

PERCEPTION OF FOOD DELIVERY RIDER DURING MOVEMENT CONTROL ORDER (MCO): A CASE STUDY IN WANGSA MAJU KUALA LUMPUR

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ABSTRACT

Food delivery service in Malaysia is an emerging trend in urban settings prior to 2020 or the COVID-19 pandemic. During the implementation of Movement Control Order (MCO) by the Malaysia government to control the spread of COVID-19 virus, food delivery service was listed as an essential service that was allowed to operate while dine-in at food outlets were prohibited. This study aims to investigate the needs of food delivery services in an urban planning to facilitate during and after COVID-19 pandemic. Wangsa Maju Kuala Lumpur was selected as the case study. This study was conducted on 100 food delivery staffs from Grab Food and Food Panda delivery platform through purposive sampling. Data were collected by questionnaire survey and were analyzed by SPSS software. The findings demonstrated that there were three themes of challenges which are (i) no waiting and resting area, (ii) inadequate and unavailability of parking spaces, and (iii) delivery location issue. The findings served as a platform for future study as well as the development of policy and guidelines together with collaboration planning to improve urban management.



Keywords: *food, food delivery services, Movement Control Order, COVID-19, Kuala Lumpur*

INTRODUCTION

Food delivery service is not new sector in market today, but their reach is expanding to the use of digital applications and smartphones. During the COVID-19 pandemic in Malaysia, food delivery services growth increased significantly due to Movement Control Order (MCO) ordered by the government to control the spread of COVID-19 virus. Following the adoption of MCO, the government has declared food delivery services to be part of the essential services. The Prevention and Control of Infectious Diseases (Measures within Infected Local Areas) (No.2) Regulations 2020 also listed food delivery service in the Federal Gazette on March 31, 2020. Businesses and stores that were judged non-essential had to be shut down during the Movement Control Order (MCO). To preserve social distance between tables, Malaysian restaurants had to restrict their seating capacity. Furthermore, as a result of the economic slump, some people who have lost their jobs, turned to meal delivery as their new source of income. With social distancing that has been ordered by the government, people highly demanded to have takeout food delivered, since it can prevent the people from the infection of the virus. As a result, restaurants and eateries immediately partnered with at least one food delivering platform to prevent their business from shutting down. According to the World Health Organization (WHO), this new situation is called the 'New Normal' pertaining to the changes in human behaviour in terms of the way to live, work, and play. Furthermore, the manner viewing the city also changed substantially, where in this context, focused on the food delivery service. The influence of this service is highly welcomed in the context of urban planning (Acikgoz & Gunay, 2020). To date, the accommodation for the needs of the food delivery service in urban planning in Malaysia is still inadequate since food delivery service is still a new developed concept in Malaysia. This study aims to investigate the perception of food delivery rider on the services and facilities during MCO period particularly in Wangsa Maju, Kuala Lumpur.

LITERATURE REVIEW

History of Food Delivery Service

According to Knodel (2019), the concept of food delivery can be traced all the way back to ancient Rome (753 B.C. – 476 A.D.). Due to the lack of a kitchen in their homes, the poor were left with no alternative for hot meals, which is where the street kitchens came into play which is known as Thermopolium (Knodel, 2019). On the other hand, Gamilla (2021) stated that food delivery started in 1889, when King Humberto and Queen Margherita, the king and queen of Italy, asked chef Raffaele Esposito to have pizza brought to them at their palace. Thus, pizza delivery began. Next, while under British rule during 1890, Thomke and Sinha (2013) reported that the dabbawala meal delivery system is created in Mumbai, India, in which the dabbawalas delivered meals directly to people's workplace using the rail and bicycle (Thomke & Sinha, 2013). Another view from Gamilla (2021), due to the most popular invention of the 1950s that was the television, more families preferred to watch television while enjoying their meals, specifically middle-class American, resulted in many fast-food restaurants introduced takeaway and delivery options (Gamilla, 2021).

