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## Consumers' Motivational Factors on The Use of Online Food-Delivery Apps in Malaysia

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### Abstract

Online Food-Delivery (OFD) Apps are online platforms that provide food-and-beverage businesses between food-service operators and consumers. The digital environment has advocated the ever-increasing use of smartphones and the Internet, as well as changes in lifestyle, which leads to the booming of food-delivery businesses. However, there are a moderately limited number of studies that have offered a profound understanding on consumers' perspectives on the use of the online food-delivery apps in Malaysia. With that notion, the primary purpose of this study is to determine the factors that motivate consumers to use the online food-delivery apps in Malaysia. The survey has been distributed among respondents through several online platforms, such as WhatsApp, e-mail, and social media. The results unveil several pieces of important information related to the Malaysians' OFD use frequency, which are the fact that Foodpanda is their highly preferable app, dinner is the ultimate mealtime for delivery, and online transactions are the most opted mode of payment for Malaysian consumers. Furthermore, the use of the OFD apps has also been motivated by the ease-of-use (EOU) factor and trust (T) factor. Hence, despite of all the problems encountered when using online food-delivery apps, the study shows that there are numerous amounts of consumers who have perceived that these apps are beneficial for their desirable purposes.

**Keywords:** Motivation Factor, Online Food Delivery, Ease of Use, Trust, External Influence

### Introduction

The buying and selling of goods and services through online platforms is widely increasing over the years. Recently, with the COVID-19 pandemic issue, many people have started to purchase any kind of goods and services available most conveniently and safely as possible. It is known as electronic commerce or e-commerce, which is expanding and booming over the past decade as consumers have increasingly gone online (Li et al., 2020). Based on the same study, it has also been reported that all of these trends and changes include an increase in disposable income, longer work and commuting times, increased broadband penetration, improved safety of electronic payments, increased number of retailers building their online presence, and a greater awareness of e-commerce by consumers. One of the industries which

grow along e-commerce activities is the food-service industry. The industry has provided huge opportunities for online food delivery (OFD) to thrive and grow. Due to the dramatic rise, food-delivery companies have been estimated to increase to USD956 million by 2022 (Insider, 2018). The OFD service's growth has commonly been caused by a rising total of Malaysian consumers who use their mobile devices to purchase online. In 2019, there were 28.4 million of mobile-Internet users in Malaysia accessing the Internet through their mobile devices. By 2025, this figure has been projected to amount up to 33.4 million of mobile-Internet users (Muller, 2021).

Owing to the increasing number of the mobile-Internet users in Malaysia and the current circumstance due to the COVID-19 pandemic crisis, online food delivery has evolved from just a trend to a completely compulsory need, which means that dine-in and eating out would turn out to be risky options nowadays. Moreover, food delivery has been transformed by technological advancements in order to meet the demands of consumers with diverse lifestyles, and this service has allowed them to purchase food online and have it delivered in a matter of minutes (Koiri et al., 2019). In this fast-growing industry, food-service providers have to offer something unique and different from other competitors by offering various options to the consumers, such as a variety of menus offered, convenience in food-ordering, several options of payment methods, and user-friendly apps for booking and ordering foods. OFD platforms or apps provide numerous channels for restaurant operators to connect to their consumers in online-and-offline food-delivery services (Zhang et al., 2017) and perform a variety of tasks, including providing the consumers with a diverse range of food options, accepting orders and transmitting these requests to food producers, monitoring payments, organising food deliveries, and making tracking capabilities available (Li et al., 2020).

The growth of this industry has been due to the convenience, time-saving, and the ease of use of the online food-delivery apps. Online food-ordering is the new trend of dining out with numerous food-delivery companies offering online food-delivery services (Chai & Yat, 2019). There is an abundance of the OFD apps that consumers can install, such as Foodpanda, Dahmakan, GrabFood, FoodTime, Uber Eats, Running Man Delivery, Honestbee, DeliverEat, Mammam, Shogun2U, and so much more. The majority of these delivery services are centred in urban areas like Kuala Lumpur, the Klang Valley, Penang, and Johor Bahru (Chai & Yat, 2019). With all the technological advancement from both the restaurant operators and the OFD-system providers, this research can be beneficial and significant to all the restaurant operators, food-delivery companies, and consumers. Although many users have used the services, there is no guarantee that they would continue to use the OFD apps in the future. This problem may occur because the consumers would probably have not intended to continue using the apps in the future, or in other words, it can be referred to as a behavioural intent due to the quality of information, performance expectations, effort expectations, social influence, hedonic motivation, price value, and habit (Rasli et al., 2020). Therefore, by acknowledging the motivational factors on the use of the OFD apps, the consumers are able to understand how the factors play their roles in influencing their decisions to use the OFD apps. Hence, this study aims to determine the factors that motivate the consumers' use of the OFD apps in Malaysia.

