# FACTORS INFLUENCING THE ONLINE FOOD DELIVERY SERVICES APPS ON PURCHASE INTENTION AMONG CUSTOMERS IN KLANG VALLEY, MALAYSIA DURING COVID-19.

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### Abstract

Online services of food delivery are more critical than ever. Customers are getting comfortable using the apps for services to order the meals they want via their smartphone using the apps. This research is therefore carried out to examine the key factors affecting the intention of customers to use online food delivery services among customers in the Klang Valley during Covid-19 in 2020. The research investigated the most significant factors that influence the customer purchase intention on using Online Food Delivery (OFD) services. There are 4 independent variables which we are focusing on; time, price factor, convenience motivation factor and food illustration. From the research, we have found out that convenience motivation factor is the most important exogenous variable that can influence purchase intention directly, sequentially through shopping motivations. The other factors that have a significant impact on a customer's purchase intentions are price and time factors. The least important factor that influences a customer's purchase intention is the food illustrations. The study is carried out by gathering responses from over 167 participants. The results will show the factors influencing and the significant effect of using online food delivery services apps to run the businesses efficiently and more effectively in order to attract customer's purchase intention. The novelty of this study is by giving the strategies and opportunities to the online business entrepreneurs to enhance and boost their sales by using social media as a platform of online food delivery services apps to the community.

Keywords: Online food delivery systems, Convenience, Time Factor, Price Factor, Food Illustration

# 1. Introduction

Day after day, the world is getting involved and the changes are constantly changing rapidly. Everything around us is changing around, without us even noticing it (Lau et al., 2019). Talking about eating out, for example, by understanding or not, people often use online food delivery (OFD) services more than ever before. The market size for 2017 stands at USD 66.3 million for Malaysia as a whole, and has increased dramatically since then. As of 2020, the size of the market is expected to reach USD 192 million by the end of this year. This a sign

that the demand for food delivery is enormous and it keeps increasing day by day. However, what are the determining factors that make customers choose to purchase foods online? What makes the industry grow rapidly? Does Malaysians accepted the additional costs incurred when they ordered food online and by having it delivered to their door steps does really saves their money on travelling, petrol, parking etc (Lisnawati et al,. 2020), or is it the attractive foods displayed in the websites and applications does have impact on consumers purchase intention the ordering foods online. In Malaysia most restaurants still depend on 3rd party apps for delivering their foods and products. This is due to limitation of resources and expertise in the food company. Some due to logistics issues and the cost of starting up the system and the whole team of delivery business from back-ends, software, runners etc is very expensive. For some established companies like McDonalds, KFC, and Pizza hut, they also use the services provided by these 3rd party platforms due to limited runners they have and the logistics issues. This study conducted to perform a research towards factors influencing the purchase intention of using online food delivery services among customers in Klang Valley during covid-19 Movement Control Order (MCO) period. The respondents are collected from the customers who used the OFD services during the MCO in 2020.

# 2. Literature review and hypotheses development

One of the most dominant and most important factors in using OFD services is TF. In today's fast-paced life, many can't afford to go out for dinner or wait for dinner to be served in a restaurant (Euromonitor, 2015). So, instead, they make the food come to them. This is about taking as little time as possible to get a job completed, and it is a time saving tool for them. In the United States, one out of every two and a half meals are eaten away from home (Kara et al., 1997). The market for take-away and delivery is highly fragmented, with a wide variety of options and choices of food (Alreck and Settle, 2002; Ball, 1999). Thanks to its convenient, ease and accuracy of orders, OFD services also tend to be beneficial to customers (Verma et al. 2009). Some of these food deliveries are catered for the household market, meaning they are distributed to households, at about 70 percent of the order. That figure suggests that the food distribution target market relies primarily on household assets. According to Gentry and Calantone (2002), the perceived utility captures the buyer's perception that a certain technology will help to improve the productivity of shopping. The time saved by online shopping is a value earned by consumers. Online shopping is seen by a customer as useful as it can save time, reduce energy, and deliver extended store hours and efficient checkouts (Chiu et al., 2014). Higher income consumers have also been found to value time due to the cost of opportunity.

H1: Time factor (TF) has a positive relationship with purchase intention of Online Food Delivery services apps among users and customers in Klang Valley.

