

Online Food Delivery (OFD) Operation on Cross-Sectional Study on Consumers' Perspective Regarding the Situation After the COVID-19 Pandemic in Klang Valley

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Abstract: *In Klang Valley, users bought more food online and had it delivered during the COVID-19 pandemic. Many restaurants had to offer online food delivery services (OFD) to survive. Will the tendency continue post-pandemic? This study examines how OFD services' users view them. Convenience motivation, perceived ease of use, time-saving orientation, and price-saving orientation affect future OFDS use. To solve the symptom, 372 respondents were surveyed online using convenience sampling to Klang Valley users. To indirectly compare ratios, demographic data was presented in descriptive analyses tables. Consumers' attitude is presented as the frequency of usage and as the convenience motivation increase, the consumers' attitude also increases (i.e., increase in frequency of usage). Time saving, price-saving, and perceived ease of use also plays a part to encourage usage and convenient. This study aims to highlight whether OFD services remains relevant and to infer the continuation of relevance.*

Keywords: Online Food Delivery, Klang Valley, Convenience Motivation, Price-saving, Time saving, Ease of Use, Consumers' Attitude

1. Introduction

Online food delivery (OFD) services are a newly growing trend in Malaysia's food and beverage sector. Online meal ordering is the new dining out and is not just limited to takeout and dining out. The rise of internet food delivery services may be ascribed to urban consumers' evolving preferences. Studies that address the contributing elements towards OFD services among urban dwellers are relatively rare, despite the significance and changing consumer behaviour towards OFD services in Malaysia (Lau and Ng, 2019). Online food delivery (OFD) services are a newly growing trend in Malaysia's food and beverage sector. Online meal ordering is the new dining out and is not just limited to takeout and dining out. Online food ordering and delivery services, or OFD services, connect customers with partner restaurants through their websites or mobile applications (Ray et al., 2019). Even though the OFD market has experienced rapid growth prior to the pandemic, more consumers have used OFD services because of the COVID-19 pandemic, as shown by an NPD Group analysis that showed a 67 per cent increase in the number of OFD orders in March 2020 compared to March 2019 (Hong et al., 2021)

There are several food delivery businesses in Malaysia, many of which provide online food delivery services. One of the businesses is FoodPanda, the first delivery service to launch aggressively in Malaysia. Companies like DeliverEat, Uber Eats, Honestbee, Dahmakan, Shopee Food, and Grab Food are also present in the market. Lau and Ng (2019) also stated that the majority of these meal delivery services are focused in big cities like Kuala Lumpur, Penang, Johor Bahru, and Klang Valley. This makes sense given that food delivery services face the difficulty of location and coverage boundary while also maintaining high customer satisfaction with on-demand delivery, in contrast to other e-commerce services. Perhaps this explains why there are only a few notable competitors in this market without a clear dominating party. Additionally, Hooi et al. (2021) stated that Malaysia's policymakers and other stakeholders must have a better grasp of the purpose to use the online food delivery service in the country. OFD service is not only becoming more popular in Malaysia, but it also contributes to the digital economy of the country.

The growth of online food delivery services is at least partially attributable to the fact that other food and beverage enterprises have adapted to conducting business in this manner. These days, it is much simpler for customers to acquire the food they require by utilising a variety of methods, such as travelling to a real store or placing an order on the internet. In Malaysia, there is an abundance of meal delivery services that can be accessed by placing an order online or by downloading the corresponding mobile applications (Hooi et al., 2021). According to Dazmin and Ho (2019), there are two different kinds of food delivery services that may be found in Malaysia. These services are offered by retailers and restaurant intermediaries respectively. For example, most retailers agree that the fast-food industry, which includes businesses like McDonald's (MCD), Kentucky Fried Chicken (KFC), and Pizza Hut, does provide delivery service by billing customers an additional fee to cover the cost of transportation. The second type serves as an intermediary for restaurants. For a wide variety of restaurants, this kind of meal delivery business offers delivery services. Examples of this kind include the e-hailing service GrabFood and foodpanda (www.foodpanda.my). The second kind is widespread in cities (Dazmin & Ho, 2019). The exponential growth of online food delivery (OFD) application starts up in Malaysia within these few years, and it is regarded as the liaison of restaurant that gives delivery services for a wide variety of restaurants. In other words, it provides delivery services for a wide variety of restaurants, regardless of the scale and size i.e. small and medium scale enterprises (SMEs) are also open to using the medium.