### Literature Review

Technology has played a crucial role in changing the food-delivery industry. This has led to changes in consumers' expectations by motivating them to do everything online, including having cooked meals delivered to their doorstep. The popularity of online meal-ordering and delivery services is continuously increasing, as are the expectations of consumers. According to Chavan et. al (2015), the use of a smart-device-based interface for consumers to view, order, and navigate has aided restaurants to quickly manage orders. This is due to the capabilities of wireless communications and smart-phone technology in meeting and improving business management and service delivery. According to their findings, the system is convenient, effective, simple-to-use, and it is predicted to boost the whole restaurant industry in the future. Leong (2016) has stated that many sectors have changed their business models as a result of technological advancements. This is because efficient systems can boost restaurants' efficiency and profitability as the use of an online meal-delivery system is able to assist restaurants to increase their businesses over time and ease significant transactions online.

### OFD Use Information

With the popular use of wireless handheld devices, such as tablets and smart phones, more businesses have increasingly sold their goods and services via mobile apps (Magrath & McCormick, 2013). They have become a great tool for companies of all sizes to reach out to potential consumers, which can be purchased or downloaded through app stores, and are open to being rated and reviewed by the users. Today, user ratings and reviews are deemed one of the most important triggers for app discoverability and installs and have now become core metrics to gauge their success (Cho et al., 2019). In addition, Chavan et. al (2015) has also mentioned that OFD apps, such as Grab Food and Food Panda, are easily installed on mobile phones, therefore, the mobile apps have replaced the personal digital interface to give their consumers a better interface to display menus or track orders. This means that the consumers have capabilities to access a list of menus, place orders at any time, browse their orders, receive food notifications, and use a strong authentication system to make online transactions (Chavan et al., 2015). Moreover, Tribhuvan (2020) has also stated that online food-ordering systems would help boost restaurant operations efficiency and be time-efficient for consumers. Properly designed online ordering systems can provide the consumers control over the wide options of food obtainable and payments in the absence of physical contact or without physical handling of cash by restaurant operators (Dabholkar, 1995).

Besides, online food-ordering is time-efficient because of its convenience to use at any time and options available to consumers (Sethu & Saini, 2016). The smart system has minimised paperwork and a waiter's or waitress's time to write down orders because the technology used can record food orders at any specific moment in time (Preetha & Iswarya, 2019). In addition, Roh and Park (2019) have also reported that OFD apps could be a good approach in order to get the sense of convenience that consumers look for when it comes to meal preparation. The increasing availability of mobile-communication devices has prepared the ground for developing a setting in which mobile applications can be integrated into our daily lives.

### **Motivational Factors of OFD Apps**

There are several motivational factors that influence consumers in using online food-delivery (OFD) apps continuously. Zhao and Bacao (2020) have stated that factors motivating users to use OFD apps continuously are essential for restaurant operators to understand the consumer's needs and expectations, particularly in the current pandemic state. Moreover, consumers preferably consider performance expectancy as one of the main determinators to accept a relevant service easiness next to the quality of service, convenience, social influence, and satisfaction, which are among the considerable antecedents of the intention to use OFD apps (Roh & Park, 2019; Cho et al., 2019).

### **Ease of Use (EOU) of OFD Apps**

Davis (1989, p. 320) has defined perceived ease of use as "the degree to which a prospective user expects the target technology to be used free of effort", while perceived usefulness indicates "the degree to which a user believes that using the target technology improves his or her job performance". It is perceived that the flexibility of using OFD apps by consumers is because it is easy to use, for instance, they do not have to face any obstacles when ordering and they find it simple and secure when utilising the OFD apps (Tribhuvan, 2020).

