivered by the nearest couriers to corresponding destinations by competing for orders through delivery. Users shall be informed 2 to 5 min ahead of food and beverage delivery, in order to give users rapid seamless high-quality service experiences. Provided that any user chooses to cancel his order during his waiting for food, customer service specialist of the platform shall handle it within an hour, to make the user feel that the services are considerate.

The second keyword is emotion, which requires meticulously designing all details of services. First of all, food packaging must be neat and clean, made from safe, sanitary and degradable materials which are favorable for recycling. Next, design styles of couriers' clothing and logistics distribution vehicles shall be visually consistent with takeaway platforms. At last, attention shall be paid to couriers' professional qualities, namely code of conducts and basic etiquettes in the course of distribution. Each food delivery is a process of brand shaping, because users may have an overall impression on services of the takeaway platform in dealing with the platform and its couriers. Therefore, brand building is an important measure for increasing user satisfaction, user flow and corporate benefits.

(3) Improving Evaluation System. At present, Takeaway O2O platforms usually consider destination of their services is to deliver food and beverage to users. In contrast, from the perspective of service sustainability, it is the beginning of another service when users begin to have the food or beverage delivered [6], on the grounds that users won't make the most important comments on takeaway quality until their eating. Food manufacturers and takeaway platforms must track users' dining feedbacks. Thus, a complete evaluation system shall be established to improve overall services. Users' perception is mainly impacted by three aspects as follows. Firstly, relationship between users and food which are concerned about takeaway nature and food quality is the most important factor. If takeaway is unsanitary in terms of quality, users may choose the report function of a takeaway platform. Under this situation, both food manufacturers and service platforms shall actively solve the problems to appease users. If users have a low opinion of takeaway, manufacturers and service platforms have to interview the users to seriously take their advices and strive to improve quality of takeaways [7]. Secondly, people's contact. In other words, concerning standards for distribution personnel, indexes shall be constructed to evaluate services of distribution personnel and incorporated into the evaluation system. Evaluation results shall be connected with performance appraisal of distribution personnel, to promote constant improvement of their services. Thirdly,

connections between people and products, which matter about usability of products on takeaway platforms. Once all services are based on indexes, effective complete service evaluation and feedback systems need to be established, in order to constantly improve user satisfaction. Additionally, touch points of reward functions may be introduced, namely users can reward businessmen and distribution personnel at fixed amount if they feel takeaway is sold with high quality and distributed at fast pace after they have the food. Besides, the rewarded amount may be allocated according to the proportion designated by users, so as to encourage businessmen to constantly improve quality of their takeaways and distribution, for the final purpose that users can have sustainable delightful experience from services.

4 Conclusions

In light of problems with design of Takeaway O2O platforms, service touch points of these platforms are completely analyzed and designed based on concepts of service design. In the mean time, three systematic innovative design modules are put forward to construct a diffuence mechanism, shape brand image and improve evaluation system. As O2O service platforms, takeaways shall understand multiple factors such as pain points of users' demands, application environment, service content and touch points during design, in order to appropriately plan service procedures of Takeaway O2O, pay close attention to natural experiences of users and systematically analyze all details of catering services, particularly offline services and their touch points which are crucial for designing services for Takeaway O2O platforms. As regards innovative design of Takeaway O2O, it is more necessary to highlight user-centered system innovation. In other words, better dining experiences are provided for users by overall intervention with "products and services" to improve customer satisfaction.

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