

## **Working Conditions of Online Food Delivery Gig Workers from A Consumer Perspective in China: A Lesson for Malaysia**

**Yosuke Uchiyama\***

*Faculty of Arts and Social Sciences, Universiti Malaya<sup>1</sup>*

**Md Nasrudin Md Akhir\*\***

*Faculty of Arts and Social Sciences, Universiti Malaya*

**Yuanzhu Wang\*\*\***

*Asia-Europe Institute, Universiti Malaya*

**Beatrice Lim\*\*\*\***

*Faculty of Business, Economics & Accountancy, Universiti  
Malaysia Sabah*

**Khairul Hanim Pazim\*\*\*\*\***

*Faculty of Business, Economics & Accountancy, Universiti  
Malaysia Sabah*

### **Abstract**

Whilst the expansion of the gig work market has enabled flexible task-based work that is not bound by employment contracts with firms, it has also given rise to various concerns about the working conditions of gig

labours. In China, the general preference for eating out and the convenience of this service has led to a growing need for online food delivery (OFD) services and rising demand for delivery riders. At the same time, the working conditions of the riders are strictly controlled by the oligopoly platforms, which makes their position very weak. However, there is minimal research on how Chinese users understand this situation, generating colossal demand. This study uses primary data collected through in-depth interviews to examine Meituan online food delivery users' understanding of delivery riders' working conditions and their potential contribution to empowering riders. Through the thematic analysis, the collected data identified five main themes: new category job location between chance and risk, ultimate O2O productivity labour, fragile workers' balance of power, and mutual assistance difficulties with 16 sub-categories. Although OFD users had a profound and insightful understanding of riders' working conditions, their potential contribution to improving working conditions was not highly promising. As platforms continue to be confronted by oligopolies and government regulators, users have a pivotal role as a mitigating factor for the sustainability of China's on-demand gig economy sector. Lastly, based on the China experience, this article offers lessons to OFD industries in Malaysia.

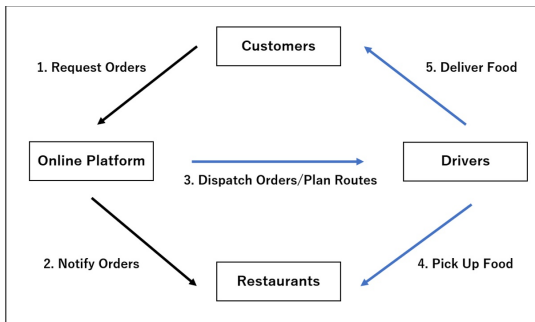
**Keywords:** *Online food delivery (OFD), Gig economy, Working condition, Meituan, China, Malaysia*

## 1. Introduction

The creation of various online platforms due to the rapid expansion of e-commerce has led to increased consumer use and a larger workforce. This emerging trend has led to the rise of new types of working styles called gig workers aside from the traditional working style. Gig workers deviate from the bound employment contracts with firms and perform flexible task-based work through online platforms, earning remuneration per task. The gig work market is attracting many people who rely on gig workers for skilled crowd work on behalf of freelancers and ride-sharing and online food delivery. Specifically, online-to-offline (O2O)

businesses, where users select products online, and the actual transaction takes place offline, are fuelling the growth of online food delivery (OFD) services (Xie et al., 2021). There are two main types of parties offering OFD services. The first is the restaurants, mainly fast-food chains such as McDonald’s, KFC, and Pizza Hut. The second is app-based intermediary platforms such as Meituan and Ele.me, Uber Eats and Food Panda list various restaurants (Yeo et al., 2017). Figure 1 illustrates the order-to-delivery process of a typical OFD service (Chen et al., 2021). On-demand delivery services are common to both restaurant delivery and platform apps in that they are provided through online platform apps. Firstly, customers place their food orders through the online platform. Next, the online platform is an intermediary between the customer and the restaurant by notifying the restaurant of the order. Whilst the restaurant prepares the food, the online platform allocates the order to the delivery driver and suggests a delivery route. After that, the driver picks up the food from the restaurant based on the delivery route and finally delivers the food to the customer. As these services are largely dependent on demand from customers and supply from drivers, the efficient and high-performance technology of this business model has always played a key role in making last-mile delivery viable (Chen et al., 2021).

**Figure 1: The order-delivery process of OFD**



Source: Chen et al. (2020) and Authors’ modification

In China, a leading OFD market country, OFD service is becoming even more significant in people's lives due to its convenience and the spread of the COVID-19 pandemic (Choi et al., 2021). The domestic OFD market in 2020 reached 664.6 billion yuan, which means 40% of the Chinese population use OFD services in their daily lives (Blazyte, 2022a). Concretely, the Chinese national preference for eating out and the convenience of apps ordering have generated approximately 544 million domestic OFD users as of December 2021 (Thomala, 2022). Particularly, OFD service is widely accepted by the younger generation in China, such as university students and unmarried office workers. OFD services are very convenient, especially for students whose university dormitories do not have cooking facilities and whose primary means of cooking is to eat out or use delivery services (Mukhopadhyay and Chatwin, 2020). For unmarried office workers, the normalisation of overtime makes them arrive home late. They are reluctant to cook and often use OFD services to solve one person's diet.

On the other hand, the severe Chinese government lockdown due to the COVID-19 pandemic led to a significant drop in orders, but demand has regained since the lockdown (Thomala, 2022). In China, Meituan has the largest share of the OFD market at around 65%, followed by Ele.me (Choi et al., 2021; Xie et al., 2021). Rakuten Insight survey in 2021 showed approximately 92% of respondents indicated that Meituan was their first choice (Blazyte, 2022b).

It should emphasise that there are drivers to meet the needs of the huge number of customers using the OFD giant apps in China. Both academically and practically, the current situation of gig workers, including OFD workers in China, tends to be discussed by platform firms. Under platform capitalism, drivers must adhere to algorithm-based routes and delivery times that prioritise customer needs, whilst the platform app controls the time order (Chen and Sun, 2020). The profit-centred efficiency algorithms of these platforms are undermining the safety and working environment of the 9.5 million Meituan delivery workers in China (Tech Crunch, 20th February 2022). For instance, delivery workers are forced to disobey traffic lights or pass-through closed roads to make on-time deliveries. This platform's manipulation of

the apps and high target settings make it common for drivers to receive traffic tickets (South China Morning Post, 10th February 2022). Meituan CEO, Wang Xing has stated that Meituan has been working to make the algorithmic system transparent and improve it to prioritise delivery worker safety. The algorithms published by Meituan include four main delivery time evaluation algorithms: estimated time based on historical data models, estimated time under characteristic urban traffic conditions, cumulative estimated time under various delivery scenarios and estimated delivery time (iMedia, 30th July 2022). Meituan tries to indicate the maximum time required for delivery, taking all four algorithms comprehensively into account. Experiments in some cities show that changing the estimated delivery time of an order from a strict time to a flexible period reduced the rate of negative feedback from users to riders by 50.7% (iMedia, 30th July 2022). However, most delivery workers do not recognise the strong statement (Tech Crunch, 20th February 2022). Although these information asymmetries are a typical problem between users and the gig economy platform, it is still not remedied even though they are the most developed OFD apps in China. Whereas the Chinese authorities have advised OFD platform firms to improve worker safety and the social protection system, they are still on the way to dealing with several major challenges, such as balancing platform profits, driver welfare and customer needs. However, since there is no clear labour classification for gig workers under the current employment law in China, it causes a discrepancy in legal practice whereby the disposition of gig workers varies depending on the court case (Xiao, 2019). As Chinese labour law was based on a planned economy system, the framework regulating modern labour relations was created in the 1994 and 2007 Labour Contract Law (Zhou, 2020). However, Chinese labour law has no legal concept of employment relations. It is because employment is derived from the labour force employed by capitalists based in a capitalist society, and the meaning of employment in China is limited to the “purchase of labour for money” (Zhou, 2020). It interprets that only labour units, such as firms, rather than individuals, as in the planned economy, can enjoy social protection and other benefits for their workers. Therefore, apart from the

employment relationship, establishing a labour relationship or an employer-employee relationship is a prerequisite for applying labour law and social security law. According to Zhou (2020), a specific feature of the adaptability of labour law in China is that both the worker and the working unit must have the principal legal entitlements before establishing the labour relationship. From a legal perspective, labour contracts under Labour Law and labour service contracts under Civil Law can regulate labour relations. Labour service contracts can be further divided into service contracts regulated by contract law and employment contracts regulated by civil law, including contract law. The labour contract obliges the employer to protect the rights and conduct of the employee under labour law. On the other hand, the labour service contract is regarded as work in which the workers assume rights and obligations and are not subordinate to the employer. However, the ambiguous criteria for determining the subordinate status of platform gig workers, who enjoy a certain autonomy in their work, means that courts' decisions influence labour disputes in labour contracts without uniformity. Generally, platforms try to gain an advantage in their relationship with workers by entering civil contracts, which are less costly. On the other hand, platform workers can file a lawsuit and ask the court to redetermine the legal relationship between them. According to a study by Wang and Cooke (2021), there were 102 cases involving online platforms such as delivery and transport sectors, in the Supreme People's Court's employment dispute decisions from 2014 to 2019. Two-thirds of the judgments ended in the first trial, and around 10% of the judgments were changed in the second trial. The lack of clear distinctions in the judiciary tends to make courts' decisions more conservative (Wang and Cooke, 2021).