### **Trust (T) of OFD Apps**

Pavlou (2003, p. 106) has defined trust as "the belief that allows consumers to willingly become vulnerable to web retailers after having taken the retailers' characteristics into consideration". According to the definition, trust forms the basis of consumers' beliefs about online shopping safety. It includes protection when utilising an online-transaction service by consumers, in which they do not encounter any issues as the efficiency of the service is proven (Tribhuvan, 2020). Besides, trust is also one of the key factors that influence the consumers' attitude towards the use OFD apps. Likewise, Cho et al (2019) have also pointed out that consumer's trustworthiness is the most important quality attribute of OFD-app businesses. In order to improve a user-friendly experience, the same study has stressed the importance of building an essential set of OFD-app quality attributes representing 'convenience', 'design', and 'trustworthiness' (Cho et al., 2019). According to Nilashi et al (2015), users' trustworthiness towards mobile apps plays a key part in their decision-making for online purchases, which leads to higher loyalty for using mobile apps, as trustworthiness in mobile applications has been widely regarded as a crucial quality attribute.

### **Methodology**

This study has adopted a cross-sectional study with an online survey as the instrument used to respond to the study's objective. As mentioned in the introduction part, this study intends to analyse the factors that motivate Malaysian consumers to use online food-delivery apps in Malaysia. The study has used the term 'consumers' instead of 'users' or 'customers' as the intended term to determine the factors that motivate them to use such platforms to order food online. A total of 384 samples have been extracted from the population framed by using non-probability sampling.

The online survey has been conveniently distributed among the targeted respondents by using messaging apps, such as WhatsApp, and social media, such as Facebook, Instagram, and Twitter, to reach the intended population. This method has bid the researchers a sense of convenience in terms of the respondents' availability, reachability, and accessibility.



Within four (4) weeks of the data-collection period, the researchers were able to obtain the respective sample size that is adequately acceptable for the concerns of this study. The questionnaire is the main instrument for this study, which has been adopted from the previous study. As Tribhuvan (2020) has conducted his current study on consumers' perceptions of food apps, the adopted questionnaire designed by the researcher is significantly relevant to be used for this study with a few modifications. Basically, the questionnaire comprises three sections, which are Section A (demographic profile), Section B (general information about the consumers regarding the use of online food-delivery apps), and Section C (motivational factors). A total of 17 constructs have been used to provide the native consumers' responses on what factors motivate their use of online food-delivery apps in Malaysia. Frequencies have been generated in a percentage form, and the mean scores have been displayed in the data-analysis section with a scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). In the interim, this study employed a pilot test among the 30 volunteers before the actual data-collection process took part. In general, this phase had notified any faults regarding the instrument before the actual data were collected. Fortunately, since the results of Cronbach's Alpha are relatively acceptable, the questionnaire has been ready to be deployed to the targeted population.

## Results and Discussion

Table 1

### *Demographic Profile*

Descriptive Statistics			
Category	Item	Frequency	Percentage
Age	18-25 years old	320	83.3
	26-30 years old	21	5.5
	31-45 years old	39	10.2
	> 45 years old	4	1.0
Total		<b>384</b>	<b>100.0</b>
Gender	Male	127	33.1
	Female	257	66.9
Total		<b>384</b>	<b>100.0</b>
Monthly Income	No Income	256	66.7
	< RM2,000	69	18.0
	RM2,000-RM5,000	48	12.5
	RM5,001-RM10,000	11	2.9
	> RM10,000	0	0.0
Total		<b>384</b>	<b>100.0</b>

As shown in Table 1 above, the descriptive statistics reveals that, among the 384 samples, it is found that most of the respondents are female (66.9%) and the remaining 33.1% of them are male. Most of them are around the age of 18-25 years old, which is approximately (83.3%). Meanwhile, the age ranges of 26-30 years old and 31-45 years old are represented by 5.5% and 10.2% respectively.

The least recorded age belongs to the group of age 45 years old and above, which is only 1.0%. In terms of monthly income, a total of 66.7% of the respondents have no income, whereas the rest is able to obtain a monthly income around RM2,000 and above.

Table 2

*Respondents' OFD-Use Information*

Category	Item	Frequency	Percentage
How often do you use online food-delivery apps?	Daily	18	4.7
	At least once per week	72	18.8
	At least once per month	46	12.0
	At least twice per month	28	7.3
	Occasionally	220	57.3
Which online food-delivery apps do you prefer most?	GrabFood	66	17.2
	Food Panda	232	60.4
	Dahmakan	3	0.8
	McDelivery	52	13.5
	Pizza Hut Delivery	7	1.8
	Domino's Pizza	13	3.4
	Others	11	2.9
At what mealtime do you prefer to use online food-delivery apps?	Breakfast	5	1.3
	Lunch	153	39.8
	Dinner	213	55.5
	Others	13	3.4
	Cash on Delivery	128	33.3
What mode of payment do you prefer most in online food-delivery apps?	Credit/Debit Card	50	13.0
	E-wallet	20	5.2
	Online Banking	185	48.2
	Others	1	0.3
Total		<b>384</b>	<b>100.0</b>