Price, as described by Nagle et al. (2010), is the monetary value which a purchasing agreement must give in return for a product or service. Consumers are searching for price cuts by price discounts, and they are curious about how much money they can save from these discounts (Darke et al. (1995). Another study by Tversky and Kahneman (1981) revealed that consumers were willing to make additional trips just for the discount on products offered by the stores. Evidence from a study that notes discounts can add the perceived value to a product 's offer is also reinforced by the success of a price cut, as it suggests that the price is an even better deal (Thaler (2008). Lower rates stimulate an organization 's profits, and higher discounts boost the market value of the individual commodity (Madan and Suri, 2001). In addition to recognizing the consideration of monetary savings, the price saving approach can also be viewed from the viewpoint of not incurring any extra costs for buying a product or using a service (Escobar-

Rodríguez and Carvajal-Trujillo, 2014). Online users have the opportunity to compare prices by visiting multiple pages or OFD services applications, so it would be viewed as the most valuable website by the business that can deliver a lower price. The Internet promotes price comparison, making it convenient for consumers to purchase goods at a lower cost (Chiu et al., 2014; Eriksson and Nilsson, 2007; Gentry and Calantone, 2002). Comparing conventional retail and online shopping, the relative benefit of online shopping is that it can offer both lower prices and save time, making online shopping much more convenient, as has been empirically proved (Akroush and Al-Debei, 2015).

H2: Price Factor (PF) has a positive relationship with purchase intention of Online Food Delivery services apps among users and customers in Klang Valley.

This study adopts part of the Technology Acceptance Model (TAM) Davis (1989), Diney, and Hu (2007) to examine the acceptance of a new technology. TAM indicates that when a consumer discovers a new technology, there will be many factors influencing how they embrace and use the technology. This has been used to describe factors influencing the adoption of other technologies or systems in both the customer and organizational sense (Rezaei et al., 2016c). Examples of these contexts include business graphics systems, online fashion shopping (Kim and Forsythe, 2008), mobile Internet (Venkatesh et al., 2012), smartphone use (Chun et al., 2012), social networking (Pinho and Soares, 2011), mobile police (Lindsay et al., 2011), teleworking (Pérez et al., 2004), and social media, specifically instant messaging services (Zhao et al., 2016). These studies have shown that the factors perceived to be useful and perceived to be user-friendly have been able to explain how easy or difficult it is for users to accept the use of the different technologies.

H3: Convenience Motivation Factor (CMF) has a positive relationship with purchase intention of Online Food Delivery services apps among users and customers in Klang Valley.

Salleh Mohd Radzi, et al. (2015) refers to food presentation as an appealing appearance and decoration of the product as measurable indicators for the interpretation of quality by the customers. Aforesaid, presentations are important for indicating the customer's first perceptions of the product. The presentation, from a food viewpoint, is the addition of sauces and garnishes to menu items; soup, exits, main courses and desserts. In addition, the ideal combination of food presentation and the ideal surrounding ambience helps the diners to completely appreciate the dining experiences. Consequently, the visual quality of the presence of food eventually affects the expectations of the diners regarding the qualities of taste and smell and also their hedonic value (Zellner et al., 2011). Spence (2010) also accepted that it was discovered that the interpretation of consumers is typically influenced by what they see through their eyes in terms of providing a better dining experience.

H4: Food Illustration Factor (FIF) has a positive relationship with purchase intention of Online Food Delivery services apps among users and customers in Klang Valley.

# 3. Research methodology and data analysis.

There are two data forms secondary and primary in existence. The aim of data collection is to identify primary data by gathering the data necessary for this analysis. All data obtained will help address the goals and hypotheses of research. This would also provide legitimacy and validation to a report to be carried out. The data obtained would of course provide researchers with a clearer picture. In primary data collection or secondary data collection the respondents

will be tracked by questionnaire. Sometimes in study, primary data will be chosen to collect data required for this information gathering phase. It will help to get input from respondents on the target of this study and quality response hypothesis testing. In addition, this study will benefit from the quality of the data information. The object of this descriptive study is to know the purchase intention of using Online Food Delivery services apps in Klang Valley among users and customers. (N) Number unit of population of this research on frequency. According to Krejie Morgan, the population will be divided by the number of females and male structurally by sampling technique in probability technique with simple random technique among users and customers in Klang Valley. The questionnaire will be given in English. Short, simple questions are better than old ones. The questionnaire consists for namely Section A demographic profile of respondents question 1 to 7, section B respondents experience using online food delivery services question 8 to 12, Section C Purchase Intention for Online Food Delivery services question 13 to 17, Section D Time Factor question 18 to 22, Section E Price Factor question 23 to 26, Section F Convenience Motivation Factor question 27 to 30, Section G Food Illustration Factor question 31 to 34.

