Exploring Challenges of Food Delivery Riders in The Gig Economy – A Conceptual Model

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Abstract

The widespread use of smartphone apps and online ordering has contributed to a significant increase in the meal delivery sector in recent years. These riders have flexible job alternatives because of the gig economy; nevertheless, there are drawbacks as well. Food delivery riders play a crucial role in ensuring the smooth and efficient delivery of food to customers. However, not all food delivery procedures go smoothly because there are a number of obstacles and problems that food delivery riders have to deal with before the food is delivered to the clients. Thus, the purpose of this research is to identify the factors that lead to the issues and challenges that urban area of food delivery drivers encounter. A conceptual model has been laid out based on the findings of the interview conducted with 10 food delivery riders in order to accomplish this research based on data saturated. According to the research, there are four main factors that lead to issues and challenges for food delivery riders: time constraints, fraudulent consumers, dangerous behaviour, and system problems. Future research can be shaped by the suggested conceptual framework.

Keywords: online food delivery, food delivery rider, gig economy, challenges, conceptual model

1. Introduction

Using a phone app to place a takeaway order from your preferred restaurant may appear to be a very contemporary habit. However, food delivery has existed for a considerable amount of time prior to the smartphone era. It is common knowledge that two Italian royals placed the first pizza delivery order in the 19th century. Furthermore, in the 130 years that followed that pivotal moment, the development of food distribution mostly followed general historical patterns. It is evident that within the past five years, the market for meal delivery has expanded. Food delivery has evolved to encompass everything as a result of platform-to-consumer businesses like DoorDash and Uber Eats, adding billions of dollars in potential revenue collection. Millions of people under lockdown during COVID-19 submitted their first-ever internet food orders, propelling the sector into the future (Curry, 2023)

The food delivery industry has experienced a radical change in recent years, primarily due to the widespread impact of online ordering platforms and smartphone apps. As a result of this development, the gig economy is rapidly expanding and providing flexible work options for people who deliver meals. The gig economy has its own set of difficulties even if it offers riders a distinctive job structure that gives them the freedom to select their own work schedules.

In Malaysia, Yellowbees website released the list of Top 10 Food Delivery Platforms For F&B Merchants in Malaysia.

Rank	Food Delivery Apps	Coverage
1	GrabFood	Major cities nationwide
2	Foodpanda	Major cities nationwide
3	ShopeeFood	Klang Valley
4	AirAsia Food	Klang Valley, Penang, Ipoh
5	EASI (Hungry)	Selected cities
6	Bungkusit	Klang Valley, Terengganu, Ipoh, Johor
7	DeliverEat	Penang, Klang Valley
8	LOLOL	Klang Valley. Melaka, Johor
9	GemSpot	Klang Valley
10	Beep Delivery	Klang Valley, Penang, Johor

Table 1.1: Top 10 Food Delivery Platforms For F&B Merchants in Malaysia.

Users of online food delivery services may also bring their own automobiles, including cars, bikes, scooters, and motorcycles. Food delivery riders possess a wide range of duties, including using reasonable judgement, dealing with customers with good behaviour that you would like the company to represent, communicating clearly with customers and food service staff, and delivering food efficiently and politely in order to provide outstanding customer service while establishing lasting relationships with customers.

In order to pinpoint the underlying causes of obstacles to the smooth delivery of food to clients, this article undertakes a thorough investigation of the difficulties experienced by food delivery riders in the Klang Valley. In order to provide a comprehensive knowledge of the complex issues faced by food delivery riders, the research attempts to develop a conceptual model based on information obtained from interviews with this group of people. Time restrictions, dishonest consumer practises, risky behaviours, and structural problems in the food delivery ecosystem are the key components that the study found. This research attempts to shed light on the intricacies that underpin the daily experiences of food delivery riders in the gig economy through a thorough examination of these issues.

The gig economy is redefining traditional employment structures, and it is critical to understand and address the difficulties experienced by people who operate in it. This paper provides insight into the challenges faced by food delivery drivers while also laying the groundwork for future studies by putting forth a conceptual framework that can guide and influence more research in this dynamic and developing field.

1.1 Research Objectives

The purpose of this paper is to identify and examine the factors that lead to the problems and difficulties faced by Klang Valley food delivery drivers. Governments, food delivery service providers, and food delivery riders can come up with strategies to address these issues and ensure that the food delivery process continues well while minimizing potential disruptions by being aware of them.