Table 2 above shows the respondents' OFD-use information comprising the frequency of use, the most preferable apps, delivery mealtimes, and modes of payment. It is found that 220 of the respondents (57.3%) occasionally use the OFD apps while only 4.7% of them use the apps daily. In the meantime, 60.4% of them use *Foodpanda* as their most preferred online food-delivery app. In the interim, 213 (55.5%) of them prefer to use online food-delivery apps for dinner and only 5 (1.3%) of them use for breakfast mealtime. As for the mode of payment, overall, online banking is voted as the highest mode of payment (48.2%). This finding is aligned with SimilarWeb (2021), which has reported that *Foodpanda* is ranked the first place in the Mobile App Ranking in Food and Drink category as well as the best *Google Apps* in Malaysia. This is seconded by a survey done by *Rakuten Insight* which has reported that around 75 per cent of respondents in Malaysia have stated that *Foodpanda* is the food-delivery app they use the most. Hence, this makes *Foodpanda* the most preferred one among users in Malaysia. On the contrary, Tribhuvan (2020) has revoked that his respondents do not prefer online transactions because the mode of payment invades their privacy or they feel vulnerable using online payment systems, hence, they tend to pay in cash during delivery.

Table 3

*Respondents' Motivational Factors of Using OFD Apps*

Category	Item	Frequency	Percentage	Mean
I find that online food-delivery apps are flexible and easy to use.	Strongly Disagree	1	0.3	4.3854
	Disagree	6	1.6	
	Undecided	32	8.3	
	Agree	150	39.1	
	Strongly Agree	195	50.8	
I believe that online payments are safe and secure.	Strongly Disagree	8	2.1	3.9245
	Disagree	18	4.7	
	Undecided	97	25.3	

Based on Table 3 shown above, the respondents have testified that they have perceived that “I find that online food-delivery apps are flexible and easy to use”, “I believe that online payments are safe and secure”, and “I have been influenced by social media to use online food-delivery apps” are the motivational factors behind their use of the OFD apps, which are annotated (M=4.38, M=3.92, and M=3.79) respectively. However, as the consumers of online food-delivery apps, the perceptions differ individually based on their degree of frequency use of the online food-delivery apps. As shown in the data above, it is assumed that they seem to agree and mostly agree that they have perceived the ease of use due to the effortlessness and flexibility of the apps used yet are undecided on the trust of payments towards the online food-delivery apps. This seems to be aligned with the past study done by Lau and David (2019) who have implied that users are somehow convinced that convenience is one of the motivating factors to adopt OFD services. The researchers have then interpreted further that, if the convenience level of using the OFD services meets the expectation of the consumers, they would be motivated to use the services continuously.

Table 4

*Respondents' Perceived Ease of Use (EOU) of OFD Apps*

Category	Item	Frequency	Percentage	Mean
I often find that online food-delivery apps are difficult to use.	Strongly Disagree	66	17.2	2.4141
	Disagree	169	44.0	
	Undecided	92	24.0	
	Agree	38	9.9	
	Strongly Agree	19	4.9	
A variety of restaurants available in online food-delivery apps affect my food choice.	Strongly Disagree	1	0.3	4.1172
	Disagree	25	6.5	
	Undecided	57	14.8	
	Agree	146	38.0	
	Strongly Agree	155	40.4	
I believe that special features (search filters/self-pick-up/recommendations on	Strongly Disagree	1	0.3	4.1484
	Disagree	9	2.3	
	Undecided	68	17.7	



home page, etc.) in online-food delivery apps are useful.	Agree	160	41.7	
	Strongly Agree	146	38.0	
I find that the chat box in online food-delivery apps is easy to use.	Strongly Disagree	9	2.3	3.5990
	Disagree	28	7.3	
	Undecided	141	36.7	
	Agree	136	35.4	
	Strongly Agree	70	18.2	
Total		<b>384</b>	<b>100.0</b>	