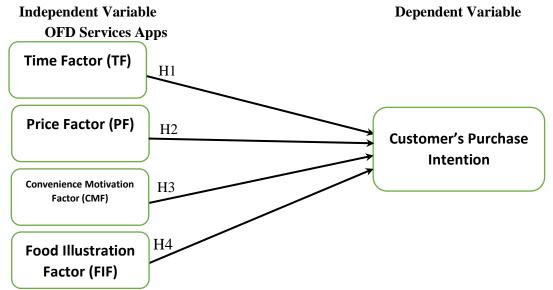


Figure 1: Theoretical framework of customer's purchase intention.

Table 1: Summary of Pearson Correlation of Purchase Intention of Using Online Food Delivery Services Apps.

	Purchase Intention	Time Factor	Price Factor	Convenience Motivation Factor	Food Illustration Factor
Purchase Intention	1	.692**	.558	.700	.350
Time Factor	.692**	1	.533	.754	.324
Price Factor	.558**	.533	1	.493	.383
Convenience Motivation Factor	.700**	.754	.493	1	.389
Food Illustration Factor	.350**	.324	.383	.389	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (1-tailed).

Table 2: Summary of Linear Regression of Purchase Intention of Using Online Food Delivery Services

Independent	Dependent	R-Square	Adj.R- Square	*Sig F-change: P<0.05
Variable	Variable	(R-SQ)		
Time Factor	Purchase intention of using OFD services apps	0.479	0.476	0.000
Price Factor	Purchase intention of using OFD services apps	0.312	0.308	0.000
Convenience Motivation Factor	Purchase intention of using OFD services apps	0.490	0.486	0.000
Food Illustration Factor	Purchase intention of using OFD services apps	0.122	0.117	0.000

Table 3: Coefficient Table

Model 1	В	Std. Error	Beta	t	Sig.
Time Factor	.335	.090	.301	3.743	.000
Price Factor	.178	.053	.210	3.365	.001
Convenience Motivation Factor	.337	.075	.357	4.481	.000
Food Illustration Factor	.025	.044	.033	.580	.563

# 4. Results

The result of the Reliability Test has revealed that the entire variable (time factor, price factor, convenience motivation factor, food illustration factor, and purchase intention to use online food delivery services apps) is confident. The Cronbach's Alpha result states that the built objects are a good match for presenting the variables, and further research can be performed with confidence. This means that all the variables provided by a number of items were a good order and placement as the result of the data analysis shows that these items are closely related and within the same variable, but it is sufficiently secure to be classified as redundant secure. In this research, the convenience motivation factor plays the most important role for most customers when they are choosing the best online food delivery services for them. They love apps and services that are easy to use and navigate. The ordering process should be simple and straightforward. A friendly app will be their main preference. They also love apps that can understand their preferences so every time when they open the app to buy the food, the app system would know what best to offer to the particular customer. This would help customers to make purchase decisions instantly and seamlessly. Existing customers are essentially important to any establishment as they have experience in buying and using the services provided by the company. Thus, the process should be simple and less hustling.