Whereas most of the discussion of the views of platform firms and the government on the current situation of OFD market delivery workers in China has been about the opinions of platform firms and the government, there has been little research on how the customers of the vast market perceive their labour. It is a natural assumption that this is due to the power relations between delivery workers and customers on the current platform business model since there is not much active

market competition. Furthermore, in the duplicated Chinese OFD labour market, the robust control power of platforms may make the negative aspects of delivery riders highly invisible (Barratt et al., 2020; Wood and Lehdonvirta, 2021).

Therefore, this study examines the consumers' understanding of the working conditions of OFD workers and the potential contributions to their empowerment in the Meituan food delivery apps, which has the largest OFD market share in China. Under the qualitative research basis, this study conducts in-depth interviews with Chinese Meituan users. This study can make both academic and practical contributions. Academically, it provides a deeper perspective on the current situation of gig delivery workers from the standpoint of customers using Meituan, which has the largest market share in China, the world's largest OFD market. The previous literature investigated service providers' usage intentions and satisfaction levels among customers. In other words, in the power relations within the current platform capitalism, customers evaluate gig workers solely based on service, and the platform does not consider their position and status within it. Thus, this study suggests a new empirical contribution to the extent to which customers understand the working environment of delivery workers. The potential for customer-sent driver empowerment could be explored based on customers' understanding of the current situation regarding OFD workers. Customers could be considered a third possibility to replace government authorities and legal institutions that create new legal frameworks for gig workers that curb the profit-driven business models of firms in the current platform capitalism. Prior research looking at gig workers from a consumer perspective is limited. For instance, Smith et al. (2020) and Healy et al. (2020) investigated OFD consumers in Australia, and Belanche et al. (2021) examined OFD users in Spain and the USA. The understanding and perceptions of Chinese OFD users of riders' working conditions are expected to generate new insights into comparisons with consumers in the European region and provide pivotal insights into research on the understanding of OFD consumers on gig workers in the Asian area. Chinese duopolistic market structure goes beyond their role as simple intermediaries within the business model and



has significant control as administrators. It would be why the existing trend of OFD labour market research in China relies on a platform versus worker or regulator structure, with a customer perspective approach being neglected. Considering how customer mediocrity can influence the market in this robust and unique Chinese OFD market structure would be the novelty of this study.

This article consists of the following sections. The next section is a literature review of online food delivery in China and OFD workers' issues. The research methodology is then presented in section 3, and the findings are presented in section 4. Section 5 contains a discussion of the research findings. Section 6 discusses lessons for the Malaysian online food delivery industry and applies the study's findings to the industry in other countries. Section 7 is the final section.

## **2. Literature Review**

### **2.1. Online Food Delivery (OFD) in China**

The literature on the Chinese OFD sector has been examined from various perspectives. China's rapid economic growth has changed individuals' eating habits, and the OFD sector benefits from this influence. The COVID-19 pandemic has particularly affected the food and tourism sectors. As one of the countermeasures, five-star hotel restaurants in China have begun to enter the OFD industry to secure revenue (Yang et al., 2021). In this manner, the list of restaurants in OFD apps allows consumers to choose from numerous options, ranging from famous cuisine to top hotel menus. Whereas OFD services improve convenience and people accessibility, it causes various problems (Maimaiti et al., 2018). For consumers, excessive use of services may lead to safety and health hazards and loss of traditional food culture.

Furthermore, it may also increase social concerns, such as increased accidents for drivers and difficulties in waste management. According to Xie et al. (2021), 86% of CO<sub>2</sub> emissions from a single home delivery order were generated from food packages, with larger cities using more food packages than smaller cities (Xie et al., 2021). Consumer behaviour in China regarding OFD services is also directly related to



environmental impacts, and a reorientation of policymakers towards sustainable service provision is necessary.

However, market growth and increased competitive rivalry under COVID-19 could be seen as sacrificing environmental impact towards a strategy of sustainable operations for firms. It is because consumer satisfaction and re-use intentions are affected by various factors. Regarding customer satisfaction and re-use intentions for the Meituan apps, Choi et al. (2021) provide some interesting results. Customised economic factors such as coupons, low prices and complementary services that can be used with the order were most important for platform firms to obtain high customer satisfaction. Furthermore, they also emphasised that concretising delivery information for real-time delivery status and impressions is linked to customer loyalty (Choi et al., 2021). As offline services in deliveries are undertaken by deliverers rather than firms, enhanced training and ensuring they drive the proper routes would lead to further positive customer feedback (Lan et al., 2016). Consumer trust is vital to the quality of OFD platforms, and additional quality improvement is required by platform firms and deliverers (Choi et al., 2021).

Delivery workers in OFD using platform apps are treated as gig workers, guaranteeing a flexible working pattern. However, Sun (2019) notes that delivery workers are subject to strict management and control by the platform algorithm. OFD workers are blurred into a precise worker classification under current employment law, and legal opinions vary from case to case (Xiao, 2019). This lack of a clear legal category gives gig workers unequal status and prevents their well-being from being fully met. As a result, the deliverers may lose the boundary between working hours and leisure time, forcing them to work longer hours (Sun, 2019). Whilst the use of OFD services among consumers during the COVID-19 pandemic has positively affected food procurement, and it has led to negative job satisfaction among OFD workers by increasing their exposure (Li et al., 2020). Formulating power relations under platform capitalism has achieved that platform algorithms can positively affect firms' value creation and customer demand. Indeed, developing efficient algorithms leads to increased

consumer satisfaction and delivery efficiency (Chen et al., 2021). However, this simultaneously means that platforms further enforce gig workers' traditional temporal dimensional domination (Chen and Sun, 2020). Under the current platform ecosystem, the structure of secular authority over workers has become essential for firms to meet their quotas and customer satisfaction needs. The restructuring of this system may play a vital role in achieving equilibrium in power relations between workers and other actors. It is an excellent danger for platform firms to perceive delivery workers as transient and always replaceable (Mukhopadhyay and Chatwin, 2020), and OFD service users should also recognise this. In other words, increasing customer power and decreasing gig worker job fulfilment are inextricably linked. Therefore, a proper understanding of the customer-sourced deliverers may have great potential for realising them as services and commodities.

## **2.2. Online Food Delivery (OFD) in Malaysia**

Most previous studies on the OFD sector in Malaysia have been related to consumer behaviour, examining the significance or otherwise of various relevant factors, their behavioural intentions and satisfaction levels (Pitchay et al., 2022; Dazmin and Ho, 2019; Lau and ng, 2019; Nayan and Hassan, 2020; Tan and Kim, 2021; Tarmazi et al., 2021; Yeo et al., 2017; Zulkarnain et al., 2015). The OFD market in Malaysia is an oligopoly with some platform market competition (Furuoka et al., 7th June 2022). In analysing consumer perceptions and satisfaction with OFD services, Nayan and Hassan (2020) rated each application based on system usability scores using the System Usability Scale (SUS). The results showed that Foodpanda ranked first, followed by Grab Food, with the two largest giants in the OFD sector in Malaysia, garnering the highest consumer ratings (Nayan and Hassan, 2020). Key factors that positively influence consumer attitudes, behavioural intentions, attitudes and significance in loyalty were studied, including convenience, price, time website quality, and service quality (Yeo et al., 2017; Zulkarnain et al., 2015). According to Dazmin and Ho (2019), time factors had a more dominant effect on usage intention than price factors for OFD customers in Malaysia. Other studies, such as Lau and ng (2019) and Pitchay et al.

(2022), also noted that time factors such as time savings positively influence customers' usage intention (Pitchay et al., 2022; Lau and ng, 2019). Based on these empirical studies, the time factor plays a vital role in Malaysia's primary usage intention of OFD users.

Tan and Kim (2021) mentioned that a wide range of Generation Z accepted OFD services to Generation X. Especially Generation X, which has many working parents and others, tended to have relative satisfaction in terms of the time-saving nature of ordering OFDs (Tan and Kim, 2021). On the other hand, Soon et al. (2022) stated that Generation Y was reluctant to use OFD services. A survey of 205 respondents inferred that social influence had a predominant impact, as half of the respondents started using it during the Movement Control Order (MCO), a COVID-19-compliant policy in Malaysia (Soon et al., 2022). Pitchay et al. (2022) also mentioned that social influence positively influenced customers' attitudes towards using OFD services. However, this study did not confirm that age significantly impacts usage intentions. Moreover, the elderly population is not the leading target group for OFD services due to technological demands (Tarmazi et al., 2021).

The COVID-19 pandemic has led to associations with risk factors in OFD consumer orientation studies in Malaysia. Poon and Tung (2022) showed that perceived physical and COVID-19 risks had a negative impact on consumers' usage intention. Moreover, perceived risk moderated the relationship between attitude and intention (Poon and Tung, 2022). On the other hand, other factors, including price, promotions, discounts, and service approach quality, give significance to consumers' usage intention during a pandemic (Tan and Kim, 2021).

As the OFD sector continues to grow in the country, its labour market ecosystem is inequitable, but there is limited research focusing on gig workers and the labour market. Following the rapid growth of OFD riders in Malaysia, Rusli et al. (2022) studied the characteristics of road accidents during deliveries among OFD riders. The odds ratios of young and full-time riders involved in an accident were approximately 2.05 and 1.79 times greater, respectively. In addition, work experience, longer average mileage and lack of working experience were identified

as factors that increase the probability of being involved in a road accident. Uchiyama et al. (2022a) focus on the inequality and vulnerability of OFD gig workers and propose developing worker-centred policies for social protection in the gig economy elsewhere in Asia based on the Malaysian experience. Currently, OFD gig works in Malaysia is decent short-term work based on platform and customer-centred and performance-based, which does not provide adequate social protection for workers. However, if the sector merely follows the platform exploitative profit structure business model and customer-first approach, workers as human resources would be depleted. A sustainable labour market ecosystem renewal for gig workers is required to address this serious problem.