The 'New Norm'

The government developed a Standard Operating Procedure (SOP) in the movement of persons to control the spread of COVID-19 cases, which was the biggest contributing element to the 'New Norm' situation. The federal government restricts people's ability to enter or leave a specific area to curb the spread of the COVID-19 pandemic in Malaysia. There are four types of movement control order in Malaysia, which are:

1. Movement Control Order (MCO). MCO is the restriction movement of people to enter or to leave specified area by the federal government for the reasons of controlling the spread of COVID-19 pandemic in Malaysia. Table 1 shows the Standard Operating Procedure (SOP) for MCO.

Table 1: Standard Operating Procedure for Movement Control Order

Prohibited	
1.	Cross-county or state; except emergency, health, employment, economics, vaccinations, and long-distance couples
2.	All forms of ceremonies or social gatherings
3.	Sports or recreational activities
4.	Operation of educational institutions
5.	Dine-in at restaurants and eateries
Allowed	
1.	Akad nikah with determined number of attendance & SOP
2.	Individual sports or recreation in the open area
3.	Students sit for international examinations
4.	Childcare centres, kindergartens, & nurseries operate in accordance with sops.
5.	Only three people in private vehicle, taxi & e-hailing including driver
6.	The number of people in the vehicle carrying the goods depends on the amount allowed in the commercial vehicle registration license
7.	The number of people in public transport must comply with physical distancing & sops are determined
8.	Delivery, drive-thru & take-away meal sales
9.	All sectors of the economy can operate

Source: Ministry of Health Malaysia (2021)

2. Enhanced Movement Control Order (EMCO). EMCO is a stricter order implemented on the condition of a large cluster which was discovered in an area for 14 days. The regulations comprise:
 - a. Door-to-door tracing for COVID-19.
 - b. All exit and entry points are closed.
 - c. Police, Armed Forces and RELA personnel present.
 - d. All businesses are shut down.
 - e. A medical base will be established within the area.
 - f. Adequate food supplies will be given by Social Welfare Department.
 - g. Food deliveries until lobby or designated areas.

3. Conditional Movement Control Order (CMCO) refers to the loosening of the MCO regulations, with the main purpose that is to resume the national economy in a controlled approach.

4. Recovery Movement Control Order (RMCO).

Food Delivery Service during COVID-19 Environment in Malaysia

Table 2 below shows the key events on COVID-19 in 2020 and the government imposition on food and beverage industries which become the catalyst in the behaviour change in society to shift to food delivery service.

Table 2: Timeline of Key Events of Covid-19 in Malaysia in 2020

Quarter	Date	Events
Q1 2020	18 th March	<ul style="list-style-type: none"> From March 18th to March 31st, Prime Minister Tan Sri Muhyiddin Yassin issued a 14-day Movement Control Order (BERNAMA, 2020).
	19 th March	<ul style="list-style-type: none"> DBKL announced 24-hour eateries will only be open from 6 a.m. to 10 p.m. during the Movement Control Order (MCO) period (New Straits Times, 2020).
	25 th March	<ul style="list-style-type: none"> MCO extended to April 14th (Anis M. N, 2020).
Q2 2020	2 nd April	<ul style="list-style-type: none"> The Federal Gazette - Prevention and Control of Infectious Diseases (Measures within Infected Local Areas) (No.2) Regulations 2020 classifies food delivery as an essential service (Arumugam, 2020).
	10 th April	<ul style="list-style-type: none"> MCO extended further to April 29th (Muhammad, 2020).
	17 th April	<ul style="list-style-type: none"> COVID-19 screening is required for all food delivery riders, according to Datuk Seri Mohd Ismail Sabri Yaakob (Povera, 2020). Small businesses and individuals in towns are also permitted to conduct food delivery services as long as they register with their respective municipal authorities (Azil, 2020).
	3 rd May	<ul style="list-style-type: none"> Starting on Monday, May 4, 2020, food outlets, stalls, and business premises in Selangor will be allowed to operate from 7 a.m. to 10 p.m., but only for takeaways and deliveries (Annuar, 2020) .