2. Literature Review

2.1 Consumers' attitude towards Online Food Delivery (OFD) services

Attitude can be defined as a consumer's overall reaction when using a specific device or technology. It refers to a person's reaction, whether positive or negative, to a given object. When consumers believe that online food ordering is useful and capable of easing their daily lives, they are more likely to develop a positive attitude which will lead to continuance intention (CI) of using it. Thus, attitude is positively related to behavioural intention. Consumers who are pleased and content with their online purchase experience are expected to continue doing so (Tan et al., 2021). Therefore, for this study, the consumers' attitude is interpreted from their frequency of usage of OFD services.

2.2 Convenience Motivation

Today of advanced technology, online food delivery (OFD) is more than just a simple e-commerce platform; rather, it has evolved into a way of life for a lot of people. As a direct consequence of the COVID-19 pandemic, most of the food and beverage retailers have been

compelled to rely on OFD services to maintain the viability of their businesses throughout the duration of the pandemic. This has led to a large expansion of the OFD business (Tan et al., 2021). In addition, it reported in the year 2020 that there had been a 30 percent increase in the frequency of orders made via these platforms (Positivity in Negativity: COVID-19 Sees 30 Pct Jump in Delivery Orders, 2020). This shows that because of the restrictions that were imposed during the Movement Control Order, there was a demand for meal delivery services because people were asked to stay home and minimise contact with each other. During the COVID-19 outbreak, 47% of Southeast Asian e-commerce consumers shopped online to save time and energy, and 87% agreed that internet services were useful.

The perceived time, value, and effort necessary to facilitate the usage of OFDS is characterised as convenience. Consumers can now choose from a wide range of food providers advertised on the internet at any time and from any location. Consumers will be encouraged to utilise OFD services on a frequent basis because of its convenience (Thamaraiselvan, 2019).

2.2.1 Time-saving

Numerous studies have shown that the primary drivers behind customers' decisions to utilise OFD services are the time-saving nature of these services as well as the convenience of being able to browse and make purchases whenever and wherever is most convenient for them (Yeo et al., 2017, Novita & Husna, 2020, Tan et al., 2021). As a result, it is reasonable to assert that customers, particularly those belonging to the blue collar and student demographics (Yeo et al., 2017, Novita & Husna, 2020, Tan et al., 2021), are anxious about the passage of time. Consumers are eager to utilise OFD services because, beginning with the menu selection and continuing all the way through the preparation of the food, they can save a significant amount of time. They are more likely to use the services offered by OFD rather than wait in line at a restaurant, particularly during rush hour (Tan et al., 2021). Having said that, OFD services can be defined as a consumer-focused market that attempts to provide comfort to consumers by providing them with the ability to obtain their preferred meal with the utmost convenience without having to leave the house. (Tan et al., 2021).

2.2.2 Price-saving

Price can be described as the monetary or non-monetary value that an individual must provide in exchange for a product or service. Preetha et al., (2019) demonstrated that price-saving orientation, which comprises offers and discounts made by sellers, is one of the primary elements determining customer satisfaction. In the previous month, 21.8% of Malaysians purchased a goods online. The internet makes it easy for consumers to compare costs across different online vendors, which has proven to be favourable for consumers to purchase at a reduced price, which has a substantial impact on their behavioural intention to shop online (Ray et al., 2019).

According to Tan et al., (2021) OFD services offers additional benefits such as not having to pay the restaurant's service charge, as well as free delivery and discount vouchers. Furthermore, consumers do not need to exert any energy or effort to visit a physical business or restaurant. As a result, customers will be happier with their online meal ordering experience and are more likely to utilise these services in the future.

2.2.3 Perceived ease of use

PEOU (perceived ease of use) refers to a person's perception of how simple it is to utilise a system. The simplicity with which websites may be traversed, the availability of a clear and uncomplicated layout, and the system's dependability are all indicators of a system's quality.

Companies must guarantee that their online platform is simple to use because poor design or a difficult process can discourage customers from continuing with their online transaction. The amount of effort required to use a system is a key determinant of its acceptance and later usefulness. It was discovered in 2019 by Ray et al., that if a system is reasonably simple to use, consumers are more inclined to purchase food online.

3. Methodology

3.1 Research design

Research design involves solving a research problem. Sekaran and Bougie (2013) define a research design as a plan to collect, measure, and analyse data. As a field experiment, this study's goal, which is to find out how cause and effect are connected, can be described as follows: One could conclude that the study takes place in a natural setting, with only a moderate amount of help from the researcher. One way to describe this research is as a descriptive study, which is a type of research that focuses on describing the characteristics of a group of people or an event. It will be used to compare how consumers felt about OFD services before and after the pandemic, with a focus on users from the Klang Valley, where many of the businesses mentioned above are located. Furthermore, A cross-sectional study is a type of research design in which you collect data from many different individuals at a single point in time. In cross-sectional research, you observe variables without influencing them.