Furthermore, Uchiyama et al. (2022b) used a job-matching model to present lessons for improving industrial relations among OFD workers in Malaysia. They identified three potentials for Malaysian gig workers to secure higher remuneration: productivity, labour market conditions and bargaining power. However, productivity gains are practical and experience-driven, and gig workers cannot directly encourage labour market changes. Therefore, constant negotiation by gig workers is the most feasible option to improve social welfare.

### **2.3. On-Demand App Food Delivery Workers' Issues**

As a premise, the gig work is broadly divided into crowdwork, and on-demand apps work. Crowdwork refers to work completed entirely online, connecting many gig workers, including clients and individuals, through online platforms (De Stefano, 2015). On the other hand, on-demand apps work is a traditional labour activity such as mobility, delivery, cleaning, and clerical work that is provided offline through the intermediary of an online application (De Stefano, 2015). As on-demand apps work is O2O (Online to Offline) based business model, matching is done offline, and services are provided locally. However, this new categorised on-demand apps gig work has generated numerous issues due to its specificity (Goods et al., 2019). In general, the gig economy business model functions as a multifaceted marketplace, mediating between the demand side (customer) and the supply side (gig worker)

users on both sides (Aloisi, 2015). It is called a triangular relationship in the gig economy (Kost et al., 2020; Roy-Mukherjee and Harrison, 2020; Stewart and Stanford, 2017). In the case of OFD, the restaurant exists between the platform and the delivery rider (Chen et al., 2021). This business strategy offers an efficient business opportunity for platform firms to contract labour with workers through technology-based outsourcing, avoiding transaction costs and fixed costs (Aloisi, 2015). This flexible business model allows workers to be hired as independent contractors and circumvent employment law regulations (Aloisi, 2015). Initially, on-demand apps-based gig workers, including food delivery workers, would fight platform firms on legal classification. Specifically, they are either employees or independent contractors (Koutsimpogiorgos et al., 2020). As the unified claim on the platform firms, they are intermediaries between the customer and the independent contractor, denying the worker status as employees (Prassl and Risak, 2016). This fundamental problem stems from the lack of uniform laws to categorise gig workers. Therefore, the classification of gig workers is based on the judgment of courts and regulators, who also vary from case to case (Koutsimpogiorgos et al., 2020; Wang and Cooke, 2021).

It means they bear all the risks of being independent contractors whilst financially dependent on the platform. Online food delivery riders are also forced to work under labour process control under platform capitalism (Montgomery and Baglioni, 2021; Veen et al., 2020). However, the impact of new technology on workers' working conditions and status is not a new issue in the labour market (Montgomery and Baglioni, 2021). For instance, Friedrich Engels (1892) provided a detailed account of the impact of new technologies, such as steam power and machine tools, on working conditions and creating a new class known as the "proletariat". He described the misery of the "proletariat" in Manchester, which was the centre of the Industrial Revolution in the middle of the nineteenth century. Engels asserted that these new technologies contributed to the deteriorating working conditions of workers in England. In this context, developing information and communication technology, such as digital platforms and social networks, could contribute to forming a new class or the "class-in-the-

making” (Standing, 2011) whose leading players are the gig workers. The main feature of this new class of workers is its “autonomy” and “flexibility”. However, this flexibility could be considered a double-edged sword. The positive side is that gig workers can decide their working hours and reward themselves. However, the negative side is that flexibility would mean uncertainty (Peetz, 2019). In other words, this new class populated in cyberspace could evoke the “lumpenproletariat” in the Marxian sense, but the gig workers could not be exactly equated with this disposed of class of people (Peetz, 2019; Standing, 2011). Interestingly, actual problems of the “proletariat” were manifested in England, a leading country in the industrialisation process in the nineteenth century. Similarly, the real issues and challenges of this new class in the digital economy could be manifested in China, a leading country in the digitalisation process in this century.

The current operation under the gig economy undermines the capacity of workers in capitalism by restructuring the capital-labour relationship through on-demand intermediation made possible by technological innovation (Barratt et al., 2020). Furthermore, O2O labour using on-demand apps such as OFD riders faces a unique problem of “platform algorithmic constraints”. Since food delivery riders are considered independent contractors, they seek to minimise risk through risk management techniques. However, the binding of the platform algorithm is likely to impose additional physical and financial risks on them (Gregory, 2021). In reality, this problem has been recognised as one of the biggest challenges in last-mile logistics for the OFD industry. Especially during peak hours, including lunch and dinner hours, it is essential to develop sophisticated algorithms to deliver orders on time with limited resources (riders) (Chen et al., 2021). However, the pursuit of efficiency would lack the ability to deal with uncertainties in the delivery process. This algorithm creates a lack of safety culture in the OFD sector. Papakostopoulos and Nathanael (2021) found that subjective norms of acceptable risk-taking (jaywalking, not wearing helmets, etc.) correlate to traffic violations. However, general regulatory measures to enforce compliance may not be effective. This study points out that a combination of regulations and new standards to raise riders’



awareness and motivation for safety and to deal with younger drivers, who are more likely to engage in dangerous driving, may promote their effectiveness (Papakostopoulos and Nathanael, 2021).

In addition, the algorithms under platform capitalism take away the essence of the rider's online platform labour because they prioritise corporate profits and customer demand (Sun, 2019). As a result, delivery workers are forced to work longer hours and lose time to reproduce due to algorithms' manipulation (Sun, 2019). Each platform firm provides a mutual evaluation system for riders and customers to maintain a certain level of service quality. According to Veen et al. (2020), Uber Eats uses three main performance criteria. The first is the acceptance rate, which is the percentage of delivery requests approved or rejected; the second is the cancellation rate, which is the percentage of orders cancelled after acceptance; and the third is customer satisfaction, which assesses rider performance after delivery completion. However, riders have criticised the subjective ratings by customers, who tend to confuse restaurant errors and late deliveries with their performance (Veen et al., 2020). These personal customer perceptions may be inevitable. It is because as long as the gig economy platform controls the system (Wood et al., 2019), it can easily manipulate the degree of interaction between riders and customers. According to Smith et al. (2021), consumers are essentially limited in their opportunities to know OFD riders' rights, and their knowledge is inaccurate (Smith et al., 2021). It is the nature of the whole gig industry, where platforms can rate gig workers under several layers of criteria but do not provide a means of legitimately rating customers or clients (Jabagi et al., 2019). Therefore, there is insufficient recourse in the event of a perceived unfair evaluation by customers. Furthermore, even if workers try to commit to collective bargaining to resolve such imbalances, it would be hampered by unequal bargaining power between gig workers and employers as long as employers consider workers as "independent contractors" (Pinsof, 2015; Uchiyama et al., 2022a).

### **3. Research Methodology**

This study uses in-depth interviews under a qualitative research method.

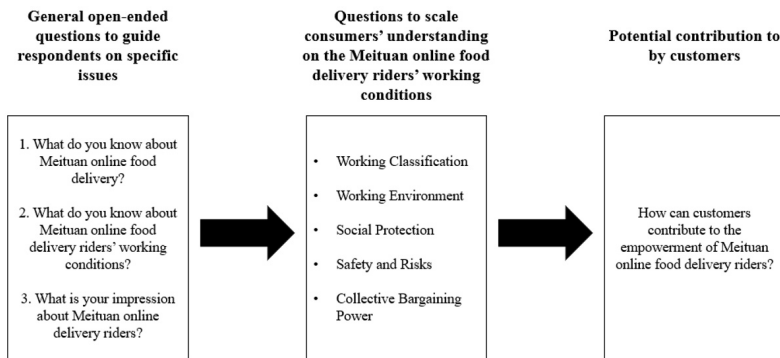


Given the minimal number of studies that seek to understand gig workers from a consumer perspective, conducting in-depth interviews is suitable because it provides more valuable and detailed information than other data collection methods, such as surveys (Boyce and Neale, 2006). This study also set appropriate participant selection and a straightforward interview process to reduce bias in opinion due to small numbers of respondents and induced interview bias. This study recruited 19 Chinese Meituan food delivery users residing in China using snowball sampling techniques. Snowball sampling is a technique of gaining contact through various connections to reach target respondents. However, to prevent the reproduction of self-selective dynamics by approaching specific communities (Cini et al., 2022), this study used two means of recruitment. Initially, the study contacted WeChat groups consisting of Chinese Meituan food delivery users who are (or were) affiliated with the University of Malaya and currently living in China and recruited 13 voluntary participants willing to help with the online interviews. Subsequently, this study also recruited four participants from Liaoning province, ready to help with the offline interviews and two from Beijing province, who could take online discussions. For the data analysis purpose, participants were labelled R-1, R-2, R-3...R-19. Gender and residence region are no concerns as long as the respondents frequently use Meituan apps. The interviews were conducted both online and offline from August to October 2022. Following the ethical manner, for the online interviews, this study used Microsoft Teams with recording, whilst the online interview was recorded after the participants' agreements and also taken notes for the smooth analysis process. All interviews lasted less than one hour, and English and Chinese were used. After the author moderates and introduces the purpose of the study, the author also provides several agenda items (questions) to coordinate the direction of the discussion., The in-depth interviews prepare three processes to achieve this study's objectives (Figure 2). The first process consists of a series of questions designed to gauge the candidate's familiarity and understanding with the Meituan platform and the role of the delivery riders. This process allows them to make a smooth transition into talking about more specific working

situations. The second process involves discussions on the five selected items based on the literature review regarding the working conditions of Meituan online food delivery riders.

