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FACTORS THAT ATTRACT CUSTOMERS TO ONLINE FOOD DELIVERY APPLICATIONS DURING THE PANDEMIC IN MALAYSIA.

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ABSTRACT

Digital technology is the science or engineering knowledge branch that deals with creating and practically using digital or computerised devices, methods, and systems to enhance human life. During the Virus-19 pandemic, many business sectors were affected economically because people could not go shopping, travelling, etc. One of the affected business sectors was the food business. Nevertheless, this digital technology helps to sustain the business sector affected by the covid-19 virus. Many online food services and delivery systems were grown to provide buying and selling food services to customers. This study selected eight Online Food Delivery Application (OFDA) platforms operated in Malaysia and further surveyed them to measure its customers' demography and their reasons for OFDA preference. Customer demography includes gender, race, age, occupation, and state of residence. While the factors used to measure customer preference to the OFDA based on common criteria of customer satisfaction metrics such as user friendly, accessibility, compatibility, and response time. Finally, the customers ranked the OFDA based on additional metrices such as rider service, food quality, price of food, and food arrival time.

ABSTAK

Teknologi digital adalah cawangan pengetahuan sains atau kejuruteraan yang berkaitan dengan penciptaan dan praktikal menggunakan peranti, kaedah, dan sistem digital atau berkomputer untuk meningkatkan kehidupan manusia. Semasa pandemik Covid-19, banyak sektor perniagaan terjejas dari segi ekonomi kerana orang ramai tidak boleh pergi membeli-belah, melancong dan sebagainya. Salah satu sektor perniagaan yang terjejas ialah perniagaan makanan. Namun begitu, teknologi digital ini membantu mengekalkan sektor perniagaan yang terjejas akibat penularan virus COVID-19. Banyak perkhidmatan makanan dan sistem penghantaran dalam talian telah dibangunkan untuk menyediakan perkhidmatan membeli dan menjual makanan kepada pelanggan. Kajian ini telah memilih lapan platform Aplikasi Penghantaran Makanan Dalam Talian (OFDA) yang beroperasi di Malaysia dan seterusnya meninjau mereka untuk mengukur demografi pelanggan dan sebab-sebab pilihan OFDA. Demografi pelanggan termasuk jantina, bangsa, umur, pekerjaan, dan keadaan kediaman. Walaupun faktor-faktor yang digunakan untuk mengukur keutamaan pelanggan kepada OFDA berdasarkan kriteria umum metrik kepuasan pelanggan seperti mesra pengguna, kebolehcapaian, keserasian, dan masa tindak balas. Akhir sekali, pelanggan meletakkan OFDA berdasarkan metrik tambahan seperti perkhidmatan rider, kualiti makanan, harga makanan, dan masa ketibaan makanan.

ARTICLE INFO

Keywords:

Online Food Delivery Application, User Friendly, Accessibility, Compatibility, Response Time, Rider Service, Food Arrival Time

Aplikasi penghantaran makanan dalam talian, mesra pengguna, kebolehcapaian, keserasian, masa tindak balas, perkhidmatan rider, masa ketibaan makanan

INTRODUCTION

Digital technology is the science or engineering knowledge branch that deals with creating and practically using digital or computerised devices, methods, and systems. During this pandemic, many sectors were affected because people could not go shopping, travel, etc. One of the affected sectors is the food business. Since the internet has revolutionised the way we shop, the powers of the internet have recently allowed people to do shopping online. Technology has been at the end of people's fingertips, so this digital technology helps revitalise the business sector affected by the covid19 virus.

Food delivery is a courier service in which a restaurant, store, or independent food delivery company delivers food to a customer. Usually, an order is made through websites or mobile applications, but people nowadays prefer to use mobile to make an order (Kapoor, A. P., & Vij, M. 2018). The item will be delivered in boxes or bags. Customers can choose the payment method to pay online or in person, with cash or a card. A flat rate delivery fee is often charged with the customer's purchase. Tips are often customary for food delivery services, and contactless delivery may also be an option. By selecting eight online food delivery platforms, they will be evaluated by the customer itself. Then, three of them will be chosen according to their strength and weakness and overall application performance, such as user-friendly, accessibility, and response time, by following a few guidelines that will be taken from a few sources.