	7 th June	<ul style="list-style-type: none"> The existing Conditional Movement Control Order (CMCO) will be phased out on June 9 and replaced by the Recovery Movement Control Order (RMCO), according to Prime Minister Tan Sri Muhyiddin Yassin. In June, the RMCO eased restrictions on economic and social activity in Malaysia, which businesses allowed to operate throughout the RMCO (Povera & Chan, 2020).
Q3 2020	September	<ul style="list-style-type: none"> The third wave of COVID-19 infections has been triggered by the Sabah election. The number of COVID-19 cases is skyrocketing (Bedi, 2020)
Q4 2020	12 th October	<ul style="list-style-type: none"> From October 14 to October 27, Selangor, Kuala Lumpur, and Putrajaya will be under the control of the CMCO (Yunus & Chan, 2020).
	26 th October	<ul style="list-style-type: none"> The CMCO is extended until November 9, 2020 in Kuala Lumpur, Selangor, and Putrajaya (Zainul E, 2020)
	7 th November	<ul style="list-style-type: none"> From November 9 to December 6, CMCO was applied in Peninsular Malaysia, with the exception of Kelantan, Pahang, and Perlis. The current conditional MCO in Selangor, Kuala Lumpur, Putrajaya, and Sabah, which was set to expire on November 9, has been extended till December 6th (Zainul E., 2020).
	5 th December	<ul style="list-style-type: none"> Except for Sabah, Kuala Lumpur, most of Selangor, and sections of Johor, Negeri Sembilan, Kelantan, and Perak, the Conditional Movement Control Order (CMCO) would be extended until December 20 (Channel News Asia, 2020).
	7 th December	<ul style="list-style-type: none"> In places under CMCO, including Kuala Lumpur, the National Security Council (MKN) lifted the limit on the number of diners allowed to share tables at eateries (Anis M. N., 2020).
	18 th December	<ul style="list-style-type: none"> CMCO in Kuala Lumpur and Selangor is extended to 31st December 2020 (Kaos, 2020).
	28 th December	<ul style="list-style-type: none"> CMCO is further extended to 14th January due to increase of cases (Chan, 2020).

Due to the Movement Control Order (MCO) imposed by the government, consumers have changed their behaviour significantly. According to Angele (2020), food delivery industry has been heavily affected due to the constraints imposed on restaurants, as well as on riders in terms of the delivery procedure. In addition, food delivery service is a solution of a contactless communication which is being enforced by the government

to avoid the risk of COVID-19 infection. Due to that, many restaurants globally chose to associate with a third-party delivery service as a form of culture (Cheng, 2016; Syakir Amir *et al.*, 2017b).

Food delivery rider is classified as gig workers, which is an online platform worker (Vallas & Schor, 2020), that plays a part in a formal agreement with the platform companies in providing service for their consumers (Donovan & Lutz, 2016). Majority of the platform worker have to provide their own 'capital equipment' for their work (Stewart & Stanford, 2017). Besides that, majority of the gig workers are not working full-time, and in relation to that, Stewart and Stanford (2017) claimed that gig work acts generally as a complementary for other main job. Payment for gig workers is based on the tasks instead of per unit of time worked.

The rise of food delivery services, specifically food delivery people, has increased employment prospects (Li *et al.*, 2020). The workforce in gig economy has a very low commitment since the riders work according to their leisure time. However, according to Tyas *et al.* (2019), food delivery rider are subjected to a poor working condition, considering the high volume of work and the danger in the delivering process.

As mentioned by Shi (2003), urban planning is concerned with creating a more suitable, healthy, effective, and desirable environment for the welfare of the population. Proper living conditions must be supplied through the city, in both its physical and philosophical elements, in which as a result, urban planning must use all of its abilities to suit the demands of the population (Varesi & Mahmoudzade, 2016).

Varesi and Mahmoudzade (2016), Syakir Amir *et al.* (2017a, 2017c) also highlighted the need of an inextricable aspect of human nature, although some of these needs are non-material but nevertheless required for growth and well-being. In order to meet all components of an urban society in an appropriate manner, physical urban planning must progress in line with socio-economic planning.