2. Literature Review

2.1 The Scenario of Food Delivery

The principles behind the food delivery process are complex and involve a symphony of activities that smoothly integrate customers, delivery platforms, and restaurants. Essentially, the procedure starts when an order is placed via mobile applications or internet platforms. This initial action begins a series of events that include the restaurant acknowledging the order and the careful preparation of the chosen items. When the food is prepared for delivery, then it passes to the assigned delivery staff, who are mostly gig economy riders equipped with thermal bags and cellphones. The seamless transition from kitchen to doorstep depends on accurate planning and prompt

implementation. For ensuring a quick and precise delivery, ideas like route optimisation, real-time tracking, and order prioritisation are essential.

These ideas are closely associated with the concept of customer satisfaction. The temperature of the food served, the on-time delivery, and the overall experience all have an impact on the customer's opinion of the service. Furthermore, the conceptual framework becomes even more difficult in light of the rapidly changing landscape of contactless delivery and unique packaging alternatives. Basically, there is a lot more to the ideas behind the food delivery process than just carrying meals. They include a dynamic interaction of customer-focused tactics, logistics, and technology that come together to reinvent the contemporary dining experience. Understanding and improving these ideas is crucial for the food delivery ecosystem's sustained development and prosperity.

The Department of Statistics Malaysia (DOSM) reported that out of a total of 6,657 p-hailing labourers, 97.71 percent were young adults aged 15 to 30, while the remaining 2.29 percent were senior citizens aged 60 or older. According to a study conducted from March 1 to December 31, 2022, the majority of p-hailing employees possessed an educational qualification equivalent to Sijil Pelajaran Malaysia (SPM) or Sijil Pelajaran Malaysia Vokasional (SPMV) (39.54%), a diploma or equivalent (23.24%), or a bachelor's degree (11.79%). DOSM also stated in the report that 73.08 percent of p-hailing employees consider their employment to be their primary source of income, and 70.35 percent consider it to be their primary occupation. Only 29.65% of respondents opted to enrol in the service with the intention of increasing their income.

Presenting a variety of menus on the digital platform is standard practice for food providers who offer online food delivery services. This entails the initial phase in the procedure that motorcyclists delivering food have to undergo. The meal of their preference is selected and placed in the order by the customer in the second phase. The next steps consist of receiving orders, disseminating them to the restaurants, and monitoring payments. Food delivery services ensure that their clients receive their meals by employing delivery tracking tools prior to transmitting their orders to the facilities where the meals are to be prepared. "Food apps," or meal delivery software, are what enable each of the previously mentioned operations.

2.2 Risky Behavior

In contrast to those with daily distances below 200 kilometres, those exceeding 200 kilometres significantly elevate the likelihood of encountering traffic accidents. Accidents are more probable when travelling longer distances, according to a significant number of traffic safety studies (Rusli et al., 2022) It was determined that several factors contributed to traffic accidents involving p-hailing customers: speeding, ignoring red lights, and slippery roads (Hang Tuah et al., 2022). More than half of motorcyclists, according to a previous study, use their mobile phones while riding. This was especially evident among "Tok-Tok" riders (those with three wheels). Additionally, the majority of motorcyclists travel on highways and disregard traffic regulations such as road signs and traffic lights (Sa & Mm, 2018). According to group differences, food delivery drivers demonstrated a positive relationship between time constraints and erratic driving. Although traffic enforcement significantly diminishes the aggressive driving conduct exhibited by food delivery drivers, it is personal standards that function as a more effective deterrent for ordinary e-bike riders compared to the concept of traffic enforcement (Dong et al., 2021)

P1 – It is risky behavior positively relates to food delivery rider's challenges.

2.3 Fraud

A significant proportion of food delivery drivers have encountered difficulties in managing various types of customers, including those who exhibit aggressive and impolite behaviour, as well as those who have difficulty avoiding fraudulent reservations and incorrectly pinning locations. Theft is committed by individuals who fraudulently assert that an online food order was lost, damaged, or incorrect in order to obtain a complimentary or discounted meal. Refund policy fraud occurs when a customer, knowing the food order was ascurate in nature, knowingly claims that the food they received from an online food delivery service was absent, damaged, or inaccurate. In order to secure a substantial discount or a complete refund, specific users may fraudulently assert that their online food order was defective, incomplete, or incorrect (Orhan & Collisson, 2022). Ensure the security and convenience of every interaction that takes place between customers and passengers. Application-side security measures are required to eradicate the possibility of cheating, despite the existence of policies and laws designed to prevent it. Potential ridership losses could be mitigated by the proposed transaction structure for the food delivery service (Damaini et al., 2018)

P2 – It is fraud positively relates to food delivery rider's challenges.