According to Table 4 above, the users of the online food-delivery apps are revealed to have disagreed with the difficulty in using the online food-delivery apps ( $M=2.41$ ). It is assumed that the users have not found any complexities in using the apps. Furthermore, the users of the online food-delivery apps have testified that they agree and almost agree with the “Variety of restaurants available in online food-delivery apps affect my food choice”, “I believe special features (search filters/self-pick-up/recommendations on home page, etc.) in online food-delivery apps are useful”, and “I find that the chat box in online food-delivery apps is easy to use”, which are annotated ( $M=4.11$ ,  $M=4.14$ ,  $M=3.60$ ) respectively. It is assumed that the users have perceived the ease of use in terms of the variety of the apps’ features; however, they have mixed feelings over the usefulness of the chat box. It is understood that the ease of use comes when the users can easily find a wide range of restaurants in the apps, which have special features that can help them to ordering foods, such as search filters and recommendations. Besides, the chat box in the apps, which can help them to communicate directly with riders to make the process of food delivery much easier, also carries the meaning of the perceived ease of use.

Table 5

*Trust (T) of OFD Apps*

Category	Item	Frequency	Percentage	Mean
I find that food available in online food-delivery apps is as per my taste.	Strongly Disagree	2	0.5	4.0391
	Disagree	10	2.6	
	Undecided	66	17.2	
	Agree	199	51.8	
	Strongly Agree	107	27.9	
I find that the cost of food and delivery charged is affordable in online food-delivery apps.	Strongly Disagree	12	3.1	3.4557
	Disagree	50	13.0	
	Undecided	134	34.9	
	Agree	127	33.1	
	Strongly Agree	61	15.9	
I believe that online food-delivery apps are time-efficient.	Strongly Disagree	3	0.8	4.2005
	Disagree	7	1.8	
	Undecided	62	16.1	
	Agree	150	39.1	
	Strongly Agree	162	42.2	
I believe that consumer care in online food-delivery apps will respond to my complaints (if any).	Strongly Disagree	6	1.6	3.7214
	Disagree	31	8.1	
	Undecided	126	32.8	
	Agree	122	31.8	
	Strongly Agree	99	25.8	
	Total		<b>384</b>	

Table 5 above explicates the respondents' trust (T) of the OFD Apps. Apparently, they have testified that they trust that "*I find that food available in online food-delivery apps is as per my taste*" and "*I believe that online food-delivery apps is time-efficient*", which are annotated (M=4.04, M=4.20), respectively. It is assumed that the consumers have perceived trust due to the fact that the choice of foods available in the online food-delivery apps is as per their taste and it is time-efficient for the consumers to order and purchase foods online. However, the consumers have testified that they almost agree and are undecided when it comes to the "*I find that the cost of food and delivery charged is affordable in online food delivery apps*", and "*I believe that consumer care in online food-delivery apps will respond to my complaints (if any)*", which are annotated (M=3.46, M=3.72) respectively. It is assumed that some consumers have found that the cost incurred is affordable and they partially perceive trust through the consumer care service in the online food-delivery apps.

Consequently, this study has responded respectively to analysing the factors that motivate consumers to use the OFD apps in Malaysia. Thus, based on the findings stated above, it is imperative that the operators should anticipate what factors that would motivate the consumers to use the OFD apps, inclusive of all the systems used and dinner as the peak hour of the mealtime, to maintain the effective online-transaction system and identify the special features (search filters/self-pick-up/recommendations on the home page/etc.) in the online food-delivery apps that are useful to the consumers. Moreover, the consumers have put their trust on the OFD due to time efficiency that it has promised to deliver. Hence, by using these valuable inputs, OFD-service providers that have developed these systems would be able to

improvise and refine their existing applications to achieve a certain desired level of convenience in order for them to encourage and motivate the consumers to use their apps, which eventually leads to consumer satisfaction and loyalty. This is because motivation is important as it will affect the attitude and willingness of the consumers with the given scenarios, as stated above. Once the convenience level meets the expectation of the consumers, they will be motivated to use that system continuously and stay loyal.

### Conclusion

Overall, the study has managed to answer the research question in identifying the motivational factors on the use of the online food-delivery apps in Malaysia. Despite all the problems encountered in using the OFD apps, the study has shown that numerous consumers have perceived that the apps are highly beneficial for their lifestyles and convenient for them. Consequently, service providers, cum the OFD apps developers, are able to understand the perceptions and expectations of the consumers towards the online applications, which may help the improvement of the systems in the future. This is in line with the idea, which this study has theorised, that the use of an OFD app is more compatible with the lifestyle of convenience-oriented people due to its greater ability to satisfy their needs in preparing meals rapidly and smartly. Lastly, these findings may serve as a useful benchmark for understanding the dynamic interplay between the consumers, OFD-service providers, restaurant operators, and improvements in the OFD apps for future benefits.