Food Delivery Service in City Logistics

Last-mile delivery concerns the final stage of the freight transport

system from the last distribution centre to the recipient's designated destination address (Lim *et al.*, 2018; Gevaers *et al.*, 2014, and Harrington *et al.*, 2016). According to Allen *et al.* (2018), food delivery service is one of the sub-branches in last-mile delivery, in which, it can be seen that it operates under a high time pressure as 'it must overcome to meet the 'need-it-now' consumer mindset' (Shaikh, 2020).

The growth of food delivery service to some extent contributed to the city logistics system. Morganti *et al.* (2014) as cited in Fancello *et al.* (2017), developed the terms 'food mile' which can be defined as 'the physical distribution of food occurring in the last part of the food supply chain'. Based on Morganti and Gonzalez-Feliu (2015) as cited in Fancello *et al.* (2017), food delivery service involved a high frequency of a small delivery size item, which the numerous receivers strewn across the city. In addition, the logistical activities carried out by restaurants, food deliverers, and food delivery platforms are quite complex, on top of, the urban environment's complexity is characterised by stakeholders with varying demands and specifications.

In the food delivery service concept, there are two operations which are restaurant-to-consumer and platform-to-consumer operations (Boyer & Hult, 2005; Li *et al.*, 2020). Platform-to-consumer delivery concept emphasized on providing the customers with prepared-meals or groceries from partners that do not necessarily have to offer delivery process themselves. In this case, the platform, such as Grab Food and Food Panda, controls the delivery process.

On the other hand, restaurant-to-consumer delivery concept is where the restaurant or grocery store itself handles the preparation of the meals or groceries, as well as the delivery of food. The order is made through a restaurant website or a phone call, such as Pizza Hut.

Facilities for Food Delivery Service

Parking Space

Parking regulations and enforcement, as well as safety concerns, have emerged as important issues. A study by Brown *et al.* (2020) found

that motor cars frequently hinder other travelers' access when dropping off or picking up food by double parking, parking in 'No Parking' areas, or blocking driveways, which is a problem for delivery drivers, according to the study. The study also found that double parking is often a problem when people drop off or pick up food. Chongqing municipality has devised a new method for offering parking places for last-mile delivery trucks. Food delivery trucks will be given parking spots in areas where parking is in high demand, such as business districts, hospitals, residential neighborhoods, and office buildings. For service provider vehicles, they will be provided with an authorized sticker. Food deliverers will also be provided parking places in high-demand areas. (Xinhua, 2019).

Waiting Area

Currently, there is no study conducted on waiting area for food delivery staff, however during the COVID-19 outbreak, the Ipoh City Council (MBI) took the initiative to construct rest and relaxation (R&R) stops for food delivery riders' temporary relief, with the support of the State Government of Perak (Ipoh City Council, 2021). This is based on the observation of food deliverer welfare as one of the frontliners during the COVID-19 outbreak.

Road Safety

Reported by MIROS, during peak hours, 70% of food delivery staff took risks such as stopping in yellow boxes, jumping red lights, and riding while using their smartphones since the riders are under time pressure to deliver the food on time (Selangor Journal, 2021). According to Selangor Journal (2021), the government and food delivery service companies collaborated on a road safety campaign called 'Ride Carefully, Safe Delivery' to raise road user awareness and lower accident rates.

METHODOLOGY

The research employed online questionnaire survey in order to investigate the needs of food delivery service riders. A total of 100 online questionnaire survey is distributed through purposive sampling which targeting on the food riders specifically Food Panda and Grab Food riders. The selection of the respondents was conducted within Wangsa Maju as the area is a people-concentrated area with huge malls, restaurants, houses and offices.

The respondents were approached by the numerators and were asked to fill up the online survey by considering the physical distancing procedure. The survey incorporates (i) food rider socio-demographic profiles, (ii) food delivery services activities, (iii) challenges of food delivery service during MCO and (iv) delivery route.

RESULTS AND DISCUSSION

Table 3 below illustrated the length of involvement and food rider status. It illustrates that the statement by Umar *et al.* (2020) that COVID-19 had a favorable impact on the Gig economy with many people commenced to work in the industry as well as the high number of customers since MCO started implement in the country by the government. This is also echoed in the study which found that 48% of the respondents commenced to work as food deliverer for the two significant food delivery platform in Malaysia, Grab Food and Food Panda, during the MCO period.