The rest of this article is arranged in the following order. It starts with an introduction that explains a brief description of the study. It also contains the problem statement and the research objectives. It follows with the literature review, a complete outline of past research on a subject. It reviews academic articles, books, and sources pertinent to a specific examination space. The next part will be the research methodology, a precise procedure or method to gather information, analyse and interpret data of the thesis. The following section will be the result and discussion that discussed the outcome of the study's implementation, followed by the conclusion.

LITERATURE REVIEW

Technology and Food Delivery Services System

Technology plays a significant role in smartphone food delivery services. Applications can be downloaded within a few seconds, and the order and purchasing process takes only a few minutes (Gupta, 2019; Ghadiyali, 2017). Technology has changed how people live. Using only fingertips and internet network access, we can order food in restaurants and eat at home. Because of technology, therefore, has provided an opportunity for companies to produce applications that benefit companies, eateries, and consumers. Food service providers should start changing their offerings to address the latest dynamics as consumers change over generations (Kwong & Shiun-Yi, 2017). The expectations of the customer continue to follow the latest trends, so it is recommended that the organisation needs to progress and keep on developing the customers' expectations (Van & Berner, 2003). Vinaik et al. (2019)

also pointed out that food apps have started to emerge as a pattern as they suit many restaurants and understand the connection between restaurants and consumers. Since many applications can be used for OFDA, a survey was conducted to identify the top 3 that are preferred

Online Food Delivery Services: Making Food Delivery the New Normal

Malaysia's food and beverage industry has an emerging new wave, the OFDA. The emergence of online food delivery services could be attributed to the changing nature of urban consumers. This shows that the changes brought to Malaysia require an organised system to do food delivery through the website or application. According to Kandasivam (2017), Southeast Asia has a vast food delivery market. While the food market is a trillion-dollar business, the delivery market is only a small fraction of this market. This presented a significant opportunity for future growth. It is projected that by 2022, the food delivery business will grow to an annual revenue of USD 956 million, one of the fastest-growing sectors in the food market (EC Insider, 2018). Although delivery services are becoming more advanced, there are many applications that the company has created. However, which applications are the public's choice and what features need to be in place to attract users?

Customer Satisfaction for Food Delivery Services

Online food delivery services have an essential and significant role in customers' experience. Customers satisfaction involves many factors, such as food availability, customer ratings, payment methods and human interaction (Kwong & Shiun-Yi, 2017). Service providers need to focus on the quality of service to achieve maximum customer satisfaction and not just profits; the definitive goal of food delivery services should be total customer satisfaction (Nicolaides, 2008). According to Lee et al. (2019), he found that the habit has the most incredible inspiration on endless use intention, followed by performance probability and social impact. Moreover, this also approves that customer satisfaction is essential to show that the applications used by the people meet their expectations. Through this survey, we can see the effectiveness of questionnaire questions reflecting people's voices.

Online Food Delivery Application in Malaysia

According to a report by adroit market research in their sites, Malaysia's Online Food Delivery Market was estimated at USD 66.3 million in 2017. In a survey conducted by Rakuten Insight, approximately 22% of Malaysian respondents stated that they ordered food on delivery apps once or twice a week. 4% of respondents even ordered several times a day. The same survey showed that Malaysians mainly ordered lunch on food delivery apps.

This is mainly because of speed and convenience. Only specific sectors can operate as usual, but most citizens work from home, and their children also study using online platforms. There was limited time to go to the supermarket to buy groceries or food. To ease their work, citizens tend to shop online because it is easier and saves lots of money instead of going to the restaurant itself. The most popular OFDA in

Malaysia are Food Panda, Grab Food, Halo, Tapaw, BungkusIt, Lalamove, DeliverEat, and Hantar. We choose these food delivery services in our study due to their popularity.

PROBLEM STATEMENT AND OBJECTIVES

There are various choices of OFDA in Malaysia but only eight are selected based on their popularity among people and the state. The eight applications were FoodPanda, Grab Food, Halo, Tapaw, BungkusIt, Lalamove, Hantar, and DeliverEat. The customer's demography for the OFDA is the first issue studied based on gender, race, age, state of residence, and occupation. Does demography affect the use of OFDA. Second the issue of the performance of the application, which is how the application functioning and is responsive to the user. There are four types of performance to be evaluated in this OFDA: user-friendly, accessibility, compatibility, and response time. Third, the issue of customer satisfaction while using OFDA means the product meets user expectations. This includes rider service, food quality, food price, and arrival time. Thus, the study's objective covers three aspects; to identify the effect of respondent demography on the usage of OFDA, evaluate OFDA performance, and rank the OFDA based on customer satisfaction.