# 5. Conclusions.

From the study we could gain a lot of information that could help the online food delivery services apps to improve their system and customers experiences. Apart from the new norm post covid-19 pandemic, customers love to choose convenience more than ever over hustles. Dependable on smartphone usage has increased significantly over the years. Everyday duties and routines are mainly made using smartphones. Thus, it is important for the players of the industries to know precisely what customers do love. In the study it shows customers frequently ordered foods for 2-4 people for each transaction thus more food meals should be offered particularly for 2-4 pax so customers can make decisions easily. The average spending is below RM40 thus the price range on focused items should be within the range. From the study it also indicates that most customers choose to buy fast foods using online food delivery services over other types of cuisine. It clearly shows that the current trend in online food delivery is fast foods and the particular industry makes up the major market shares. It is probably the marketing efforts made by them or maybe by other reasons thus those particular fast-food industries could enhance their foods and services to take advantage of the situation. However, for other restaurants or cuisines, they might need to do more aggressive marketing or promotion so they could capture the customers to encourage them to choose to buy their meals over other competitors. In this research, the convenience motivation factor plays the most important role for most customers when they are choosing the best online food delivery services for them. They love apps and services that are easy to use and navigate. The ordering process should be simple and straightforward. A friendly app will be their main preference. They also love apps that can understand their preferences so every time when they open the app to buy the food, the app system would know what best to offer to the particular customer. This would help customers to make purchase decisions instantly and seamlessly. Existing customers are essentially important to any establishment as they have experience in buying and using the services provided by the company. Thus, the process should be simple and less hustling.

Apart from that, customers love service providers that can send the food ordered as quickly as possible. They don't like to wait for too long for the food. Preferably the foods ordered should reach their food steps in less than 30 minutes. These would be much better if customers get to choose their own time frame when the foods should arrive at the location by placing the order in advance. This would improve the customers' experience significantly as the customers could plan ahead their time and schedule more effectively and just focus on their other tasks but still can have their meals on time, as they want it to. Price factor plays a quite significant impact on customers purchase intention towards using online food delivery services apps. The current economic conditions post covid-19 have affected most of us. Customers would think twice when they want to spend every ringgit of their hard-earned money. They will ensure the money spent gives value to them. Value often is the main criteria over other factors. Thus, the app service provider and the restaurant should be more creative in determining the food's price and the delivery charges by still managing to obtain their target revenues. Although there is a saying that good food plating is more tempting to the eyes. But on this particular online food delivery service, it might not be the main factor that customers are looking for or at least for now. Customers tend to weigh other factors over food illustration shown on the app's menu.

The results showed the factors influencing and the significant effect of using using online food delivery services apps to run the businesses efficiently and more effectively in order to attract customer's purchase intention. The novelty of this study is by giving the strategies and opportunities to the online business entrepreneurs to enhance and boost their sales by using social media as a platform of online food delivery services apps to the community. This will also help to boost the economy of Malaysia as a whole.

### **References:**

- Ajaz, Ahmad & Bhat, Dr. (2019). Satisfaction of consumers by using online food services. Social Science. 10 pages.
- Al Abid, Faisal & Rezaul Karim, A.N.M. (2017). Cross-platform development for an online food delivery application. 1-4. 10.1109/ICCNI.2017.8123769.
- Avivah Rahmaningtyas, Slamet Hartono, Any Suryantini. (2017). Factors affecting online purchasing of local food. Agro Ekonomi Vol. 28/No. 2, December 2017
- Azizul, Jamaludin; Albattat, Ahmad; Ahmad Shahriman, Ismail; Irfan, Kamal Fitri (2019). The Relationship Between Food Delivery Apps Attributes Towards Customer Perceived value among young working adults in Shah Alam. I international journal of scientific & technology research volume 8, issue 11, November 2019
- Chandra, Yakob & Cassandra, Cadelina. (2019). Stimulus Factors of Order Online Food Delivery. 330- 333. 10.1109/ICIMTech.2019.8843715.
- Correa, Juan C. & Segura Vargas, Miguel. (2019). Data of Collaborative Consumption in Online Food Delivery Services. Data in Brief. 25. 10.1016/j.dib.2019.104007.
- Daud, Dazmin & Min Yoong, Ho. (2019). The relationship between consumers' price-saving orientation and time-saving orientation towards food delivery intermediaries (fdi) services: an exploratory study. 7. 175-190.
- Ilham, Romi. (2018). Improve quality of e-loyalty in online food delivery services: A case of Indonesia. Journal of Theoretical and Applied Information Technology. 96. 4760-4769.
- Iopscience.iop.org. 2020. *Shieldsquare Captcha*. [online] Available at: Kedah, Zulkarnain & Ismail, Yusof & Ahasanul, A & Ahmed, Selim. (2015). Key Success Factors of Online Food Ordering Services: An Empirical Study. Malaysian Management Review. 50.
- Kerins, Claire & Cunningham, Katie & Finucane, Francis & Gibson, Irene & Jones, Jenni & Kelly, Colette. (2017). Effects of an icon-based menu labelling initiative on consumer food choice. Perspectives in Public Health. 137. 45-52.10.1177/1757913916640826.
- Kim Dang, A.; Xuan Tran, B.; Tat Nguyen, C.; Thi Le, H.; Thi Do, H.; Duc Nguyen, H.; Hoang Nguyen, L.; Huu Nguyen, T.; Thi Mai, H.; Dinh Tran, T.; Ngo, C.; Thi Minh Vu, T.; Latkin, C.A.; Zhang, M.W.; Ho, R.C. Consumer Preference and Attitude Regarding Online Food Products in Hanoi, Vietnam. *Int. J. Environ. Res. Public Health* **2018**, *15*, 981.
- Koiri, Saroj & Mukherjee, Subhadeep & Dutta, Smriti. (2019). A Study on Determining The Factors Impacting Consumer Perception Regarding The Online Food Delivery Apps in Guwahati. GIS-Business. 14. 521-542.10.26643/gis.v14i6.14324.
- Lau, Teck-Chai & ng, David. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. 1. 62-77.
- Lee, S.W.; Sung, H.J.; Jeon, H.M. Determinants of Continuous Intention on Food Delivery Apps: Extending UTAUT2 with Information Quality. *Sustainability* **2019**, *11*, 3141.
- Lisnawati & Rosa, Aslamia & Yunita, Dessy. (2019). Consumer Decision on Online Food Delivery. 10.2991/aebmr.k.200520.069.
- Lu, Carol & Suhartanto, Dwi & Gunawan, Arie & Chen, Brendan. (2020). Customer Satisfaction toward Online Purchasing Services: Evidence from Small & Medium Restaurants. International Journal of Applied Business Research. 2. 1-14. 10.35313/ijabr.v2i01.89.

