# Determinants of Online Food Delivery (OFD) towards Customer Behaviour: A Systematic Review

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## Abstract

Online food delivery (OFD) has become a trend worldwide. As it has emerged and revolved in the era of the gig economy, OFD is considered as a gig career where it has been popularized among urban cities and widely spread around the world. The demand of OFD has open opportunities for food aggregators in the industry to grasp whatever chances they had to open a medium to serve the consumers' needs which is food. The packed daily schedule and convenience of the OFD system led to consumers' motivation to utilize OFD as the answer to their hunger call. Therefore, scholars incorporate with the food aggregators in the industry were focusing on the customer behaviour and factors that triggered the consumers towards OFD over the recent years. Due to the many overlapping interests of studies, there is a gap in our understanding of consumers' reasons for OFD usage. We addressed the gap by conducting an interdisciplinary systematic review of the relevant literature. Through critical evaluation and analysis of the literature, we identify major determinants that have been mostly considered by the consumers relating to the OFD usage: service quality, food quality, consumer experience and practicality. Finally, we propose few suggestions that can be useful as guidance for future research and create an insight for food aggregators to note.

**Keywords**: online food delivery; determinants; satisfaction; loyalty

## INTRODUCTION

The rapid development of technology of smartphones and other Internet devices advancement had changed the way people living. Particularly, the busy lifestyle led to the growth of the online food delivery (OFD) market (Yeo et al., 2017), in which hungry people had less time to prepare their meal and just use their smartphones to get the service provider to send them food to handle their hunger. According to Frost and Sullivan (2019), the output value of the global OFD market was USD 82 billion in 2018 and is expected to be USD 200 billion by the year 2025. OFD is an industry that assists customers in providing the service of food delivery (Banrjee. 2019; Chandasekhar et al., 2019). In recent years, with the vast and faster development of the industry, its service quality attracted the attention of many consumers (Suhartanto et al., 2019). OFD service quality had a positive influence on customer satisfaction and loyalty (Saad, 2020). However, Chen (2016) stated that OFD service quality has often been ignored by operators during the past time which resulted in low satisfaction levels and poor intention by customers. Thus, today many researchers incorporate with industry key players fiercely play their part to assess and examine the only the OFD service quality determinants but other possible determinants that may influence consumers' satisfaction and loyalty towards the OFD industry. All food delivery service factors are important connotations of OFD service quality and must effectively measure and improve by operators (Cho et al., 2019). The result of this study can reconfirm which determinants had been overlooked or under-

recognized by the industry and scholars. The study also wants to clear out the gap between the previous studies collected in this research. Moreover, this study can also create the overall insight of the consideration consumers take before entering the application of OFD service.

## LITERATURE REVIEW

Customer satisfaction is an essential measurement to measure the success of online food delivery service; meanwhile, loyalty can consider it as a state where the improvisation or service has reached the success parameter and is expected to maintain its succession story. Both loyalty and customer satisfaction is a consumer's propensity to act in a particular way towards service and products (yeo et al., 2017). According to Suhartanto et al. (2018 & 2019), behavioural intention is a relatively precise predictor of customer retention and defection. Satisfaction from the customer is a subjective result of any successful marketing activity, and it is linked to the process of purchasing and consumption with the post-purchase activity, which has been examined widely previously in the traditional retailing literature (Suhartanto et al., 2019). (Nisar & Prabhakar,2017; Suhartanto et al., 2019) emphasized that food quality and e-service quality are the main determinants of satisfaction for online food purchasing services.

Determinants and Theories identification

To identify this part, all studies collected just went through the process of filtration and simple coding. It is a process of scheming and scanning the abstract and scholar literature section of each published study collected. Therefore, our finding stipulated theories that mostly used relating to the keyword of "online food delivery" (OFD) were Theory of Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Planned Behaviour (TPB) as well as the SOR model. These are the most popular theories that have been discussed by researchers and used as the basis of studies.

Meanwhile, our findings also pointed out a few determinants that are popular among researchers to investigate the satisfaction and loyalty of customers when using the OFD apps or services. We had considered the overlapping factors and not filtered out the determinants from the grey articles. These determinants identified also has been standardized as a particular theme that we assumed to be similar classification, and we indicate ranking for each theme to show the importance level for each theme of determinants. Thus, the most determinants that have been considered by existing customers for having the intention to reuse and stay loyal were from the theme of service quality and food quality followed by the customer experience and practicality. Lastly, our findings also found that these determinants will influence the motivation for potential customers to apply the usage of online food delivery services and explore particular food delivery apps.