RESEARCH METHODOLOGY

This section presents the research methodology used to solve the problem statement and achieve the objectives, which involves information gathering, analysis, interpretation, and conclusion.

1. Information gathering

The first step is gathering different kinds of information against the targeted respondents or system. A crowdsourcing method is used to collect information for the evaluation of OFDA in Malaysia by creating a survey question using Google Survey Form. Crowdsourcing is a method where obtaining information from people via the internet. With the Covid-19 virus, the survey question spreads through social media such as WhatsApp, Instagram, Facebook and Twitter. The survey questions were divided into three parts, shown in Table 1. Each piece is targeted to a specific research objective. While Table 2 shows some of the questions used in the survey.

The target sampling numbers are 200 respondents. A total of 223 respondents answered the survey questions, only one did not agree to answer the questions, and another three people are not using the OFDA. So, the response from the respondents was rejected and made a total of 219 valid respondents.

Table 1: Sub-sections of Survey Questions

1	Customer Demography	1. Data about the respondent's demography includes gender, race, age, residence by state, and occupation. 2. Which OFDA is preferred by gender and race. Finally, how often respondents used the application,
2	OFDA Performance	The matrix used user-friendly, accessible, compatible, and response time.
3	OFDA Ranking	1. The respondent will rank the OFDA based on rider service, food quality, price of food, and food arrival time.

Table 2 Some of The Items Used in The Survey

No	Questions
1	Have you using the OFDA
2	How often did you use OFDA (frequent – less frequent)
3	How did you know OFDA
4	Rank OFDA based on familiar to not familiar (most familiar – least familiar)
5	Which OFDA is user-friendly (rank)
6	Which OFDA is easy to access (rank)
7	Which OFDA compatible with your device
8	Which OFDA response fast (range of time)
9	Which OFDA give best service
10	Which OFDA rider is friendly
11	Which OFDA food is perfect
12	Which OFDA offer affordable food price
13	The time of food arrival punctual (minutes away from the promise)

2. Information Analysis

Information analysis involves the interpretation of data gathered by the use of analytical and logical reasoning to determine patterns, relationships or trends. According to Shamoo and Resnik (2003) various analytic procedures "provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data. After gathering the data, it must be analysed and interpreted through charts and tables. Not all respondents responded well when filling out the survey form provided. The most accessible analysis tool is using Microsoft Excel. The sampling target is 200 respondents. As mentioned above, 219 out of 223 respondents are considered valid for evaluation and analysis.

RESULTS AND DISCUSSION

This survey question has been disseminated through several Social Media mediums, namely WhatsApp, Facebook, and Instagram. Moreover, in a pandemic that hit the whole world, the movement became limited to conducting observation surveys outside the home. This survey question is divided into five parts, mentioned in Table 1 and will be explained one by one.

1. Effect of Respondent Demography to OFDA Usage

The essential part is about the respondent's background, which covers gender, race, occupation, age, and state, simply because we like to identify the respondent patterns or demography. We would like to know whether the respondent's demography affects the use of OFDA. The findings are shown in Table 3 (Gender), Table 4 (Race), Table 5 (Occupation), Table 6 (Age), and Table 7 (State).

Table 3 Respondent Gender

Gender	Percentage %	respondent
Male	45.3	101
Female	54.7	122
Total	100	223

From the table, we can see that there is almost equality between males and females who answer the survey questions. According to this survey, 54.7% are women, or a total of 122 respondents answered this survey, and 45.3% or the remaining 101, are men.

Table 4 Respondent Race

Race	Percentage %	respondent
Malay	87.4	195
Chinese	6.4	14
Indian	1.8	4
Other	4.4	10
Total	100	223

In this survey, there are three primary races: Malay, Chinese and Indian and a further five other races, namely Singh, Bajau, Iban, Bidayuh and Melanau. Overall, we can see the most crowded nation will answer questions of this survey, a total of 87.4%, or 195 respondents, followed by the Chinese, namely a total of 14 respondents or 6.4%, followed by India of 4 respondents or by 1.8%. Singh and Bajau share the same number of 3 respondents, or 1.4% and other races, only one or only 0.5%, contributed to this survey.