- Ng, Siew & Ng, Boon Aun. (2018). Factors Influencing Customers' Purchasing Intention of Pizza Chain Restaurants in Klang Valley, Malaysia. Middle East Journal of Scientific Research. 26. 630-637.10.5829/idosi.mejsr.2018.630.637.
- Niu, B., Li, Q., Mu, Z., Chen, L., & Ji, P. (2021). Platform Logistics or Self-Logistics? Restaurants' Cooperation with Online Food-Delivery Platform Considering Profitability and Sustainability. *International Journal of Production Economics*, 108064. https://doi.org/10.1016/j.ijpe.2021.108064
- Panse, Chetan & Rastogi, Shailesh & Sharma, Arpita & Dorji, Namgay. (2019). Understanding consumer behavior towards utilization of online food delivery
- Pigatto, Gessuir & Machado, Joao & Negreti, Amanda & Machado, Lucas. (2017). Have you chosen your request? Analysis of online food delivery companies in Brazil. British Food Journal. 119. 639-657. 10.1108/BFJ-05-2016-0207.platforms. Journal of Theoretical and Applied Information Technology. 97. 4353-4365.
- Rachmawati, Adinda & Mujahidin, Mujahidin & Aristio, Andre. (2020). Analysis of factors affecting behavioural intention at food delivery service using structural equation modelling with mediation variable attitude towards online food delivery services
- Ravichandran, Preetha. (2019). Factors Influencing the Intention to Use Food Online Order and Delivery Apps via Platforms-Using Tam(Technology Acceptance Model).
- Svb, Dr. (2017). eatlex.com: Online Food Delivery Service. Elango, Dinesh and Dowpiset, Kitikorn and Chantawaranurak, Jirachaya, A Study on Factors Impacting Consumers' Intention to Use On-demand Food Delivery Applications in Bangkok, Thailand (August 24, 2018).
- Yang, F. X., Li, X., Lau, V. M.-C., & Zhu, V. Z. (2021). To survive or to thrive? China's luxury hotel restaurants are entering O2O food delivery platforms amid the COVID-19 crisis. *International Journal of Hospitality Management*, *94*, 102855. https://doi.org/10.1016/j.ijhm.2020.102855
- Yeo, V., Goh, S. and Rezaei, S., 2020. Consumer Experiences, Attitude And Behavioural Intention Toward Online Food Delivery (OFD) Services.
- Yusra, Yusra & Agus, Arawati. (2018). Online Food Delivery Service Quality: Does Personal Innovativeness Matter?.