## RESEARCH METHOD

We conducted a review of the online food delivery literature in which we make identifications of the most considered determinants by customers relating to the usage of online food delivery and categorized it into relevant themes. It is stated that the principle promotes reproducibility and transparency in the review process (Synder, 2019). A suggests five steps for producing a systematic review which includes question formulation, locating studies, study selection or evaluation and analysis and reporting using results (Denyer & Tranfield. 2009).
Question formulation

The research scope, research questions and inclusion/exclusion criteria were established following an initial assessment of the literature, and two research questions were formulated RQ1) What are the most determinants considered by the consumers towards the application of Online Food Delivery services and apps? , and RQ2) How many studies are there relating the OFD in the perspective of marketing?

Locating studies

Our search strategy focused on searching online databases such as Scopus and Google Scholar to identify any relevant studies we had interested in. We do not include other fields of studies as we were only focusing on having a full understanding of the OFD topic in the marketing scope. To ensure that we have more accuracy in generalizing our findings and greater practical insight (Adam et al.,2016), we included conference proceedings as well as the grey literature.

We found out that there were specific years ranges for the keyword used of "online food delivery" in the Scopus database. A sum of 106 documents has been revealed from the Scopus database, and it started with just 1 document in 2016 and gradually increasing over the years till 2021. There are slight decreasing numbers of documents from the year 2020 to the year 2021, which are 44 and 33 respectively. This may be due to the year 2021 are still ongoing currently. Other than that, the possibility of other sets of phrases, keywords development or the usage of other synonym words with OFD such as cloud kitchen, online food delivery service (OFDS), online food delivery apps (OFDA), online food portal and offline-to-online restaurants. However, we had limited our study to only specifically focusing on the keyword of "online food delivery" (OFD).

Study selection and evaluation

This research identified 106 articles. The database of literature was streamlined by eliminating overlapping materials and content; then, the remaining articles went for the screening process through screening titles and abstracts. Next, a final filtering and coding process by reading the full text. The final number of articles included in our review consists of 40 published studies.

Below diagrams were taken from the Scopus database, diagram 1 shows the numbers of documents published from the year 2016 till 2021. Meanwhile, diagram 2 shows the pattern of documents published according to countries.
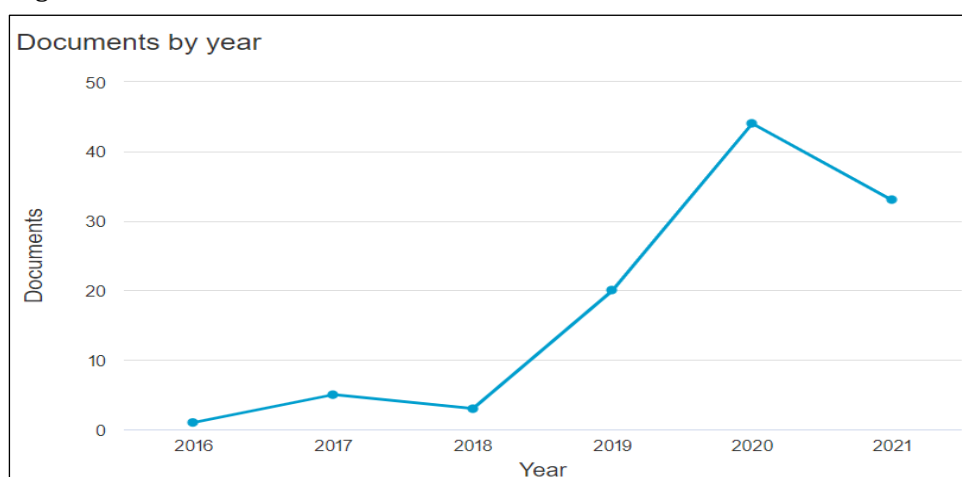


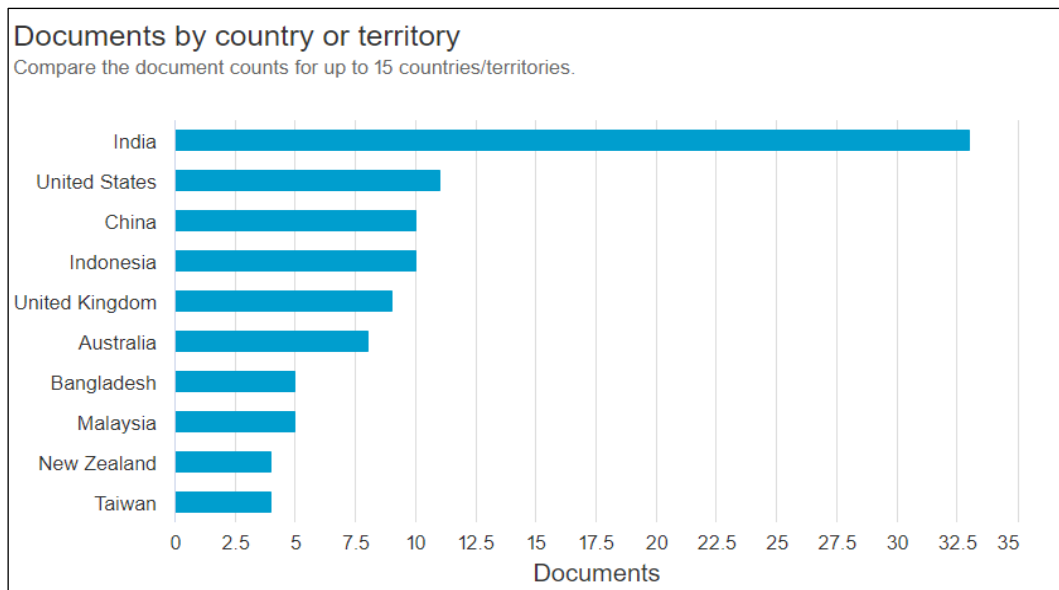Figure 1. Number of documents published by year