### References

- Chai, L. T., & Yat, D. C. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. *Journal of Marketing Advances and Practices* 1(1), 62-77.
- Chavan, V., Jadhav, P., Korade, S., & Teli, P. (2015). Implementing Customizable Online Food Ordering System Using Web Based Application. *IJSET - International Journal of Innovative Science, Engineering & Technology*, 2 (4), 722-727.
- Cho, M., Bonn, M. A., & Li, J. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*. Elsevier. 2019; 77, 108–116.
- Dabholkar, P. A. (1995). A contingency framework for predicting causality between consumer satisfaction and service quality. *Advances in Consumer Research*, Vol. 22, 101-108.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3), 319-340.
- Insider, E. (2018). The food delivery battle has just begun in Malaysia. Retrieved from EC Insider: <https://www.ecinsider.my/2018/02/food-delivery-companies-malaysia.html>
- Koiri, S. K., Mukherjee, S., & Dutta, S. (2019). A study on determining the factors impacting consumer perception regarding the online food delivery apps in guwahati. *GIS Business*, 14(6). <https://ssrn.com/abstract=3546933>.
- Lau, T. C., & David, N. C. Y. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. *Journal of Marketing Advances and Practices*, 1(1), e-ISSN 2682-8170.
- Leong, W. H. (2016). *Food Ordering System Using Mobile Phone*. Unpublished thesis, Faculty of Information and Communication Technology (Perak Campus), Universiti Tunku Abdul Rahman.
- Li, C., Miroso, M., & Bremer, P. J. (2020). Review of Online Food Delivery Platforms and their Impacts on Sustainability. *Sustainability* 12 (14). <https://doi.org/10.3390/su12145528>.

- Magrath, V., & McCormick, H. (2013). Marketing design elements of mobile fashion retail apps. *Journal of Fashion Marketing and Management* 17 (1), 115-134.
- Müller, J. (2021). Mobile internet users in Malaysia 2015-2025. <https://www.statista.com/statistics/558698/number-of-mobile-internet-user-in-malaysia/>.
- Nilashi, M., Jannach, D., Ibrahim, O., & Ithnin, N. (2015). Clustering-and regression-based multi-criteria collaborative filtering with incremental updates. *Information Sciences*, 293 (2015), 235-250.
- Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model, *International Journal of Electronic Commerce* 7 (3). 69-103.
- Preetha, S., & Iswarya, S. (2019). An Analysis of User Convenience towards Food Online Order and Delivery Application (Food App via Platforms). *International Journal of Management, Technology, and Engineering*, 429-433.
- Rasli, M. A. M., Zulkefli, N. H., Salleh, N. S. A., Ghani, F. A., Razali, N. A. & Idris, R. S. N. (2020). Determinants of Behavioural Intention on Online Food Delivery (OFD) APPS: Extending UTAUT2 with Information Quality. *Global Business & Management Research*, 12(4), 679 – 689.
- Roh, M., & Park, K. (2019). Adoption of O2O food delivery services in South Korea: The moderating role of moral obligation in meal preparation. *International Journal of Information Management*, 47, 262-273.
- Sethu, H. S., & Saini, B. (2016). Consumer Perception and Satisfaction on Ordering Food via Internet, a Case on Foodzoned.Com, in Manipal. *Proceedings of the Seventh Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences (AP16 Malaysia Conference)*, 15-17.
- SimilarWeb. (2021). Mobile App Ranking. Retrieved from Similar Web: <https://www.similarweb.com/apps/top/google/app-index/my/food-and-drink/top-free/>
- Statista. (2021) Most used app for food delivery orders in Malaysia as of June 2020 (In cooperation with Rakuten Insight). Retrieved from <https://www.statista.com/statistics/1149404/malaysia-favorite-food-delivery-apps/>.
- Tribhuvan, A. (2020). A Study on Consumer Perception of Food Apps. *International Journal of Advance Research and Innovative Ideas in Education* 6(4), 208-243.
- Zhang, D. S., Zhou, L., & Dai, L. W. (2017). Online shopping acceptance model- a critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8(1), 41-62.
- Zhao, Y., & Bacao, F. (2020). What factors determining consumer continually using food delivery apps during 2019 novel coronavirus pandemic period? *International Journal of Hospitality Management*, 91, 18-25. 102683. <https://doi.org/10.1016/j.ijhm.2020.102683>.