Regarding working classification, the degree to which consumers know how gig workers work is sought by discussing their understanding of whether they are classified as independent contractors or employees. The working environment refers to consumers’ knowledge of their operating hours and algorithmically manipulated working style. As for social protection, safety and risk, it explores how consumers understand the salary, insurance and benefits given to Meituan delivery riders and the corresponding level of safety and risk. About collective bargaining power, this interview aims to ask to what extent consumers understand the position of Meituan delivery riders in the business model and the bargaining power issues they face. Thirdly, based on the previous process, it is discussed how customers can contribute to improving the working conditions of Meituan online food delivery riders.

**Figure 2: Interview Design**



Source: Authors’ own illustration

After collecting extensive interview data, this study used thematic analysis to draw out recurring themes and offer a more nuanced understanding of the participants' perspectives and experiences (Braun and Clarke, 2006). Thematic analysis is a more qualitative analytical method than content analysis, better suited to providing detailed and complex content within the data (Vaismoradi et al., 2013). Whilst the in-depth interviews offer more detailed insights as they focus on specific consumers' understanding, this method is less suited to generalising their findings. Therefore, the authors selected the thematic analysis to maximise the effectiveness of the collected data. Regarding the phases of thematic analysis, this study follows six steps provided by Braun and Clarke (2006): familiarising with collected data, generating initial codes, searching for themes, reviewing themes, defining, and naming themes, and producing the report.

#### **4. Findings**

Table 1 describes the demographic the basic information of the participants in this interview. This includes interview codes of participants, genders, age ranges, provinces, status, and interview mode. Although gender and occupation were not taken into account in this study, the majority of customers are repeat customers who use Meituan delivery on a daily basis.

Throughout the online and offline in-depth interview, the Meituan app was recognised as a super-app that could be used not only for OFD but also for leisure entertainment, such as the delivery of daily necessities and booking of hotels and tickets to scenic movie spots. Most respondents used the Meituan apps daily, especially for OFD services.

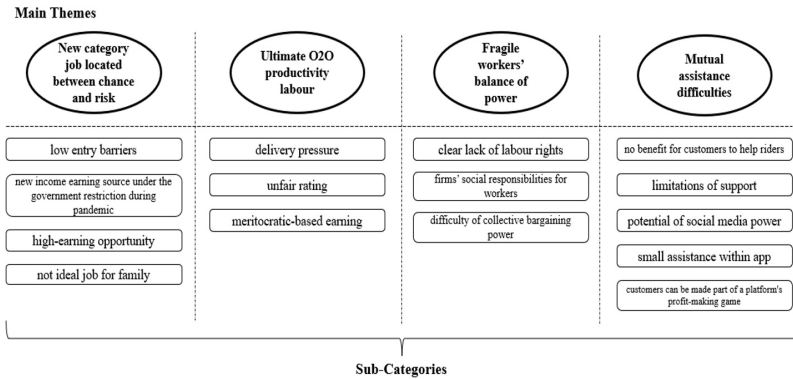
**Table 1: Demographic Information of Participants Source: Authors' own illustration based on data collection**

Codes	Gender	Age Range	Location	Status	Interview Mode
R1	Female	30-35	Shanxi	Student	Online
R2	Female	30-35	Guangdong	Student/Employee	Online
R3	Female	30-35	Chongqing	Student	Online
R4	Female	30-35	Beijing	Student	Online
R5	Female	30-35	Guangxi	Student	Online
R6	Female	25-29	Guangxi	Student/Employee	Online
R7	Female	30-35	Henan	Student/Employee	Online
R8	Female	30-35	Hainan	Student	Online
R9	Female	25-29	Fujian	Student	Online
R10	Female	25-29	Beijing	Employee	Online
R11	Female	25-29	Henan	Employee	Online
R12	Male	25-29	Shanxi	Employee	Online
R13	Male	25-29	Shandong	Employee	Online
R14	Female	18-24	Liaoning	Employee	Offline
R15	Male	30-35	Liaoning	Employee	Offline
R16	Male	18-24	Liaoning	Employee	Offline
R17	Female	25-29	Beijing	Employee	Online
R18	Female	18-24	Beijing	Employee	Online
R19	Female	45-49	Liaoning	Employee	Online

Their impression of the Meituan app is that it is just convenient and easy to use, making it an indispensable item in daily life for Chinese consumers. According to R-11, the mini programme provided by Meituan allows users to order not only food but also unique items such as medicines and shared bicycles using only the apps. Primarily, Meituan riders, with their iconic uniforms of uniformed yellow helmets, can be found anywhere in the cities (R-12). Through thematic analysis, 15 sub-topics were generated and categorised into four main themes (Figure 3). Whilst Meituan users have a wide range of views on the

riders' working environment, and the analysis results also provide a glimpse of the reality regarding the Chinese national character and power balance in the labour market.

**Figure 3: Thematic Map**



Source: Authors

*a) New category job located between chance and risk*

Although respondents were vague about categorising their work as OFD riders, they had varying perspectives on the opportunities and risks. Most users used the service daily and were proud that the app was helpful and had changed their lives. In light of this, OFD services are of interest to them as an integral part of their daily lives. The result shows that respondents provided opinions based on two trends: the job dissemination factors and the critical evaluation of the job. In terms of factors contributing to the work's popularity, they believe that the low market entry barrier of quickly starting and earning money by registering through an app has created many OFD workers. On a macro basis, the Chinese government continues to restrict people's outings and movements with strict regulations under the zero-COVID policy, which has been in place for over 20 months (Chen and Chen, 2022). Users

living under such tight controls calmly observed that demand for OFD has increased dramatically whilst the sector has successfully attracted people with restricted work and young people.

On the other hand, the work assessment from the customer's perspective was mixed with advantages and disadvantages. From a financial perspective, there is a supplementary income aspect (R-6) to help families with depressed incomes under COVID-19 and the possibility of being full-time workers (R-1), where higher payments can be achieved in some cases. Some respondents mentioned being OFD riders are attractive to fresh graduates who cannot find employment due to the economic recession in COVID-19, as they expect to earn high incomes on a meritocracy basis. Furthermore, although most riders are male (R-1, R-5, R-7), the number of female drivers has gradually increased recently (R-6).

"Due to many Chinese university graduates, finding a good job is not easy as the odds are very high in China. On the other hand, becoming an online food delivery rider has several advantages. The first is that the salary is commensurate with the hard work you put in, so you may get more than graduates who work for good companies. Secondly, it is possible to earn a high-level salary without having a high level of knowledge. This also applies to high school or secondary school graduates." (R-4)

They recognise the job as one of the means of earning money, as highlighted by R-19's statement, "this is callous work, so it deserves a respectful job". However, they also stated that becoming an OFD rider is only a short-term second choice and that they prefer to work in firms. R-4, who has family members who work as OFD riders, stated that most of her family members do not see this job as ideal.

"Working in this sector is good for our family if it is short-term. This summer, my cousin's son came to Beijing and chose a delivery rider for short-term work. It is not a good job for a young child who is about to enter the workforce. For an 18-year-old boy, it does not

give him many opportunities to practise when he goes out into society. Ideally, he should communicate more with others and improve their soft skills for the future. For example, he would gain more experience working in fast-food chains or cafes. He rides a motorbike to serve food but cannot learn anymore. From my family's point of view, this is very dangerous. So, if I were his mother, I would get the option of refusing to allow him to do this job." (R-4)

*b) Ultimate O2O productivity labour*

Users are more objectively aware of OFD riders, and riders are always constrained by both the online and offline processes that characterise the business model of this task. Regarding offline transactions, riders tend to face various pressures up to the delivery completion. Most participants pointed to deliveries within a specific time frame and in bad weather conditions. R-7 noted this concern in the working conditions of offline riders as follows.

"Firstly, they are working in bad weather. They are willing to deliver in bad weather for a living. Secondly, they always deliver under bad traffic conditions. Riders are always caught in traffic jams during peak periods when demand is at its highest, although the risk of accidents increases. According to one news report, one driver told of an accident on the corner of a road, which was dangerous and very scary. Thirdly, they perform physical labour to finish orders on time. They must climb stairs if there is no lift. It would consume their stamina. Fourthly, most of them do not have an office for taking a break. Because I always see them sitting on their bikes and waiting for orders along the road. They always tend to wait in groups." (R-7)

However, some users recognised that users' demand was inducing a burden on riders. For instance, R-8 stated that weather conditions such as heavy rain or extreme heat, which prevent users from going outside, would stimulate several users' use of food delivery services. The firm's recognition of this trend creates a constant supply of drivers under these



conditions. Therefore, riders are under invisible pressure from both firms and customers online. However, respondents perceived customer ratings to have a minor influence on riders' operations. It is because it is the intermediary's platform that ultimately penalises them based on customer feedback (R-1)

*c) Fragile worker's balance of power*

Most frequent users of Meituan were objectively aware of the working conditions of riders. There were notable opinions highlighting the fragile balance of power for workers inside the business model structure. Regarding the working conditions of online food delivery riders, the result shows that respondents have two prominent opinions. Firstly, they noticed that riders started to get more satisfactory working conditions. According to R-3, many Meituan riders have posted on TikTok that their working conditions and salaries are better than before. R-3 highlighted that this is very realistic in that Meituan riders transmit it, and users can see their lifestyles from their perspective. On the other hand, some consumers claim they are placed in dangerous working conditions. Participants have had the opportunity to see many news stories of road accidents involving delivery riders (R-1, R-2, R-7, R-8). R-2 highlighted that they are not receiving adequate social security and that riders with delivery time limits are operating in fear for their lives. This insecurity regarding social protection is one of the consumer concerns. They noted the need for generous workers' insurance and the introduction of social security schemes as part of corporate social responsibility (R-8, R-9). As for the possibility of action from workers in this platform-centred business model, R-1 point out the difficulties as follows.