Figure 2. Number of documents published by countries

Coding Process

Our findings also pointed out a few determinants that are popular among researchers to investigate the satisfaction and loyalty of customers when using the OFD apps or services. We had considered the overlapping factors and not filtered out the determinants from the grey articles. These determinants identified also has been standardized as a particular theme that we assumed to be similar classification, and we indicate ranking for each theme to show the importance level for each theme of determinants. Thus, the most determinants that have been considered by existing customers for having the intention to reuse and stay loyal were from the theme of service quality and food quality followed by the customer experience and practicality. Lastly, our findings also found that these determinants will influence the motivation for potential customers to apply the usage of online food delivery services and explore particular food delivery apps.
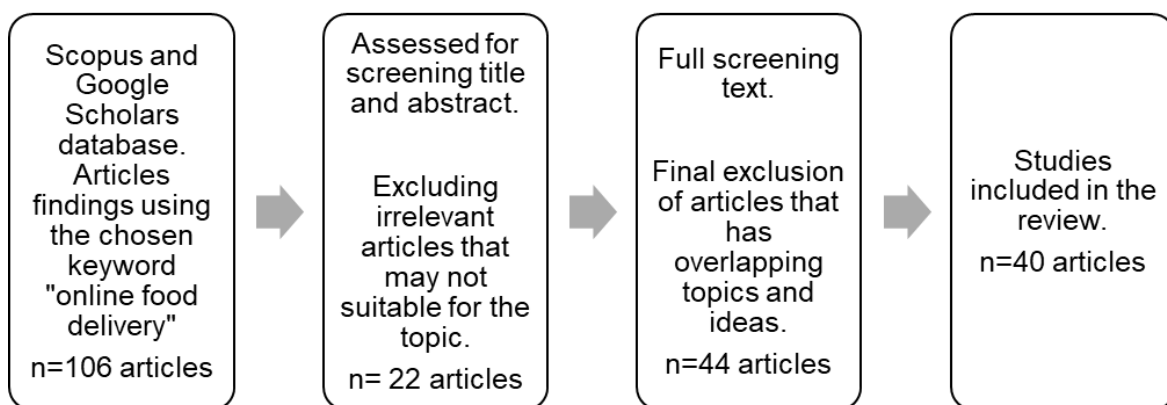


Figure 3. Coding Process

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**FINDINGS AND DISCUSSION**

Publication years

As we were digging and reviewing secondary sources, thus we had taken published studies from the most recent studies from the current year of 2021 till 2016. The first paper was published in 2016 (Kedah et al., 2016). The number of publications increased rapidly after 2018 as online food delivery (OFD) gained academic and public profile in 2018 for the role played in gig economy dynamicity where the growth of food aggregator and demand from consumers arise.

Discipline

The articles reviewed come from the field of the marketing discipline. The scholar is interested in understanding other people's motivations in online food delivery apps or service usage. The interest in OFD was driven by and growing parallel with the gig economy development. According to studies (Tom et al.,2020; Crouch, 2019) gig economy was established by the hybrid employment relationship, which led by innovative technology in the service economy.

Theme identification

The majority of many articles analyzed the factors and reasoning on what motivates and sparks the consumers' interest to choose between the many online food delivery service options available. We identified that most of the key or focus of studies regarding the keywords of "online food delivery" in the Scopus database and Google Scholar is to study the relationship of those determinants, theories or concepts with the consumer behaviour relating to intention to use, purchasing behaviour, satisfaction, intention to reuse and loyalty.

Therefore, based on our findings, we had executed a filtration and scanning process to extract the determinants from the published studies accordingly to its theme. The themes are categorized accordingly to their attribute similarity, such as fresh food, and food safety are categorized under the theme of food quality. There are four themes which namely customer experience, food quality, service quality and practicality.

