Research Article

Customer Online Purchase Behavior on Food Delivery Applications: A Conceptual Paper

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Abstract
The tremendous development and demand in purchasing food products using cutting-edge technology can be plainly seen as Malaysia entered its endemic era. Nowadays, customers like to purchase food products in efficient and effective ways. As the popularity of Online Food Delivery (OFD) applications peaked, along with the rise in smartphone and internet use during the pandemic era, numerous compelling indications of unfortunate events, including inconsistent user experiences, unreliable delivery, and unacceptably wide price range, which negatively affects customer information satisfaction, intention, and purchasing behaviour. Thus, thorough investigation of customer online purchase behaviour on OFD applications is required. This study primarily reviews previous research on customer online purchase behavior on OFD Applications and aims to provide an in-depth understanding of the factors that influence the behavior, as well as customer information satisfaction, purchase intention and visibility through the lens of the Unified Theory of Acceptance and Use of Technology (UTAUT2). This study hypothesizes the new contributing construct of "trialability" and the growing moderating influence of "visibility" between customer information satisfaction and customer purchase intention of OFD applications usage. Furthermore, a major contribution of the customer information satisfaction construct to gauge real "information" satisfaction during application usage prior to purchase intention and actual purchase.

Keywords:

Online food delivery (OFD) applications, customer information satisfaction, visibility, customer purchase intention, customer online purchase behavior.

1 Introduction

The Internet and smartphones have made information technology an integral component of human existence in the twenty-first century, when they were primarily available exclusively to organizational users in the late twentieth century (Tamilmani et al., 2021). The dramatic growth of the Internet and smartphones significantly impacted online retailing and e-commerce (Bresciani, 2017). As smartphones nowadays are affordable and valuable for each customer, this technological advancement has improved telecommunication infrastructure and consequently the foodservice industry itself (Saad, 2021). With the existence of online retailing and e-commerce, foodservice industry like any other industries also caters its path towards benefiting the technological advancement and fulfilling the needs of its customer. As a result of coping with current lifestyle, customers' purchase behavior is drastically changed as they are also made a huge exposition towards innovative technology (Troise et al., 2020). Along with the development of technology nowadays, specifically smartphones and mobile applications, the food delivery industry has been evolved in terms of technological advancement (Kapoor & Vij, 2018; Troise et al., 2020). This advancement has created the e-commerce boom in the food and beverage industry which leads to a new trend and norms in purchasing food products (Gupta & Duggal, 2021).

Online Food Delivery (OFD) applications is one of the innovations that have been created to fulfill the demand of urban consumers and bring a new dawn to the food and beverage industry (Alalwan, 2020; Choi & Park, 2020). OFD apps can be defined as an online platform that allows consumers to obtain desired foods and beverages from restaurant operators effortlessly (Arsiwala, 2020; Das & Ghose, 2019). A wide range of foods and beverages offered by varying amounts of restaurant operators through OFD apps provide a wider option for consumers. More interestingly, it provides customers with a more comprehensive, up-to-date, and accurate information about restaurants, menu alternatives, customers' prior experiences through online reviews and ratings, and even tracks their orders and their progress (Alalwan, 2020). With the prohibition to dine in during the COVID-19 pandemic, a growing trend and demand for OFD services were escalated within the global foodservice industry where many OFD apps are available (Chai & Yat, 2019; Tribhuvan, 2020). In Malaysia, various numbers of OFD apps or providers are available to assist consumers in getting their foods such as Foodpanda, Grabfood, McDelivery, Pizza Hut Delivery, Running Man Delivery, Honestbee, and DahMakan (Chai & Yat, 2019; Cho et al., 2019). With the existence of many OFD apps today, the capability and compatibility of the applications in delivering online food delivery services must be carefully designed to provide outstanding quality for both service and food products (Ngai & Gunasekaran, 2007). This is to ensure satisfaction among consumers because satisfied consumers lead to customer loyalty towards certain brands of restaurant as well as service providers.

Therefore, this study will examine the relationship between influencing factors towards customer purchase behavior online and the effect of customer information satisfaction and customer purchase intention on OFD applications as well as moderating effect of visibility.

1.1 Problem Statement

It is well documented that, Malaysia, along with other nations in the world has undergone Movement Control Order (MCO) during the COVID-19 pandemic which has imposed the consumer with restriction to dine-in at the restaurants (Razak, 2020). Due to this prohibition, many consumers in Malaysia have taken alternatives to purchase their foods through an online platform which is OFD applications (Razak, 2020). However, on April 1st 2022, Malaysia has been transitioned to its endemic era whereby operational activities without any limitations on business hours, and with no physical distancing between religious activities are allowed (Salim, 2022). Despite the transition phase may contributing to the economic changes in customer's lifestyle or income, the growing demand still resulted in dramatic escalated demand for OFD services as it seems to be more convenient for the customers (Dua, 2017). GrabFood itself had an increase of 30% in deliveries compared to the period before MCO (Kamel, 2021). Meanwhile, Foodpanda shows a rivalry with doubled number of new riders between March and June (Kamel, 2021).