"I think it isn't easy to use workers' collective bargaining power. Because if the riders go against the platform, their work will be disrupted and penalised by the platform. Therefore, they have to finish their deliveries in a limited amount of time during work, cutting down on resting time, including toilets. It may be difficult to form a trade union or even find one. As a result, I can say this work is only for the short term." (R-1)

As a result, workers are forced to work whilst accepting the imbalance of power within the business model and must rely on third parties to improve their working conditions. Consumers are aware of this situation and believe that firms at the top of the business model pyramid need to improve something from their hands.

*d) Mutual assistance difficulties*

Meituan users argued for improvements from the platform side regarding the lack of balance of power and riders' working conditions in the OFD business model. On the other hand, the result found that the contribution from customers to improving riders' working conditions is minimal. As a premise, they tend to perceive that customers use OFD services only for convenience and that it is not their job to scramble to improve the working conditions of riders.

"My question is, what are the benefits of consumers helping riders? I think social workers and the media may be able to contribute to changing their working environment, but we are ordinary consumers. We don't even know how to help them as consumers, and I think it is tough to help them given the current situation." (R-1)

Customers see themselves as mere users of OFD services and do not seem to see themselves as being able to be involved in mutual aid with the workers. Furthermore, even if they have a specific understanding of the conditions faced by current riders, they highlight it is limited what they can do as customers to improve conditions. As possibilities to improve riders' working conditions, respondents consider tipping and the use of social media may be able to contribute to riders' empowerment. The Meituan app allows free tipping online; respondents have listed them for deliveries in bad or hot weather. However, tipping is a kind of appreciation for customers, and there is a slight perception that they contribute to their working conditions. As R-7 stated, customers are not firms, they are just customers, so it should say that the system cannot be changed. In addition, they perceive that, in the end, they cannot

change the rules of the game created by the firms. They also suggest the potential for adjusting the practices of this game. To be close to the riders, what customers can do is examine the actual reactions of the riders and give them feedback on the application. Many customers give them positive feedback, which can lead to more payments at the end of the month, higher scores, and more orders. Whilst building such means of empowerment on an individual customer scale, R-5 argues that harnessing the power of social media and gaining a public understanding of improving working conditions for OFD riders may be able to change the platform policy.

"I remember a sensible debate on social media in China a few years ago about delivery times and safety. I thought getting the public involved in this debate would be a good idea. This discussion contributed to public awareness of the OFD service and improved it slightly. I have also heard that social media discussions about the problem of few restaurants and no resting places for delivery workers led to several rest points." (R-5)

However, this support from service users would generate a new concern that excessive support towards worker empowerment could lead to them being used as part of the corporate game to generate further profits. Ultimately, the wrong approach to support can be a catalyst for other disparities between workers and platforms within the business model.

## **5. Discussion**

This study focuses on consumers and attempts to provide new insights into how well they understand and contribute to the working conditions of gig workers. As there is very little consideration of the consumer perspective in research on the gig economy, their understanding of gig workers suggests that it expects to provide equity to the platform-driven gig economy business model. Whilst the gig economy in China, particularly the OFD sector, is an essential service for the public, the unequal working conditions of workers due to the overwhelming balance

of power of the platforms is a primary concern for government regulators. However, excessive regulatory repression affects the sector significantly and can deprive workers of employment opportunities. It would be a third potential (consumers) that is neither a platform nor a government regulator but can influence the ecosystem of the O2O gig economy sector.

Through in-depth interviews with Meituan food delivery users, this study questioned delivery riders' understanding of their working conditions and their potential contribution to the empowerment of riders. Whereas respondents were upfront that food delivery services have changed the convenience of Chinese people's lives, they had a wealth of insight into the working conditions of delivery riders. They believed that low barriers to entry and strict COVID-19 management policies within China have encouraged workers to join the sector. However, they noted a mix of advantages and disadvantages to these jobs. They perceived that riders' tasks could function as short-term jobs for new graduates who cannot find additional economic income or employment. It is still not an ideal job in terms of lack of stability and conditions.

Regarding the actual working conditions, they had a range of concerns about the working pattern at the same time as perceiving it as a productivity-oriented job where they earn as much as they work. In fact, they saw riders being manipulated by platforms, taking risks to avoid penalties, and making deliveries in adverse conditions. The question here is whether riders receive financial support commensurate with this risk. The Meituan platform attempts to support riders by establishing a primary delivery price gradient according to local living standards and subsidies based on season and bad weather conditions. In economically developed cities such as Beijing, Shanghai and Guangzhou, the primary delivery fee per item is around 7-15 yuan, whilst in financially backward areas and towns, it is 3-5 yuan (R-13). In winter, there is a shortage of riders engaged in takeaway work compared to summer, which may result in a subsidy of 10-20 yuan per order. In case of bad weather or high temperatures, they can receive an additional allowance of 0.7-1.5 yuan per order. However, the reality is that consumers do not perceive support from these platforms well, and it is also unclear whether drivers

will reflect it. Some of them also noted that the burden on riders and their ability to continue working depended on user demand and feedback but recognised that they had little impact on them.

Opinions on the treatment of riders were divided, with some claiming that riders are treated better than before. In contrast, others stated that they are still forced to work under unequal conditions. However, most respondents were in common regarding the expansion of workers' insurance in terms of safety and the proper adaptation of the social protection system. Meituan requires riders to take out Meituan Rider Insurance. As soon as a rider starts taking orders, 3 yuan (about USD0.4) is automatically deducted from the premium, and they must pay 90 yuan (about USD12.5) monthly. Once a rider is involved in a traffic accident or incident, they can apply for compensation. However, it is necessary to consider further how well this insurance works as social security for riders and whether it is not contributing to their insurance coverage options and financial burden.

However, users did not mention the imbalance in working conditions from a legal perspective as prior literature, and practical side focused. It may paralyse their standards for working conditions by complicating the business model of a mega-market that also incorporates a highly uneducated segment of workers. Indeed, given that the main driver of the market is young generations with little working experience, it may make it even more difficult for them to form voluntary labour unions and gain collective bargaining power. It would underlie the divergent perceptions of consumers. Chinese OFD users were more reluctant than users in Australia, Spain, and the USA, which was covered in previous studies, to contribute to improving workers' working conditions. Some consumers are interested in using services and do not see themselves as playing a role in supporting workers. They further pointed out that although they are aware of the working conditions of riders, it is difficult for them to contribute at an individual level to empowerment. As a factor in users' lack of mutual aid awareness, the analysis explored the possibility of riders giving a negative impression of users' reluctance to help, but there were no great reasons. The actual behavioural factors that gave them a negative

impression included listening to blaring music on the road due to the absence of their office, dangerous driving (R-18) and even the quality of the delivered food. However, Meituan's customer support has solved most users' problems by responding quickly (R-17). It provides new insights that differ from previous studies. According to Belanche et al. (2021), the perception of OFD users in Spain and the USA of unfair working conditions faced by OFD riders has proven to influence platform preference. Consumers carefully scrutinise the relationship between platforms and workers, and the more the platform strives to improve the working conditions of its riders, the more positive the use of its services, which is more significant for more socially conscious customers.

However, Chinese OFD users tend to differ from previous studies. They consciously consider the trends of workers and take a stance of using the service solely for their convenience. Healy et al. (2020) found that Australian OFD users recognised gig work as a potential impediment to workers' economic security and sympathised with their financial predicament. Furthermore, Smith et al. (2020) show that Australian OFD users were willing to pay more to improve riders' working conditions and earnings but also regarded that this short-term financial support was unlikely to bring lasting improvements in working conditions. Chinese OFD users were also optimistic about financial assistance, including tipping.

Contrary to this reluctance to reciprocate between individuals, disseminating OFD riders' working conditions to a broad audience through social media is a valuable means of influencing the platform. However, consumer support for OFD riders may ultimately create further disparities between platforms and workers. The excessive support and promotion may instead have a positive effect on the profit-oriented platform business model. As respondents pointed out, consumers' influence on the sector is limited. It is partly because the OFD industry in China is oligopolised by Meituan, Ele.me and the tech giants that support their operations. Ultimately, the government regulators, not consumers, can intervene to prevent conflicts of interest between actors in this robust platform capitalism. This is based on the

fact that China does not aim for the survival of capitalism but the maintenance of existing powers and interests in political leadership (Pearson et al., 2021). Further study needs to observe the gig economy market in China, which has a unique growth trajectory, where the government tends to regulate economic activity under a “state” capitalist system, contrary to the Western-style “free-market” capitalism, which encourages individual and corporate competition. This difference may impact customers’ understanding of and contribution to the sector.