Table 3: Cross-Tabulation of Length of Involvement and Food Rider Status

Length of Involvement	Part-time Rider	Full-time Rider	Total Food Rider	Percentage of Total Food Rider (%)
< 1 year	40	8	48	48
1-2 years	28	9	37	37
2-3 years	7	3	10	10
> 3 years	2	3	5	5
	77	23	100	100

n=100

Source: Primary Survey, 2021

Due to this new trend, it can be discovered from the analysis that the needs of the society, particularly food deliverer, for a proper working condition, the facilities for food delivery framework have not yet planned and provided in Wangsa Maju since it is an emerging trend in urban management. From the thematic analysis, there are three themes of challenges which are (i) no waiting and resting area, (ii) inadequate and unavailability of parking spaces, and (iii) delivery location issue. These challenges should be taken seriously as they are significant in enhancing urban management.

Relating to the SOP during MCO period, food deliverers also do not have place to pray since all religious facilities need to be closed down, alongside with the place to eat and rest since all dine-in areas are prohibited. Consequently, causing the food deliverer to impede other road users in the commercial area and high-rise building, which will lead to traffic jammed and the rise of illegal parking in commercial areas. This supports the statement of Suryanarayanan (2018), in which it is referring to the infrastructure for delivery motorbikes is not yet in place, the entire part of pedestrian walkway and stretches of road, are dominated by them.

Other than that, it can be found that large proportion of the food deliverers have experienced difficulties in locating the consumer’s delivery point, which can be perceived that most of the food deliverers took five to ten minutes to locate a single delivery point. Furthermore, technical errors in the food delivery platform apps is the main factor that contribute to the difficulties in locating consumer’s delivery point after security and residential layout. 98% of the food delivery staff used digital maps or navigation apps to assist them in locating the consumer’s delivery point. However useful it is, it still remains effective as according to one of the respondents, there are some cases the apps are not updated to the current geographical location of the area. Apart from that, Food Panda and Grab Food have provided SOP whenever any technical issue regarding the food platform app and navigation app arises. Some of the SOPs are:

- i. SOP when the customer could not be contacted.
- ii. SOP pertaining to delivery platform apps and navigation apps.
- iii. SOP when restaurants and customers pinned wrong location on the digital map.

Table 4: Relative Important Index of Factors that Contribute to the Delay in Deliveries

Factors that Contribute to the Delay in Deliveries	Frequency of Respondent				Relative Importance Index (RII)	Rank
	1	2	3	4		
Restaurant	0	3	21	76	0.9325	1
Weather	3	17	47	33	0.775	2
Traffic	13	25	37	25	0.685	3

n=100

Source: Primary Survey, 2021

From Table 4, it shows that restaurant factor is the strongest factor in contributing to the delay in deliveries, after weather and traffic aspect respectively. Restaurant is one of the nodes in the distribution structure of food delivery service, since they are involved in the food preparing and packaging. Accordingly, restaurants play a vital role in the frameworks of food delivery service. Based on the survey, the average duration that restaurant took for food preparation is within 11 to 30 minutes, which most of the food deliverer criticized on the unproductive management process. This demonstrates the necessity of collaboration planning in ensuring the delivery service's quality is met. According to Fancello *et al* (2017), the logistic activities of food delivery service are complex and involved many stakeholders. Last-mile delivery, particularly food delivery, puts a focus on management with the goal of increasing efficiency (Olsson, Hellstrom, & Palsson, 2019).

Furthermore, in logistics context, service area for food delivery in Wangsa Maju comprises the whole area which benefitted towards the population of the area during the MCO period. To bring more restaurants and businesses closer to its consumers, Grab Food's delivery service radius starts at 10 kilometers from the food outlet location as seen in Figure 1. While for Food Panda, they recently launched extra mile delivery, which widens the delivery radius from three to eight kilometers from the delivery address as per Figure 2. From the delivery radius analysis, it can be seen that the restaurants in Wangsa Maju (based on Respondents' Restaurant Point) that have partnered with Grab Food and Food Panda, can reach all the customer segments in Wangsa Maju.