Table 5 Respondent Occupation

Occupation	Percentage%	respondent
Government	22	50
Private	51	113
Self-employed	18	40
Student	9	20

Based on Table 5, the private sector uses more OFDA services which is 51% or 113 respondents. It is half of the four industries probably because most private sector small companies have no canteen for employees to buy food. Thus, the options are buying outside or bringing food from home. To avoid wasting time leaving the office to buy food, they use OFDA. This is because they can collect orders from colleagues to save on delivery charges. In this pandemic season, more private sectors were open, and government workers mostly worked from home. Then, the government sector is 22% or as many as

50 respondents. Self-employed people, as much as 18% or less than ten respondents from the government sector. Students are also diligent in using OFDA, of which 9% or 20 respondents are students. Self-employed respondents, such as those with a business or housewife who runs a business from home. So, instead of being busy managing a business from work or home, ordering food is easier to save time. There are also students living in college dormitories. In this pandemic season, they can't go out to buy food, so using OFDA is the best option.

Table 6 Respondent Age

Age	Percentage%	respondent
20 years – 25 years	21.5	48
26 years – 30 years	43.5	100
31 years – 35 years	22	49
36 years – 40 years	13	26

Table 6 shows the age of the respondents who answered this survey question. Age has been divided into four, starting at the age of 20 to 40 years. Respondents between the ages of 26 to 30 years have the highest value of 43.5% or as many as 100 respondents. The second is among respondents aged 31 to 35 years, 22% or a total of 49 respondents, followed by respondents aged 20 to 25 years, 21.5% or a total of 48 respondents. Respondents aged 36 to 40 years at least is only 13% or a total of 26 respondents. Most respondents are between 26-30 years old, totalling 100 respondents. Most respondents at this age work in the private sector and have a comfortable income. Between 31 years to 35 years and 20 to 25 years, the difference is only one respondent, i.e. 49 and 48. For youth, they are still among students, and income is still not stable. While at the age of 31, they are more likely to bring food from home or even a household of more than three people at home, and it is pretty expensive to order a lot of food fast food. Respondents at 36 years old always ask the younger ones to take orders from them. Probably, at this age, they are less interested in outside food and more comfortable with food cooked at home.

Table 7 Residence of respondents by state

State	Percentage%	respondent
Johor	31.8	71
Selangor	19.3	43
Federal of Kuala Lumpur	7.2	16
Pulau Pinang	6.7	15
Kelantan	5.4	12
Kedah	4.5	10
Terengganu	4	9
Melaka	4	9
Perlis	3.8	8
Perak	3.1	7
Negeri Sembilan	3.7	7
Pahang	2.7	6
Sabah	2.2	5
Sarawak	2.2	5
Federal of Labuan	0	0

Table 7 shows the respondent by state. The top four respondents are from urban states: Johor, Selangor, Federal of Kuala Lumpur and Pulau Pinang. Most respondents are from Johor, which is 71 people. These survey questions were disseminated through social media. The second and third most populous states are Selangor which has 43 respondents, while the Federal of Kuala Lumpur has 16 respondents. For urban areas, respondents had no problem filling out the survey questions as they were familiar with the use of OFDA. For other states, we posted survey questions on social media and accepted responses from virtual world friends. Pulau Pinang is in fourth place with 15 respondents, followed by Kelantan with 12. These two states rarely use OFDA because they lack restaurants or fast-food outlets that are of public concern. Then, Kedah has ten respondents. Terengganu and Melaka share the same number of respondents, nine people. Next is Perlis, which has eight respondents. Perak and Negeri Sembilan also transferred seven respondents, Pahang 6 respondents, and Sabah and Sarawak shared five respondents. Lastly is the federal territory of Labuan, which has no respondents. These are newly developed states, so the use of OFDA is minimal, especially in rural areas.