## **6. Lessons for Online Food Delivery Sector in Malaysia**

This section draws lessons for the Malaysian OFD sector from experiences gained from consumer perceptions of OFD gig workers in China. In presenting these lessons, the similarities and differences between the Chinese and Malaysian OFD sectors were illustrated concerning four main themes derived from the thematic analysis: (1) new category job location between chance and risk, (2) ultimate O2O productivity labour, (3) fragile workers’ balance of power, and (4) mutual assistance difficulties. Specifically, commonalities and differences were observed in terms of factors contributing to the diffusion of gig work, users’ perceptions and impressions of OFD gig work, user-worker relationships, market power balance and consumers’ potential contribution to empowering OFD riders.

Firstly, the factors behind the diffusion of gig work in Malaysia also share several similarities with China. According to Ng et al. (2017:) and Uchiyama et al. (2022b), three factors are considered for the increase in gig workers in Malaysia: (1) the intensifying cycle of obsolescence and renewal of industry and job descriptions due to rapid technological progress; (2) the increasing number of people who do not prefer traditional employer-employee relationships (3) COVID-19 restrictions on mobility and increased unemployment (Ng et al., 2017: 3; Uchiyama et al., 2022b: 168). Notably, China and Malaysia have imposed strict mobility restrictions on their citizens through government policies such as the “Zero COVID Policy” and the “Movement Control Order (MCO)”, respectively. These factors have reminded people of the possibilities and realities of new working methods. As a result, OFD



work and other gig labour markets have acted as a “catchment area” for employees with reduced incomes or unemployment and new graduates who cannot find work. In China, on-demand gig work does not require high skills in terms of competition for jobs for recent graduates and can pay more than graduates working in blue-chip firms, as the payment is based on their performances. Through interviews with Malaysian gig workers, Uchiyama et al. (2022b: 174) describe their work as “performance-based short-term decent work”. It is similar to the case in China, where becoming an OFD driver is a lower priority than becoming a firm employee, although it works well as a means of earning money. However, the crucial difference in people’s perceptions of the OFD sector between the two countries is reflected in third-party evaluations. In China, people have a negative image of working in this sector, whilst in Malaysia, OFD workers tend to be widely accepted as the primary means of work by the public. As R-4 stated in the interview, “Most of the family members do not feel that working as an OFD rider is ideal for them.” Public impressions and concerns tend to be more strongly expressed in China. They are concerned that they do not acquire practical skills and that it is dangerous to keep going out on the streets. In Malaysia, many young people have entered the sector, induced by the flexibility of not being tied to a traditional job. They tend to have fewer negative impressions of the work from a third-party perspective. Furthermore, workers understand the risks to a certain extent and are encouraged to do this work, making it easy for them to make time for themselves and their families. In decentring this work, opposing opinions from third parties, such as family members and relatives, may be reflected negatively on the gig workers. Therefore, a wider public acceptance of the OFD sector in Malaysia and the management of the ecosystem underpinned by business and government to reduce risk and its representation may not only support workers’ working environment but also minimise concerns of new entrants entering the sector.

Secondly, there are differences in the relationship between users and riders in OFD service operations in China and Malaysia. This study positions the operations of OFD riders in China as the ultimate O2O productive labour, which users also recognise. Riders operate under the

O2O process, subject to constraints from the platform. They have to limit penalties for late deliveries and make deliveries on time, even in bad weather and traffic jams, which increases the risk of accidents. On the other hand, as Uchiyama et al. (2022b: 176) point out, Malaysian riders are forced into “platform and customer-centricity operations”. According to Furuoka (2022), food delivery platforms in Malaysia have an oligopoly. They still face declining numbers of both consumers and riders, whereas, in China, the number of customers has surpassed about 300 million by the end of the 2010s, compared to 200 million in mid-2010 (Furuoka et al., 7th June 2022).. Before the pandemic, OFDs were part of people’s lives; this will not change as the pandemic moves toward its endemic. In this context, it may be inevitable that the understanding of Chinese customer workers is higher than that of Malaysian workers. At the same time, it is self-evident that Malaysian food delivery studies consider customer service satisfaction and loyalty, whilst their perception of workers is overlooked. This study found that Chinese users recognise that the increased burden on riders is induced by user demand and seek to provide incentives to them. One lesson for Malaysia is that customer understanding in this operation should be built through Malaysian customer-rider interactions.

In addition, the difference in the balance of power between workers and platforms in the OFD sector in China and Malaysia provides significant insights. Meituan users are also aware of the vulnerability of riders in their working environment and find it difficult to resist the platform or exercise their collective bargaining power. On highly controlled platforms, riders are more afraid of being penalised than taking action. As a result, the current OFD market in China is less structured as a worker-versus-platform structure and more of a regulator-versus-platform regulatory and operational surveillance situation. It is because the OFD labour market in China is duopolised by Meituan and Ele.me, backed by the Tencent and Alibaba giants, respectively (Qiu, 2022). In a highly-duopolised labour market, workers’ bargaining power and wage rates tend to be weak. Malaysia maintains an oligopoly market structure, with widely recognised platforms such as Airasia Food and Shopee Food, as well as major players such as Foodpanda and Grab

Food. However, there is some variation in market share rates (Roslan and Nawi, 2022).

In such an oligopoly situation, platforms tend to have higher bargaining power and wage rates for workers than in a duopoly situation (Furuoka et al, 7th June 2022; Sun, 2019). Therefore, before the OFD sector in Malaysia becomes a duopoly and eventually a monopoly, OFD riders need to develop effective strategies to compete with the platforms. However, OFD workers in Malaysia are still exploring effective resistance measures. On 5 August 2022, OFD riders went on strike in Malaysia's Kuala Lumpur and Selangor districts to protest against low delivery rates and unequal rights. However, their protest failed, given that only some of the riders opposed it and that they resumed their duties the following day (The Rakyat Post, 6th August 2022; The Star, 5th August 2022). Although the Malaysian government has ratified these collective bargaining conventions, the bargaining power of Malaysian trade unions is weak as they are regulated from three directions: legislative, judicial and administrative (Uchiyama et al., 2022a). Considering the OFD sector in China, where workers' bargaining power is fragile due to duopoly, persistent bargaining and resistance can serve as the most active strategy and, consequently, contain the potential to gain further support from third-party forces such as consumers and the government. The persistence of such market power imbalances could accentuate riders' stickiness to the platform (Qiu, 2022) and undermine the "flexibility" that is the essence of traditional gig work (Anwar and Graham, 2021). Participating actors must fear that this will lead to labour attrition and the depletion of the entire on-demand gig market, far from the decentralised potential of gig workers.

Finally, the challenges in the potential contribution of Chinese consumers to improving the working conditions of riders provide essential clues in taking empowerment from Malaysian OFD users to them. Meituan users claim that their contribution in terms of empowerment is limited and not very effective. They tend to take the stance that they are just users of the service, which is a problem for the platform to improve. This stance is not harmful and would make sense in a traditional service sector. Unless they perceive the benefits of actively

assisting workers, building mutual aid is just empty talk on the table. On the other hand, consumers suggested helping riders by giving tips and spreading their working conditions on social media. In their perfectionist mindset, consumers consider these supports limited in terms of their empowerment in the labour market, but they may be attractive to the actual workers. Although little research has been conducted on Malaysian consumers' understanding of gig workers, Uchiyama et al. (2022b) found that Malaysian platform gig workers emphasised tipping and customer feedback as conditions that positively affected working conditions. Malaysian consumers can support workers by understanding the labour market and fostering a spirit of mutual support similar to that of Chinese consumers. Although the interview in this study did not find a strong correlation between worker behaviour and customer assistance levels, to a small extent, the results of this study indicate that road behaviour, dangerous driving and food quality have a negative impression on customers. Thus, riders may need to create at least positive customer impressions to attract customer assistance.

## **7. Conclusion**

This study has aimed to explore the potential of consumers, one of the critical actors in the gig economy business model. Whilst Chinese Meituan users' deep understanding of riders drives their interest and the sector's prosperity, their high demand may contribute to the gap between OFD platforms and riders. The exploitation-growth business model of some platforms has resulted in a duopoly with only Meituan and Ele.me controlling 95% of the domestic market, boosted by Chinese tech giants Tencent and Alibaba (Daxue Consulting, 30th June 2022; Furuoka et al., 7th June 2022). The market size is expected to reach a world-leading RMB 94.174 billion (Daxue Consulting, 30th June 2022), and consumers are no longer manipulated as the main profit-generating character of the platforms. Furthermore, in China, government intervention through state capitalism has considerable discretion in running firms, which is another reason consumers have a limited impact on the empowerment of workers. However, from a macro perspective, bringing about government regulatory intervention is a reaction against

conflicts of interest for platforms. It will not change the fundamental empowerment of OFD riders or the power relations in the business model. Therefore, it is essential not to underestimate the importance of reflecting users' views closer to the workers from a micro perspective. The results of this study demonstrated that OFD users have an ample understanding of riders and their exact position in the business model. It presents both platforms and regulators with the potential to act as a mitigating agent to prevent consumers from disrupting business models. Online platforms will inevitably face intense oppression from regulators due to their primary focus on excessive growth.

On the other hand, given the OFD sector's tremendous contribution to sustaining a state-led growth economy, the destruction of the prescience by strong repression at the regulator can be avoided. A good voice for the consumer may be a third solution for the OFD industry, which is groping between growth and regulation. Moreover, this study is one of the qualitative benchmarking studies focusing on OFD users in China, which could be applied to quantitative research to reflect more public opinion and qualitative research to assess consumers from the riders' perspective. Finally, understanding the ridership of OFD users in China has also provided new insights into the OFD sector in Malaysia. Whilst empirical research on the impact of customers on gig workers has been limited to Western countries such as Australia, the USA, and Spain (Belanche et al., 2021; Healy et al., 2020; Smith et al., 2021) and has demonstrated that China and those countries have different trends, that of Malaysia found some similarities. Through this tendency, the adaptability of the Chinese case could be adapted to other Asian countries where the customer on-demand gig sector supports the domestic economy.