3.2 Population and sample

In conducting a study to understand the customers' attitudes toward online food delivery services after the COVID19 pandemic in Klang Valley, the population of the study will be the entire group that a conclusion will be drawn about. In this case, the population of this study is people who resides in Klang Valley which is an approximation of about 8 million people (Department of Statistics Malaysia, 2021)

On the other hand, a sample is the particular group from which the data are gathered. The sample size is always smaller than the population as a whole. Therefore, sampling refers to the practise of selecting a group of individuals from within a population in order to make inferences about the characteristics of the entire population. Convenience sampling is a non-probability sampling technique where samples are selected from the population only because they are conveniently available to the researcher. Researchers choose these samples just because they are relatively easy to employ. Ideally, in research, it is good to test a sample that represents the population. But, in some research, the population is too large to examine and consider the entire

population. It is one of the reasons why researchers rely on convenience sampling, which is the most common non-probability sampling method, because of its speed, cost-effectiveness, and ease of availability of the sample. For this particular study, an e questionnaire was deployed through various channels such as direct messaging platforms and social media. The data that was obtained were tested for reliability by using the Cronbach Alpha test for value and it came to be more than 0.6 which means that the data is reliable enough to be used.

4. Results and Analyses

4.1 Reliability Coefficient

Prior to examining the objective and research questionnaires, a reliability test was performed. This tool's reliability is vital for demonstrating the quality of the measurement procedure; it is

the Cronbach's Alpha Coefficient of the scale used for internal consistency in quantitative measurements (Sekaran & Bougie, 2016).

Table 1: Reliability Coefficient for each section of the questionnaire

Questionnaire	No. of Items	Cronbach's Alpha
Section B	4	.825
Attitude during the pandemic		
Section C	4	.820
Attitude after the pandemic		

Note: No. of respondents = 375

This table shows that the alpha values was all well above 0.60. In general, reliabilities less than 0.60 are poor, those in the 0.70 range, acceptable, and those over 0.80 good (Sekaran & Bougie, 2016).

4.2 Respondents Demographics

A total of 372 responses were analyzed using frequency analysis to describe the demographics of the respondents. The characteristics of the demographics that was captured includes age, gender, employment status, marital status, and area of residence.

Table 2: Descriptive Analysis for respondents' age.

	Frequency	Percent	Valid Percent	Cumulative Percent
> 60 years old (Elderly)	42	11.3	11.3	11.3
13 - 17 years old (Teenagers)	57	15.3	15.3	26.6
Valid 18 - 25 years old (Younadults)	126	33.9	33.9	60.5
26 - 40 years old (Adults)	86	23.1	23.1	83.6
41 - 60 years old (Middle-life age)	61	16.4	16.4	100.0
Total	372	100.0	100.0	

The young adults age group shows the most frequent in the demographic analysis with 33.9% while the least frequent is elderly at 11.3%. This demonstrates that most of OFD users are people at the prime age of 18-25 years old.

Table 3: Descriptive Analysis for respondents' gender.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	226	60.8	60.8	60.8
Male	146	39.2	39.2	100.0
Total	372	100.0	100.0	

Table 4: Descriptive Analysis for respondents' occupation/employment status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Civil servant	56	15.1	15.1	15.1
Private sector	98	26.3	26.3	41.4
Self-employed	41	11.0	11.0	52.4
Student	159	42.7	42.7	95.2
Unemployed	18	4.8	4.8	100.0
Total	372	100.0	100.0	

Table 5: Descriptive Analysis for respondents' area of residents

		Frequency	Percent	Valid Percent	CumulativePercent
Valid	Rural	47	12.6	12.6	12.6
	Suburban	208	55.9	55.9	68.5
	Urban	117	31.5	31.5	100.0
	Total	372	100.0	100.0	

As we can see here, a majority of the respondents is indeed residing in Urban and Suburban areas, which correspond which our preliminary findings indicating that the OFD services is darting in cities as it faces coverage issues. Users residing in rural area is scarce at only 12.6%.