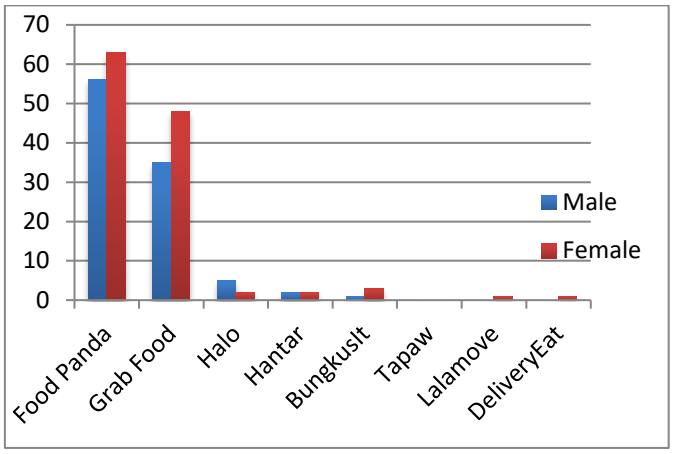

Figure 1 Most preferable OFDA by Gender

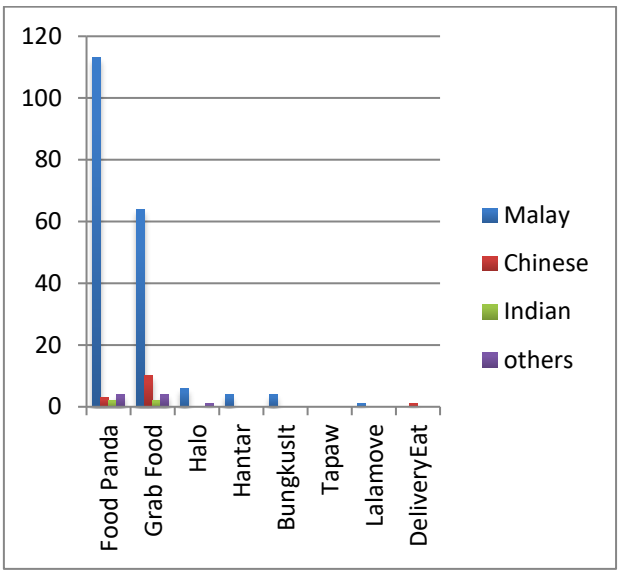

Figure 2 Most Preferable OFDA by race

Figure 1 above shows the preferable OFDA by gender. It offers both males, with a total of 56 and females, with a total of 63 respondents, choose Food Panda as their application to make an order. No one had used Tapaw, and only one person had used Lalamove and DeliveryEat as their OFDA to order food. For the halo, five males and two females used OFDA and Hantar gave the exact value of 2.

Figure 2 shows the preferable OFDA by race. Since most of the respondents are Malay, they used Food Panda with 113 respondents, more than Grab, which is only 64. But for Chinese, they prefer the Grab application, which ten respondents to Food Panda, only 3 of them using it. For Indians, it is equal to using both Food Panda and Grab. For other ethnicities, it is similar to Food Panda and Grab. Only one of them uses Halo Application.

The following chart, Table 8, shows the frequency of respondents using OFDA. In the diagram, only 11 respondents or as many as 5%, use OFDA to order daily food. The second lowest was 24.7% or 54 respondents, who rated food using OFDA, which is two to three times a week. The second highest is as much as 27.4%, which is a total of 60 respondents using OFDA, possibly due to less use of applications in a month to order food. The highest fell to 42.9%, or 94 respondents had used OFDA at least once a week.

Table 8 How often did respondents use the application

How often did you use the application	Percentage%	respondent
Everyday	5	11
2 to 3 times per week	24.7	54
Once a week	42.9	94
None of these	27.4	60

2. OFDA Performance

Performance is how the application functioning and responsive to user. There are four type of performance to be evaluated in this online delivery application: user friendly, accessibility, compatibility and response time. Based on the top three Online Delivery Applications respondents choose, they have to rate from one to five, from very uneasy to access to straightforward access with each of this statement. The values taken into account in this survey are the highest and lowest.

2.1 User Friendly

User-friendly means the instruction given by the application is easy to use, simple and easy to understand. Table 9 shows 133 respondents, or about 60.7%, who chose the first OFDA they used, which is user-friendly and easy to access, but none of the respondents chose the first application they decided was easy to access. For the second OFDA, respondents only agree that the OFDA they use is easy to access. About 55.7%, or 122 respondents, and only 1.3% or three respondents, responded that the application is not easy to access. The third application is that about 38.8% or 85 respondents are in a neutral state, but 1.8% or four respondents said the OFDA they chose is not very easy to access to show how friendly the application is.