However, this study has several limitations. First, the sample in this study is not necessarily representative of the understanding of OFD riders among all Meituan users in China. In particular, the primary data for this study was collected from only 19 users of limited age and province. Additional research with a larger sample size from a more significant number of areas is essential to get a clearer picture of the differences in customer OFD riders' understanding of the working

situation across regions. Secondly, this study may not cover all the concerning elements of the operational situation of OFD riders. This study mainly investigated user understanding based on five factors: working classification, working environment, social protection, safety and risks, and collective bargaining power. However, the current situation suggests that riders' concerns may not be limited to these factors. For future studies to accurately identify the challenges that OFD riders face, it will be necessary to conduct interviews with workers. Third, the current study focused only on the Meituan app. In reality, the OFD market in China is a duopoly, with two platforms, Meituan and Ele.me, controlling the market. Hence, it is also necessary to focus on Ele.me users. It will also embody a "representation" of customer perceptions of OFD riders in the Chinese OFD market.

- \* Yosuke Uchiyama is a PhD candidate in the Department of East Asian Studies, the Faculty of Arts and Social Sciences, at University of Malaya, Kuala Lumpur, Malaysia. His research interests are law and economics, business economics, including the gig economy and sharing economy, and Japan-ASEAN relations. E-mail: [yosuke@um.edu.my](mailto:yosuke@um.edu.my)
- \*\* Md Nasrudin Md Akhir is an Associate Professor at the Japan Studies Program (JSP), Department of East Asian Studies, University of Malaya. He specialises in international relations between Japan and East Asia, focusing on security, foreign policy, and political economy. He is the author and editor of 16 books and numerous academic articles published locally and internationally, including Routledge and Springer. His publications can be found in international journals such as the *Bulletin of the Atomic Scientists*, *The Economic and Labour Relations Review*, *Advanced Materials Research*, Switzerland, and *Asian Profiles*. E-mail: [mnasrudi@um.edu.my](mailto:mnasrudi@um.edu.my)
- \*\*\* Wang Yuanzhu is a PhD candidate in Asia-Europe Institute (AEI) at University of Malaya, Kuala Lumpur, Malaysia. She studied Japanese culture and language at Dalian University of Foreign Languages, China. E-mail: [s2100159@siswa.um.edu.my](mailto:s2100159@siswa.um.edu.my)
- \*\*\*\* Beatrice Lim is a senior lecturer at the Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah. Her research interests include labour economics and gender studies. E-mail: [beatrice@ums.edu.my](mailto:beatrice@ums.edu.my)

- \*\*\*\*\* Khairul Hanim Pazim is a senior lecturer at the Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah. Her research interests include labour economics and ageing studies. E-mail: k\_hanim@ums.edu.my
- 1 The authors gratefully acknowledge financial support from the Fundamental Research Grant Scheme (FRGS) from the Ministry of Higher Education, Malaysia (Project No: FP026-2021, Code: FRGS/1/2021/SS0/UM/02/12).

## References

- Aloisi, Antonio. (2015). Commoditised workers: Case study research on labor law issues arising from a set of on-demand/gig economy platforms. *Comp. Lab. L. & Pol'y J.*, 37, pp. 653-690.
- Anwar, Mohammad Amir and Graham Mark. (2021). Between a rock and a hard place: Freedom, flexibility, precarity and vulnerability in the gig economy in Africa. *Competition & Change*, 25(2), pp. 237-258.
- Barratt, Tom, Goods Caleb, and Veen Alex. (2020). 'I'm my own boss...': Active intermediation and 'entrepreneurial' worker agency in the Australian gig-economy. *Environment and Planning A: Economy and Space*, 52(8), pp. 1643-1661.
- Belanche, Daniel, Casalo, Luis. V, Flavian Carlos and Perez-Rueda Alfredo. (2021). The role of customers in the gig economy: how perceptions of working conditions and service quality influence the use and recommendation of food delivery services. *Service Business*, 15(1), pp. 45-75.
- Blazyte, Agne. (2022a). Sales of online food delivery service in China 2011-2020. Statista. <<https://www.statista.com/statistics/699310/china-sales-in-home-delivery/#:~:text=China%27s%20online%20food%20delivery%20business%20is%20booming.%20Over,in%20China%20had%20used%20online%20food%20delivery%20services.?msclkid=c54d77ecd02011eca3119b51c7355e2e>>.
- Blazyte, Agne. (2022b). Most used food delivery apps in China 2021. Statista. <<https://www.statista.com/statistics/1149429/china-favorite-food-delivery-apps/>>.
- Boyce, Carolyn and Neale Palena. (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input (Vol. 2). Pathfinder international Watertown, MA.



- Braun, Virginia and Clarke Victoria. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp. 77-101.
- Chen, Jing-Fang, Wang Ling, Wang Shengyao, Wang Xing and Ren Hao. (2021). An effective matching algorithm with adaptive tie-breaking strategy for online food delivery problem. *Complex & Intelligent Systems*, 8, pp. 107-128.
- Chen, Ji-Ming and Chen Yi-Qing. (2022). China can prepare to end its zero-COVID policy. *Nature Medicine*, 28(6), pp. 1104-1105.
- Chen, Julie. Yujie and Sun Ping. (2020). Temporal arbitrage, fragmented rush, and opportunistic behaviors: The labor politics of time in the platform economy. *New Media & Society*, 22(9), pp. 1561-1579.
- Choi, Yongrok, Zhang, Li. G, Debbarma Jahira and Lee, Hyoungsook. (2021). Sustainable Management of Online to Offline Delivery Apps for Consumers' Reuse Intention: Focused on the Meituan Apps. *Sustainability*, 13(7), Article 3593.
- Cini, Lorenzo, Maccarrone Vincenzo and Tassinari Arianna. (2022). With or without U (nions)? Understanding the diversity of gig workers' organising practices in Italy and the UK. *European Journal of Industrial Relations*, 28(3), pp. 341-362.
- Daxue Consulting. (30th June 2022). China's duopoly food delivery market. <<https://daxueconsulting.com/o2o-food-delivery-market-in-china/>>
- Dazmin, Daud and Ho Min-Yoong. (2019). The relationship between consumers' price-saving orientation and time-saving orientation towards food delivery intermediaries (FDI) services: an exploratory study. *Gsj*, 7(2).
- De Stefano, Valerio. (2015). The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowd Work and Labour Protection in the 'Gig-Economy'. Bocconi Legal Studies Research Paper on SSRN.
- Engels, Friedrich. (1892), *The Condition of the Working Class in Britain in 1844*, Sonnenschein, London.
- The Rakyat Post. (6th August 2022). Food Delivery Boycott Fails, Riders Continue To Work. <<https://www.therakyatpost.com/news/malaysia/2022/08/06/food-delivery-boycott-fails-riders-continue-to-work/>>
- Furuoka, Fumitaka, Lim Beatrice and Pazim, Khairul. Hanim. (7th June 2022). Effect of COVID-19 Pandemic on the Food Delivery Industry and Ologopsony in Malaysia: A Lesson from China Karabakh III. *International Congress of Modern Studies in Social Sciences and Humanities*, Karabakh, Azerbaijan.

- Goods, Caleb, Veen Alex and Barratt Tom. (2019). "Is your gig any good?" Analysing job quality in the Australian platform-based food-delivery sector. *Journal of Industrial Relations*, 61(4), pp. 502-527.
- Gregory, Karen. (2021). 'My Life Is More Valuable Than This': Understanding Risk among On-Demand Food Couriers in Edinburgh. *Work, Employment and Society*, 35(2), pp. 316-331.
- Healy, Joshua, Pekarek Andreas and Vromen Ariadne. (2020). Sceptics or supporters? Consumers' views of work in the gig economy. *New Technology, Work and Employment*, 35(1), pp. 11-19.
- iMedia. (30th July 2022). Meituan's first public rider delivery time algorithm: the estimated delivery time is changed to a flexible time period. <<https://min.news/en/tech/963ea2414a8e4d01a8989414e08c4edf.html>>.
- Jabagi, Nura, Croteau Anne-Marie, Audebrand, Luc. K and Marsan Josianne. (2019). Gig-workers' motivation: thinking beyond carrots and sticks. *Journal of Managerial Psychology*, 34(4), pp. 192-213.
- Kost, Dominique, Fieseler Christian and Wong, Sut. I. (2020). Boundaryless careers in the gig economy: An oxymoron? *Human Resource Management Journal*, 30(1), pp. 100-113.
- Koutsimpogiorgos, Nikos, van Slageren Jaap, Herrmann, Andrea. M and Frenken Koen. (2020). Conceptualizing the Gig Economy and Its Regulatory Problems. *Policy and Internet*, 12(4), pp. 525-545.
- Lan, Hing, Ya'nan Li and Shuhua Wang. (2016). Improvement of online food delivery service based on consumers' negative comments. *Canadian Social Science*, 12(5), pp. 84-88.
- Lau, Teck-Chai and ng David. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. 1, pp. 62-77.
- Li, Charlene, Mirosa Miranda and Bremer Phil. (2020). Review of Online Food Delivery Platforms and their Impacts on Sustainability. *Sustainability*, 12(14), Article 5528.
- Tech Crunch. (20th February 2022). New regulation in China to hit food delivery giants' profit model. <<https://techcrunch.com/2022/02/20/end-of-chinese-food-delivery-platforms-runaway-growth/>>.
- Maimaiti, Mayila, Zhao Xueyin, Jia Menghan, Ru Yuan and Zhu Shankuan. (2018). How we eat determines what we become: opportunities and challenges brought by food delivery industry in a changing world in China. *European Journal of Clinical Nutrition*, 72(9), pp. 1282-1286.
- Montgomery, Tom and Baglioni Simone. (2021). Defining the gig economy: platform capitalism and the reinvention of precarious work. *International Journal of Sociology and Social Policy*, 41(9/10), pp. 1012-1025.