2.4 Time Pressure

It would be more difficult to supply items on time and in the proper condition (especially at the desired temperature) if there were a greater range of demand groups. If a diabetic consumer orders anything online out of desperation, for instance, a food delivery driver must guarantee prompt delivery; otherwise, the client faces serious health risks. Timely delivery has a significant impact on customers' satisfaction and loyalty to online meal delivery services (Abbas et al., 2023). Although food delivery times would be extended, riders will incur higher maintenance and fuel costs. Riders risk running out of fuel and missing the delivery window if they take longer routes or get caught in prolonged traffic jams (Patel, 2022) The main obstacles in determining journey time are very different from those in determining service time, such as the availability of numerous route possibilities for a given journey and the dearth of data for route segments (Zheng et al., 2022). From the standpoint of health and safety, the demanding nature of the work obviously caused some riders to suffer from fatigue-related impairment and pressure to go over speed restrictions (Christie & Ward, 2018).

P3 – It is time pressure positively relates to food delivery rider's challenges.

2.5 Problem of Food Delivery System

Concerns regarding scheduling are prevalent in the service industry, including on-demand food delivery services. Riders assigned the responsibility of fulfilling a substantial volume of orders may confront order stacking complications that hinder the initial order's delivery until all orders issued to customers have been fulfilled. Puram et al. (2022) state: A food delivery application that fails could cause riders to encounter difficulties in accessing and managing their delivery orders. This may result in delivery delays and dissatisfied customers as a consequence of couriers' incapacity to accept new orders or potential challenges in fulfilling their existing orders (2023, Helling). Food delivery riders are often remunerated on a commission or per-delivery basis. A food delivery system breakdown may impede riders from accepting new orders or cause them to encounter difficulties in completing their current orders, both of which can lead to financial losses (Nguyen-Phuoc Quy et al., 2023)

P4 – It is problem of delivery system negatively relates to food delivery rider's challenges.



Figure 2.1: Conceptual framework shows the factors that influence food delivery riders' challenges in Klang Valley

3. Method

The framework proposed in this study were based on data collection. The study employs a qualitative methodology to gather its data based on 10 respondents. In the Klang Valley region, a sample of food delivery couriers employed by GrabFood, Foodpanda, and Shopee Food participated in qualitative interviews to identify the most influential challenges. This investigation will employ non-probability sampling, with a specific emphasis on Snowball Sampling, as its sampling technique. The data collection process is terminated when saturation is reached. This indicates that no additional pertinent information was obtained from the participants.

In the initial phase of interviews, the participants' backgrounds were ascertained. After determining the background of the participants, the second phase of the interviews consisted of identifying the riding characteristics of the study participants. In the final phase, the participants' experiences with regard to risky behaviour, fraudulent customers, time constraints, and food delivery system problems were uncovered. The interviews performed in the data collection process culminated in a saturation point, from which the conceptual framework that was proposed was formulated.

Items	Total		
1. Age			
20 - 22 years old	2		
23 - 25 years old	7		
26 - 28 years old	1		
Total	10		
2. Gender			
Male	10		
Female	0		
Total	10		
3. Race			
Malay	10		
Indian	0		
Chinese	0		
Total	10		
4. Education			
Bachelor's degree	5		
Diploma	3		
Sijil Tinggi Persekolahan Malaysia (STPM)	2		
Sijil Pelajaran Malaysia	0		
Total	10		
5. Reason for doing food delivery			
Generate side income	8		
Fill their free time	2		

Table 3.1: The background of participants in the data collection

4. Discussions and Conclusions

This discovery aligns with the research undertaken by Malik et al. (2023) and Nguyen-Phuoc et al. (2023), which demonstrated that risky behaviour is a contributing factor to the food delivery problem. Fraudulent consumers are additional findings that present difficulties for transporters, which are consistent with the results of Chai and Yat's (2019) study. In fact, time constraints have been identified as a contributing factor to food delivery in studies by Guo et al. (2021) and Chiu et al. (2021). Gera et al. (2018) assert that system problems constitute a significant obstacle and concern within the realm of food delivery.

Among the recommendations and solutions derived from this research is an enhancement of the food delivery procedure. In order to ensure that motorcyclists do not surpass speed limits while operating the vehicles, it is recommended that businesses implement speed monitoring as a reinforcement for passengers who comply with speed limits. Updates must be made to the food application systems of food delivery services in order to detect

fraudulent order transactions. By possessing an extensive comprehension of the fraud life cycle, the security software is capable of detecting fraudulent activities. It is imperative that legal restrictions on motorcyclists be tightened. This is the consequence of the riders disregarding the red traffic light in an effort to reach the customers' location as soon as possible so they could receive tips from them.

This conceptual paper concluded with a summary of the factors that influence the difficulties and fears encountered by food delivery couriers in the Klang Valley. A number of significant factors have been identified, including fraudulent consumers, time constraints, risky behaviour, and issues with the food delivery system. It provides food delivery couriers, government and policymakers, and food delivery platform companies with a practical framework for comprehending the elements that contribute to the difficulties.

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