Table 9 User Friendly

User Friendly	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	60.7	133	5	0	0	2
Second Application	95.7	122	4	1.3	3	1
Third Application	38.8	85	3	3	4	1

2.2 Accessibility

Secondly is accessibility, which means any content or functionality fully available to and usable by people with disabilities. This may refer to individual elements, features, or application experience. As shown in Table 10, about 58.4% or 128 respondents who chose the first OFDA strongly agree that the OFDA they used is very easy to access. None of the respondents disagreed that the first application they chose was inaccessible. In contrast, in the second OFDA, respondents only agree that the OFDA they use is accessible. It is about 118 respondents, or 53.88%, and only a few of them disagree, and it's about 1.82%, or four respondents. Surprisingly, the third application also agrees that it is accessible, and it's about 40% or 89 respondents, and the eight respondents, 3.6%, disagree about the accessibility of the system.

Table 10 Accessibility

Accessibility	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	58.4	128	5	0	0	2
Second Application	53.8	118	4	1.8	4	1
Third Application	40	89	3	3.6	8	1

2.3 Compatibility

The third is compatibility, Table 11, which means the capacity for two systems to work together. Easy access to every shop within the customer range is available and registered in the application. For the first OFDA, the respondent is very easy to access the application, so the application is compatible with their devices. It is about 63% of 138 respondents, and none of the respondents disagreed with the statement even though it is their first choice of application. The second OFDA is about 114 respondents, or 52%, only feel that the application is only easy to access and that the application is compatible with their devices. The third application is neutral, and about 35% or 78 respondents are in the middle of their evaluation. Respondents chose the second and third applications 4 of them thought it was effortless to access in terms of compatibility with the devices, which was about 1.8%.

Table 11 Compatibility

Compatibility	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	63	138	5	0	0	2
Second Application	52	114	4	1.8	4	1
Third Application	35	78	3	1.8	4	1

2.4 Response Time

Response time is when the application server returns the results of a request to the user. As shown in Table 12, for the first OFDA, respondents strongly agree that the application response time is fast, compatible, and easy to access. About 58.4% of 128 respondents and none of respondents thought access was uneasy. The second OFDA is about 119 respondents, or 54.3%, only agreeing that the application response time is fast and easy to access when using their devices. At the same time, 1.8% or four respondents strongly disagree. On the third OFDA chosen by the respondent, they also agree with the

statement. About 42%, or 92 respondents, and 2.7% or six respondents, disagree that the third application response time is fast and easy to access.

Table 12 Response Time

Response Time	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	58.4	128	5	0	0	2
Second Application	54.3	119	4	1.8	4	1
Third Application	42	92	4	2.7	6	1

3. Customer Satisfaction

Customer satisfaction refers to how well you, as a product or service provider, fulfil the needs and expectations of the customers. The following customer satisfaction definition comes from the Cambridge Dictionary: "A measure of how happy customers feel when they do business with a company." Four features we used to define customer satisfaction; service from the rider who delivered the food, quality of the received food, affordable price, and expected arrival time. The values taken into account in this survey are the highest and lowest. Respondents had to respond on a scale of one to five from very unsatisfied until very satisfied based on the top three chosen OFDA.

3.1 Rider Service

A food rider is a person who delivers customer foods. Based on Table 13, the first OFDA, respondents were very satisfied with the rider service; it is about 53.4% or 117 respondents and also zero unsatisfied services. For the second OFDA, about 61.6% or 135 respondents, are satisfied with the rider service and 1.8% or four respondents, are unsatisfied with the service. In the third application, about 43.8% or 96 respondents, are neutral about the rider service, but 2.7% or six respondents, are unsatisfied.

Table 13 The Food Rider who sent the food is friendly

Friendly Rider	Highest			Lowest		
	Percentage	Respondent	Score	Percentage	Respondent	Score
First Application	53.4	117	5	0	0	2
Second Application	61.6	135	4	1.8	4	1
Third Application	43.8	96	3	2.7	6	2

3.2 Food Quality

Another criterion is the quality of the food when received is perfect. One hundred twenty-two respondents, or about 55.7%, who chose the first OFDA, are very satisfied that the quality of the food when received was excellent, and none of the respondents was unsatisfied with the quality of the food, as shown in Table 14. The second OFDA respondent was satisfied with the food quality when received. About 63.4%, or 139 respondents, and only 1.8% or four respondents, responded that the food quality is unsatisfactory and very unsatisfactory when received. This value is shared between the two of them. The third application is about 37.4% or 82 respondents, and it is a neutral state, but 1.8% or four respondents said the quality of the food when received is unsatisfactory. Perhaps they once received an incomplete set of food or spoiled food.