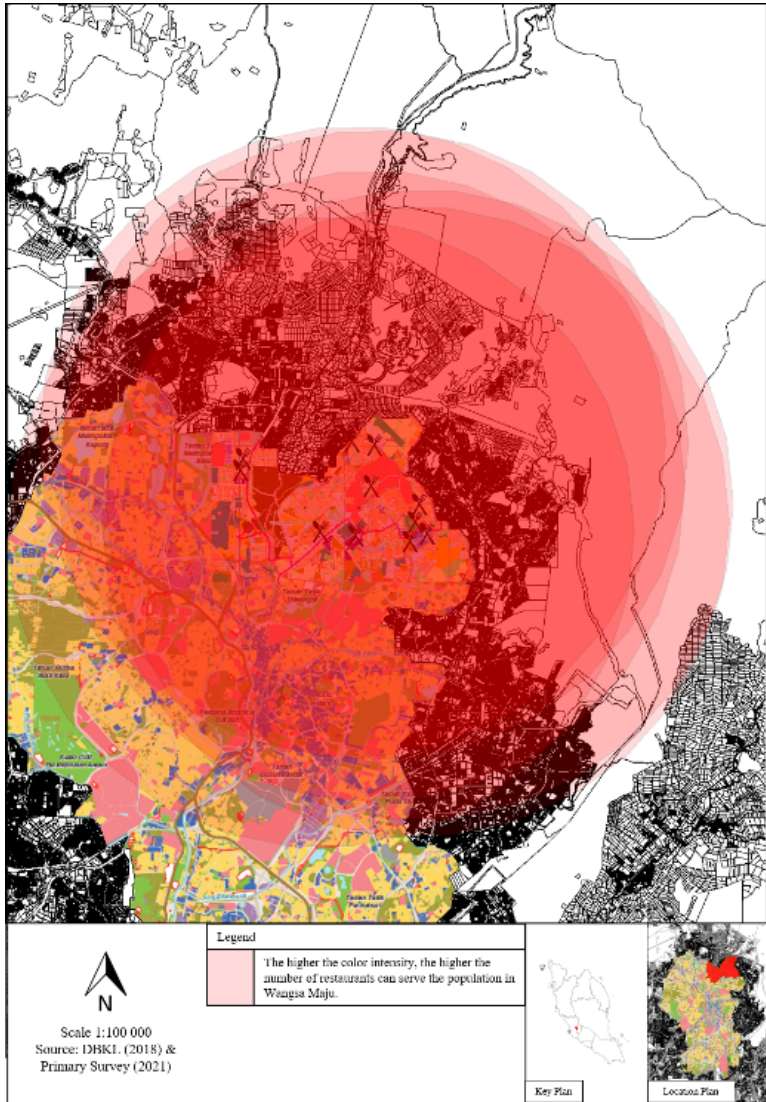


Figure 1: 10 km Delivery Radius
Source: Dewan Bandaraya Kuala Lumpur (2018)