Table 1. The determinants are categorized accordingly to themes

| Customer Experiences | Food Quality | Service Quality | Practicality |
|---|---|---|---|
| Satisfaction Customer reviews Feedbacks Online review | Variety of menu Food safety Food hygiene Freshness of food Uniqueness of taste | Timeliness Personnel' personality Assurance Convenience Responsiveness Tangibility | Navigational design Payment gateway Ease of use Privacy of data Information quality Rating System and concept Promotions Enjoyment |

Discussions

This review provides a systematic overview of the interdisciplinary literature on the determinants of the consumer when it comes to the application of online food delivery apps or services. In this review, we also identify the directions for future research from a marketing perspective.

One of the major considerations customers concern about regarding OFD was food quality. It is viewed to be related to satisfaction with restaurants of fast food (law et al., 2004). Food is not part of the service quality attributes; it is a whole part of itself. However, food quality has the same weight as service quality. The characteristic of food includes freshness, nutritiousness as well as the way of cooked and presentations are the key focus when discussing the food quality (Kedah et al., 2015). People do not want to pay for food that is not according to their expectations. Also, the customer feels offended to have paid for the food delivered that was misleading with the information of the food they received priorly before deciding purchase behaviour. This situation force consumers to give bad feedbacks and review or might as well avoid ordering from the same service provider in the future. Our findings found out that previous studies from countries such as Jordan, India, Bangladesh, Malaysia and Indonesia indicate that food quality is the main factor of the consumer behaviour relating to OFD, specifically when it comes to repurchasing or intention to stay loyal to the particular OFD portals.

In retaining the customer base, timeliness plays an important role to keep customer trust in terms of the service offered. According to Dholakia and Zhao (2010), timing is crucial and plays an important influence on the relationship between online store attributes and satisfaction. Any delay in delivery that is beyond common practice, such as too long delay (one-hour delivery), will have a negative effect on satisfaction (Zhao, 2010). It is acceptable for consumers to understand the short delay or road and weather conditions. In which, according to our research, timeliness is categorized under the theme of service quality. The core sustainable strategy for online food ordering companies is the provision of excellent service to the customers (Kedah et al., 2015). Thus, it is undeniable that service quality can be a major consideration to concern when it comes to customer satisfaction towards OFD.

Practicality includes the technicalities of the OFD system to run its function accordingly. It includes navigational design, website design, security, privacy as well as the payment system. Interestingly, our findings also found that enjoyment intervention in the OFD system can lead to customer satisfaction. Trustworthy of system design such as website or apps should save customers' transaction time (Kedah et al., 2015). The design of a webpage should take into consideration of the appearance, functionality and loading time (Weinberg, 2000). Therefore, we assumed that the practicality of a system could influence the level of service quality of OFD in which eventually leads to customer satisfaction and loyalty. Enjoyment such as a game to collect loyalty rewards or winning a free coupon to redeem food at the of the game can also enhance customer motivation to keep a good perception of the service provider and tackle their perceived risk of the particular OFD apps. Finally, it also can decrease the technology anxiety of the new customer base.

## CONCLUSION AND FURTHER RESEARCH

We want to highlight what are the most reasons and factors by consumers when it comes to ordering online food delivery by apps from the service provider. This review is from the perspective of the marketing field, specifically addressing consumer preferences and behaviour which may not be suitable to be for other study disciplines. This study provides an important contribution to enhance our understanding of the food delivery service topic as we have highlighted the gaps that researchers had resolved or should resolve in future. This review's result shows that the most critical factors that consumers considered when determining the application of online food delivery service are food quality and e-service quality, followed by the consumer's experience as reference and practicality of the OFD system. Particularly, it will assist marketing practitioners or food aggregators in the industry to take insight and execute further appropriate marketing strategies and future research. Therefore, it is recommended

for future research to put deeper research into the relationship between the themes of determinants towards customer satisfaction and loyalty. We also hope that key players of the industry, especially mobile apps food aggregators to take further action to improvise their system so that customers are able to have smoother transactions and lead them to retain to use the system. Thus, it is also notable that it is important for these service providers to take serious action for their improvisation of food quality so that it synced to the extent information they offered through the apps and the system.

Despite the contributions presented earlier, we also acknowledge some limitations. First, our work is based on secondary data, which comes from previous studies and research from the year 2016-2021 year of time frame due to the time restriction to completing the paper. Other than that, this review mainly took its sources from Scopus and Google scholar databases. Thus, we hope that future research can continue this endeavour and develop a more comprehensive understanding of the topic and do study from a deeper time frame to have more accurate patterns.

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