Table 14 The quality of the food when received is perfect

Food Quality	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	55.7	122	5	0	0	2
Second Application	63.4	139	4	1.8	4	1,2
Third Application	37.4	82	3	1.8	4	2

3.3 Price of the Food

Many people like to buy affordable but tasty food. Table 15 shows that less than half, 96 respondent or about 43.8%, who chose the first OFDA, is very satisfied with the price of the food, but 2.2% or five respondents, are very unsatisfied that the food is affordable. In the second OFDA, the respondent only satisfied that the food price was reasonable. About 60.27% or 132 respondents, which means more than half and the same with the first application; only 2.2% or five respondents responded very unsatisfied that the food price is affordable. The third application is about 47.4% or 104 respondents, and it is a neutral state, but 2.7% or six respondents are very unsatisfied with the price of the food. When food is ordered directly from a restaurant, the price will be lower than in the application and does not include delivery charges. All three applications also have the lowest value. The respondents probably ordered food with a price that was too expensive from OFDA and not worth the price offered.

Table 15 The price of the food on OFDA is affordable

Price	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	43.8	96	5	2.2	5	2
Second Application	60.27	132	4	2.2	5	1
Third Application	47.4	104	3	2.7	6	1

3.4 Time of Food Arrival

The last part is the punctuality of the food arriving to the customer. Table 16 shows that 116 respondents, or about 52.9%, who chose the first OFDA, are very satisfied with the time arrival but 1.3% or three respondents, are unsatisfied with the time arrival. The second OFDA respondent was only satisfied that the timely arrival of the food was punctual. About 63.4%, or 139 respondents, and only 1.3% or three respondents, are very unsatisfied with the timely arrival of the food. The third application is about 44.2% or 97 respondents, and it is a neutral state but 2.2% or five respondents were very unsatisfied with the timely arrival of the food.

Table 16 The time of arrival of the food is punctuality

Time Arrival	Highest			Lowest		
	Percentage %	Respondent	Score	Percentage %	Respondent	Score
First Application	52.9	116	5	1.3	3	2
Second Application	63.4	139	4	1.3	3	1
Third Application	44.2	97	3	2.2	5	1

4. OFDA Ranking

The last evaluation in this category asked the respondents to rank eight OFDA applications from well-known to least known, and the results are shown in Table 17. The top application chosen by the respondents is FoodPanda which is 119 respondents or 54.3%. The second place is Grab Food which is 53.8% or 118 respondents. Respondents chose Halo food delivery for the third place, 82 respondents or 37.4%. Then BungkusIt, as many as 45.2% or 99 respondents, chose this app for fourth place. Followed by the Tapaw is, 51.1% or a total of 112 respondents. The last three ranks belong to the application, which is Lalamove, DeliverEat, and Hantar applications which have 49.7% (109 respondents), 59.8% (131 respondents) and 54.7% (120 respondents), respectively.

Table 17 Ranking of OFDA

Ranking 1 to 8 of OFDA	Percentage %	respondent
Food Panda	53.4	119
GrabFood	53.8	118
Halo	34.7	82
BungkusIt	45.2	99
Tapaw	51.1	112
LalaMove	49.7	109
DeliveryEat	59.8	131
Hantar	54.7	120

RESEARCH LIMITATIONS

To produce tremendous and abundant data, respondents must answer face-to-face survey questions, which is much recommended. This is because the data obtained through online surveys is feared to have fraudulent data. Face-to-face surveys will cause a researcher to have two-way communication with the respondent. And also have more understanding and gaining experience if the Online Food Delivery Application is opened with respondents to be evaluated. During this research, some interviews were rejected by restaurants, especially shops other than fast food. Many small traders registered Online Food Delivery applications during this pandemic season to increase their income. So an advantage is taken to do a simple interview. Most of them reject due to a lack of confidence in the researcher, and the residence of the researcher is a red zone area, so the researcher is having difficulties going outside.

CONCLUSION AND FUTURE WORKS

The three objectives of this research achieved the requirement. The objectives are; to identify the effect of respondent demography on the usage of OFDA, to evaluate OFDA performance, and to rank the OFDA based on customer satisfaction. The top 3 Online Food Delivery Application is Food Panda, GrabFood and Halo. Most respondents have no problem accessing the Online Food Delivery Application for performance. And for customer satisfaction evaluation, most of them very satisfied with the service, friendly rider, punctuality, food price and food quality. For future research, add the study along with vendors who registered Online Food Delivery in Malaysia and ask them to evaluate between vendor and the company, how is the registered flow and the price added between them.

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