- Mukhopadhyay, Boidurio. Rick and Chatwin Chris. R. (2020). The Significance of Herzberg and Taylor for the Gig Economy of China: Evaluating Gigger Incentives for Meituan and Ele.me. *International Journal of Applied Behavioral Economics*, 9(4), pp. 1-17.
- Nayan, Norshita. Mat and Hassan, Mohd. Khairul. Azmi. (2020). Customer satisfaction evaluation for online food service delivery system in Malaysia. *Journal of Information System and Technology Management*, 5(9), pp. 123-136.
- Ng, Allen, Tan Zhai. Gen and Mahadeva Mohan. (2017). *An Uneven Future? An Exploration of the Future of Work in Malaysia [Discussion Paper]*.
- Papakostopoulos, V and Nathanael Dimitris. (2021). The Complex Interrelationship of Work-Related Factors Underlying Risky Driving Behavior of Food Delivery Riders in Athens, Greece. *Safety and Health at Work*, 12(2), pp. 147-153.
- Pearson, Margaret, Rithmire Meg and Tsai, Kellee. S. (2021). Party-state capitalism in China. *Current History*, 120(827), pp. 207-213.
- Peetz, David. (2019). *The realities and futures of work*. ANU Press.
- Pitchay, Anwar. Allah, Ganesan Yuvaraj, Zulkifli, Nurul. Syifa and Khaliq Ahmad. (2022). Determinants of customers' intention to use online food delivery application through smartphone in Malaysia. *British Food Journal*, 124(3), pp. 732-753.
- Pinsof, Jennifer. (2015). A new take on an old problem: employee misclassification in the modern gig-economy. *Mich. Telecomm. & Tech. L. Rev.*, 22, pp. 341.
- Poon, W. C and Tung, S. E. H. (2022). Consumer risk perception of online food delivery during the COVID-19 Movement Control Order (MCO) in Malaysia. *Journal of Foodservice Business Research*, pp. 1-21.
- Prassl, Jeremias and Risak, Martin. E. (2016). Uber, Taskrabbit, & Co: Platforms as Employers? Rethinking the Legal Analysis of Crowdwork. *Comparative Labor Law and Policy Journal*, 37, pp. 604-619.
- Qiu, Jack. Linchuan. (2022). Humanising the posthuman: Digital labour, food delivery, and openings for the new human during the pandemic. *International Journal of Cultural Studies*, 25(3-4), pp. 445-461.
- South China Morning Post. (10th February 2022). Beijing continues to push labour protections as China's delivery couriers battle 'dehumanised' algorithms in fight for survival. <<https://www.msn.com/en-xl/news/other/beijing-continues-to-push-labour-protections-as-china-e2-80-99s-delivery-couriers-battle-e2-80-98dehumanised-e2-80-99-algorithms-in-fight-for-survival/ar-AATFAJj?ocid=uxbndlbing>>

- Roslan, Nur. Mira. Arisa and Nawati, Nur. Syazwani. Mohd. (2022). Food Delivery Service Application during Pandemic COVID-19. *Journal of Technology and Operations Management*, 17(1), pp. 71-79.
- Roy-Mukherjee, Shampa and Harrison Michael. (2020). The Shifting Boundaries of Capitalism and the Conflict of Surplus Value Appropriation within the Gig Economy. In R. Page-Tickell & E. Yerby (Eds.), *Conflict and Shifting Boundaries in the Gig Economy: An Interdisciplinary Analysis*. pp. 45-62.
- Rusli, Rusdi, Mohammad, Mazlina. Zaira, Azreena Kamaluddin, Noor, Bakar Harun and Hafzi Md Isa, Mohd. (2022). A comparison of characteristics between food delivery riders with and without traffic crash experience during delivery in Malaysia. *Case Studies on Transport Policy*, 10(4), pp. 2244-2250.
- The Star. (5th August 2022). Don't gig up on us, baby: P-hailing riders want full worker rights and benefits. <<https://www.thestar.com.my/news/nation/2022/08/05/don039t-gig-up-on-us-baby-p-hailing-riders-want-full-worker-rights-and-benefits>>
- Smith, Brett, Goods Caleb, Barratt Tom and Veen Alex. (2021). Consumer 'app-etite' for workers' rights in the Australian 'gig' economy. *Journal of Choice Modelling*, 38, 100254.
- Soon, Wong. Lai, Gengeswari, K and Chin, Khor. Saw. (2022). A Peek at the Food Delivery Application Adoption Reluctance among Generation Y in Malaysia. *Journal of Positive School Psychology*, 6(3), pp. 7018-7031.
- Standing, Guy. (2011). *The precariat: The new dangerous class*. Bloomsbury academic.
- Stewart, Andrew and Stanford Jim. (2017). Regulating work in the gig economy: What are the options? *Economic and Labour Relations Review*, 28(3), pp. 420-437.
- Sun, Ping. (2019). *Chinese Journal of Communication*, 12(3), pp. 308-323.
- Tan, H and Kim, V. W. E. (2021). Examining the Factors that Influence Consumer Satisfaction with Online Food Delivery in Klang Valley, Malaysia. *The Journal of Management Theory and Practice (JMTP)*, pp. 88-95.
- Tarmazi, Siti. Anis. Adilah, Ismail, Wan. Rusni. Wan, Azmin, Nur. Aisya. Syazwani. Noor and Bakar, Ahmad. Redhuan. Abu. (2021). Consumer Purchase Intention toward Online Food Delivery Service: The Implication for Future Research. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(9), pp. 347-354.
- Thomala, Lai. Lin. (2022). Number of online food delivery users in China from

- 2015 to 2021. Statista. <<https://www.statista.com/statistics/1117698/china-number-of-internet-food-delivery-service-users/#:~:text=As%20of%20December%202021%2C%20around%20544%20million%20people,The%20boom%20of%20online%20food%20delivery%20in%20China?msclkid=e9f47863d0fc11ec8cf60782cf7219b9>>.
- Uchiyama, Yosuke, Furuoka Fumitaka, Md Akhir, Md. Nasrudin, Li Jingyi, Lim Beatrice and Pazim, Khairul. Hanim. (2022a). Labour Union's Challenges for Improving for Gig Work Conditions on Food Delivery in Japan: A Lesson for Malaysia. *WILAYAH : The International Journal of East Asian Studies*, 11(1), pp. 83-111.
- Uchiyama, Yosuke, Furuoka Furuoka and Md. Akhir, Md. Nasrudin. (2022b). Gig Workers, Social Protection and Labour Market Inequality: Lessons from Malaysia. *Jurnal Ekonomi Malaysia*, 56(3). pp. 165-164.
- Vaismoradi, Mojtaba, Turunen Hannele, and Bondas Terese. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), pp. 398-405.
- Veen, Alex, Barratt Tom, and Goods Caleb. (2020). Platform-Capital's 'Appetite' for Control: A Labour Process Analysis of Food-Delivery Work in Australia. *Work, Employment and Society*, 34(3), pp. 388-406.
- Wang, Tianyu, and Cooke, F. (2021). Internet Platform Employment in China: Legal Challenges and Implications for Gig Workers through the Lens of Court Decisions. *Relations Industrielles/Industrial Relations*, 76(3), pp. 541-564.
- Wood, Alex. J, Graham Mark, Lehdonvirta Vili and Hjorth Isis. (2019). Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy. *Work Employment and Society*, 33(1), pp. 56-75.
- Wood, Alex. J and Lehdonvirta Vili. (2021). Antagonism beyond employment: how the 'subordinated agency' of labour platforms generates conflict in the remote gig economy. *Socio-Economic Review*, 19(4), pp. 1369-1396.
- Xiao, Shan. Y. (2019). Understanding the Employment Status of Gig-Workers in China's Sharing Economy Era-An Empirical Legal Study. *Asian Journal of Law and Economics*, 10(3), Article 20190019.
- Xie, Jingyi, Xu Yan and Li, Haixiao. (2021). Environmental impact of express food delivery in China: the role of personal consumption choice. *Environment Development and Sustainability*, 23(6), pp. 8234-8251.
- Yang, Fiona. X, Li, Xiangping, Lau, Virginia Meng-Chan and Zhu, Victor Zhu. (2021). To survive or to thrive? China's luxury hotel restaurants entering O2O food delivery platforms amid the COVID-19 crisis. *International*

*Journal of Hospitality Management*, 94, 102855.

- Yeo, Vincent Chow Sern, Goh, See Kwong and Rezaei, Sajad. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, pp. 150-162.
- Zhou, Irene. (2020). Digital labour platforms and labour protection in China (9220322390). ILO Working Paper 11.
- Zulkarnain, Kedah, Ahasanul, H and Selim, Ahmed. (2015). Key success factors of online food ordering services: An empirical study. *Malaysian institute of Management*, 50(2), pp. 19-36.