Table 6: Descriptive Analysis for respondents' Marital status

		Frequency	Percent	Valid Percent	CumulativePercent
Valid	Married	184	49.5	49.5	49.5
	Single	171	46.0	46.0	95.4
	Widowed/Seperated/Divorced	17	4.6	4.6	100.0
	Total	372	100.0	100.0	

4.3 Pearson Correlation Coefficient

Pearson Coefficient of Correlation Pearson's R is the one strength for the correlations between two variables that is statistically determined. In other words, it measures the dependency of two variables. The Pearson correlation approach is the most used strategy for assessing numerical variables, and it assigns a value between 0 and 1, with 1 signifying total positive correlation and 0 denoting total negative correlation. A correlation value of 0.5 between two variables indicates a significant and beneficial link between them, according to the following explanation. A guideline from Cohen, J. (1988) noted that the strength of relationship is strong at value 0.5 – 1.0 (both negative and positive)

Table 7: Pearsons Correlation Coefficient

		ATT	Convenience Motivation
ATT	Pearson Correlation	1	.704**
	Sig. (2-tailed)		<.001
	N	372	372
Convenience Motivation	Pearson Correlation	.704**	1
	Sig. (2-tailed)	<.001	
	N	372	372

***. Correlation is significant at the 0.01 level (2-tailed). ATT – Attitude*

Based on this table, it can be concluded that there is indeed a strong positive relationship between the two variables. The significance value shown in the table projects a value <.001.

4.4 Multiple Linear Regression Analysis

Table 8: Model Summary for Multiple Linear Regression Analysis Model Summaryb

Mode	Change Statistics								
1	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.977a	.955	.955	.77415	.955	2612.160	3	368	<.001

a. *Predictors: (Constant), Time-saving, Price-saving, Perceived ease of use*

b. *Dependent Variable: ConvenienceMotivation*

Coefficients ^a								
	Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		
						Model B	Lower Bound	Upper Bound
1	(Constant)	1.229	.160					
	Time-saving	1.305	.051	.389	25.382	<.001	1.204	1.406
	Price-saving	1.043	.042	.349	24.939	<.001	.960	1.125
	Perceived ease of use	1.367	.052	.406	26.181	<.001	1.264	1.470

a. *Dependent Variable: ConvenienceMotivation*

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable. The variables we are using to predict the value of the dependent variable are called the independent variables (or sometimes, the predictor). In this case, we are trying to determine whether there is a positive relationship between time-saving, price-saving and perceived ease of use with the convenience motivation. There is a significant positive relationship between the independent and dependent model.

4.5 Summary of hypothesis testing

Table 9: Summary of hypothesis testing

Hypothesis	Result
H1: There is a relationship between convenience motivation and consumers' attitudes towards OFD services post-pandemic.	Coefficient (t-value) based on Pearson's Correlation Coefficient test - .704** Supported

5. Discussion and Conclusion

In order to determine whether or not the hypotheses can be accepted, two types of test is conducted via IBM SPSS (Statistical Package for Social Sciences). The first test is the Pearson's Correlation Coefficient test, that is used to test the relationship between 2 variables. Next, to test multiple variables against one dependent variable, a multiple linear regression analysis is used. As seen above, both hypotheses are accepted.

This means that According to the study's findings, convenience motivation has a considerable impact on consumers' attitudes towards OFDS, which is in line with previous research. OFDS platforms are currently quite advanced, allowing consumers to purchase food online at any time and from any location without leaving their homes. Food will be ready in a short amount of time with just a click and a cashless payment system, giving consumers with a great lot of ease. However, because electronic gadgets have long been interwoven into our daily routines and people are already comfortable with them, perceived ease of use is not a strong incentive that would drive consumers to continue buying food online. Time is a crucial consideration for consumers, particularly working adults, and students. Customers are keen to adopt OFDS because they may save time on everything from menu selection to food preparation. OFDS will be their first choice over waiting in line at a restaurant, especially during rush hour. OFDS also saves consumers money because it allows them to compare the costs offered by various food retailers and budget for a meal. To entice customers to return, food stores must continue to offer competitive prices, such as appealing discount coupons or free delivery services. Price-saving orientation considerably effects consumers' perspective towards OFDS continuation intention after the pandemic, although not for all students, according to third-party apps. A

positive attitude towards utilising the services is fostered by a satisfying online purchasing experience, which always enhances the likelihood of future purchase behaviour.

There were several parts of the respondent demographics that were not explored, such as the range of household income. This research did not consider that household income played a role in affecting customers' attitudes towards Online Food Delivery (OFD) services at the time of deploying the questionnaire; however, there may be a relationship that can be explored in further research, along with the cultural influence on consumers' attitudes and intentions to use OFD services.

This study on the environmental impact of online food delivery services is both scholarly and theoretically significant. The study's findings may help educators, researchers, and consumers gain a better understanding and knowledge. This study may provide insight into post-pandemic OFD consumer perceptions. The epidemic has strengthened the OFD industry, although little is known about customer perceptions after the pandemic. This study can benefit OFD service users and others (restaurants and intermediaries). This research can assist users, middlemen, and restaurants in developing sustainable business practises, particularly SME's looking to access these platforms.

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