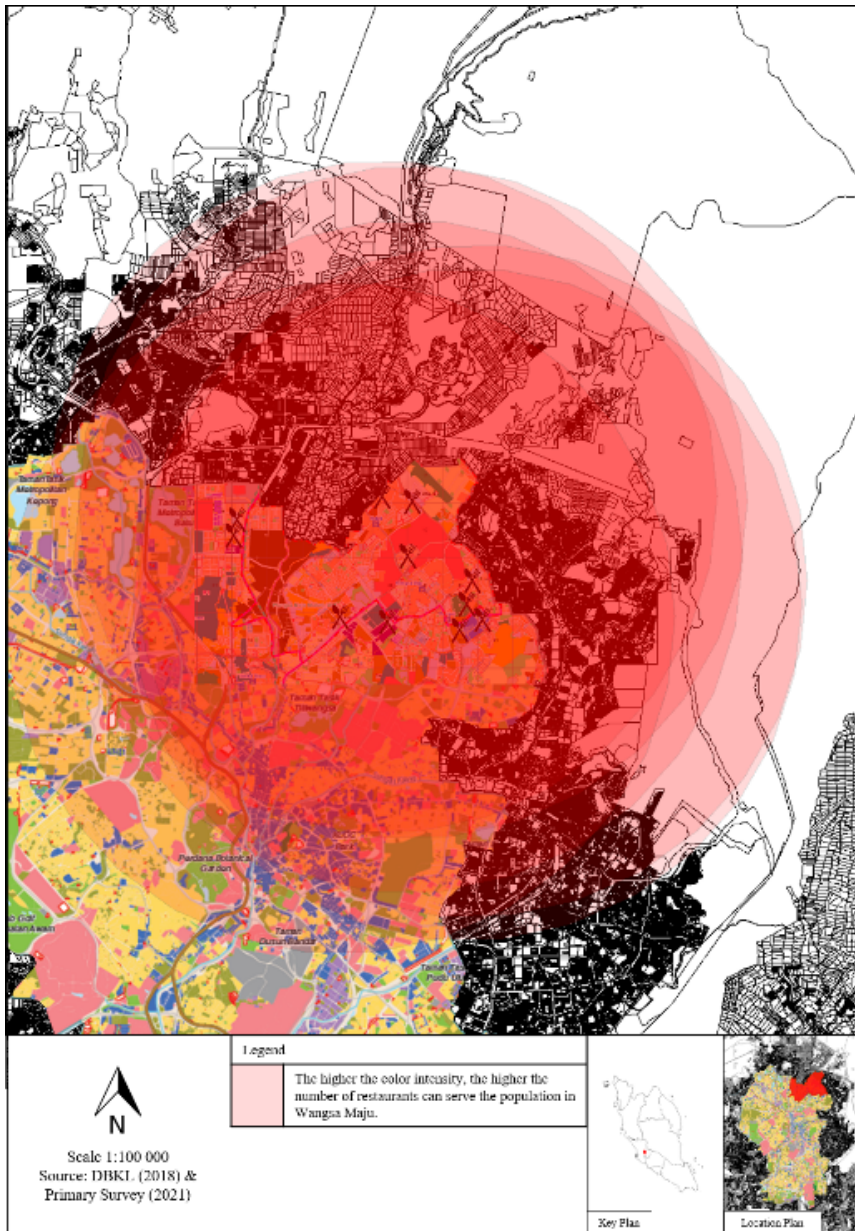


Figure 2: 8 km Delivery Radius
Source: Dewan Bandaraya Kuala Lumpur (2018)

CONCLUSION

Food delivery service is closely related to the urban planning since the frameworks utilise the infrastructures and facilities served by the cities. With a few limitations that need to be considered, a number of possible future studies using the same experimental set up are apparent. This study is carried out in the span of eight months' time. The output and recommendation can be improved through an extended timeframe of the study. The study is also conducted during the COVID-19 outbreak which to some extent may affect the output of the findings and analysis. Therefore, in continuation of further research, it is suggested that research shall be done to plan for the delivery route, as the research finds that the delivery route planning is essential to meet the consumer demand, which is to achieve short order response time. It is also suggested to investigate the needs and levels of expectation of each stakeholder involved in the food delivery service framework. For the managerial position and decision makers, as food delivery services entail numerous logistical operations, each of which is performed by a separate organisation, is advised that each entity work together to maintain the efficiency of food delivery service. Other than that, it is suggested for urban planner to establish a comprehensive planning guideline to cater the needs of food delivery service to be published which includes providing for food deliverer's temporary aid in hotspot area, enhancing the parking facilities for food deliverers, and last but not least maintaining proper infrastructure, such as road and pedestrian walkway. This study proves that human interaction and communication are important to determine the quality delivery services. If the facilities and logistics are planned from the outset by relevant authorities and the delivery staff are well-treated, it will ease the quality of delivery service and ensuring the safety within the COVID-19 pandemic period and MCO.

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