As the demand for OFD services increased, the complaints and bad reviews are more noticeable than usual as many consumers experience an unfortunate event in using the apps or services (Chowdhury, 2021; Jessy, 2017; Liang & Wang, 2021). These complaints have been impelled by inconsistent user experience, safety and security concerns, unreliable delivery, price range, and food quality itself. Study also found that 71% of Malaysian online shoppers regret their purchases, 48% experienced disappointment as a result of unrealistic expectations, 29% experienced dissatisfaction due to subpar product quality, and 30% of Malaysians abandoned their online transactions (Goh, 2013; Jessy, 2017). Therefore, with a high number of complaints and bad reviews, consumers' purchase intention to use OFD apps as well as their purchase behavior online would be affected, which what this study is trying to elucidate. Thus, this study will adopt Unified Theory of Acceptance and Use of Technology (UTAUT2) in considering the factors or determinants contributing to customer purchase intention and purchase behavior online as well as customer information satisfaction which is crucial for the survival of service providers and restaurant operator in OFD applications.

Unfortunately, there happens to be a very limited study in OFD services especially in terms of consumers' intention to use and buying behavior specifically among Malaysia's demographic (Chai & Yat, 2019). The same author also stated that studies on the factors influencing OFD services among urbanites are still hard to come by, despite the importance of these services and changing consumer behaviour in Malaysia (Chai & Yat, 2019). Plus, the area of research regarding OFD apps is still in its initial stages and there are significant gaps in present knowledge and comprehension. For starters, only a few previous research has looked into the aspects that influence users' decision-making

processes and intentions to use such food applications (Ray et al., 2019; Xu & Huang, 2019). Not only that, just a few researches have looked into the impact of customers' behavior and categorical value preferences for using FDAs on the platform's uptake and use (Ray et al., 2019; Wang et al., 2021). From the above discussion, it is obvious that there is a huge gap and lack of in-depth research in the OFD apps context especially in Malaysia region. Pham and Ahammad (2017) provided an example of practical gap on how a poor app that fails to meet users' usability expectations will not entice users to make purchases using the app. A simple app will boost user enjoyment and system satisfaction (Pham & Ahammad, 2017). Customers will therefore be encouraged to use the service as long as the level of convenience provided by OFD services fits their needs. This study will provide extended information and knowledge towards the online food delivery industry which will assist the service providers to develop better application experience in the future.

2 Literature Review

2.1 Online Food Delivery (OFD) Applications

OFD applications can be defined as an online medium platform that offers restaurants to bring foods to their consumers' doorsteps without any physical interactions (Chotigo & Kadono, 2021; Das & Ghose, 2019). OFD applications promote a convenient and faster way to obtain orders and purchase desired foods from partnered restaurant operators. OFD applications are one of the alternatives in e-commerce that are functional for restaurant operators in obtaining a high volume of customers to purchase their food products. With the rivalry figures among OFD service providers dramatically increases especially during COVID-19 pandemic and endemic era, study emphasizes Modifying, updating, pivoting, and innovating operations in order to satisfy the existing needs of a changing customer and adapting customer experience in the future will be critical for restaurants and restaurateurs (Gavilan et al., 2021). Wen et al. (2021) and Puriwat and Tripopsakul (2021) also agreed on future studies should gather data longitudinally and examine consumer attitudes and behaviors throughout the various pandemic stages. This is due to consumers' behavior may change over period of time. Hence, this study projects a strong significance to be conduct in scope of consumer behavior through the lens of utilization of OFD Applications.

2.2 Influencing Factors in OFD Applications Usage

2.2.1 Performance Expectancy

Performance Expectancy is defined as the extent to which customers will gain benefits from utilizing a technology when doing particular tasks (Venkatesh et al., 2003). Through the perspective of OFD applications, many scholars reach the point of consensus by claiming OFD Application should be able to provide a wide significance of influential values among customers. By utilizing the OFD Applications, the time can be efficiently saved by purchasing foods without physically reach to the restaurant and

reduce the congestion in the store and the potential risk of COVID-19 (Alalwan, 2020; Zakaria et al., 2022). Besides, People who stuck with tight schedule at work or at home also gain beneficial aspect through OFD applications usage. This is parallel with study conducted by Kalinić et al., (2020), Performance Expectancy also provide its significant effect towards the customer information satisfaction. Referring to the issue in this research which is customer information satisfaction, with issues like traffic, parking, and extended wait times at restaurants, OFD applications are extremely important. Consequently, it may be claimed that a customer of OFD applications is more likely to be happy and satisfied with their experience if they see a high amount of utilitarian value in doing so (Alalwan, 2020; Kalinić et al., 2020).

H_{2a}: Performance expectancy has an influence on customer purchase behavior online on OFD applications

H_{2a}: Performance expectancy has an influence on customer information satisfaction on OFD applications.

2.2.2 Effort Expectancy

Effort Expectancy refers to the ease with which a system is used (Athapaththu & Kulathunga, 2018; Venkatesh et al., 2003). In the context of OFD applications, effort expectancy refers to the ease and effectiveness of the app for consumers to purchase desired foods and beverages. When a consumer uses an OFD applications, it should not be complicated and not require much work. Therefore, a consumer's behavior to shop online may be influenced by the information's simplicity of understanding, the usability of the application, and the service offered (Koiri et al., 2019; Saad, 2021). This will help to create a positive consumer perception about OFD applications and restaurants which leads to a satisfying experience. To guarantee high-quality services, OFD app providers must enhance the real-time tracking of online purchases, production, and delivery operations (Gunden et al., 2020). Therefore, the most crucial factors influencing a customer information satisfaction are the structure of OFD applications and its capacity to fulfil customer food orders placed online quickly and effectively (Zakaria et al., 2022). Pigatto et al., (2017) also emphasized that restaurant managers must realize that customers complete the full process through the OFD applications; they select the restaurant, place the order, decide on the method of payment, and then follow up on the order until it is delivered. Thus, the consistent findings among scholars shows that Effort Expectancy actually provides a significant influence on customer information satisfaction.

H_{1b}: Effort expectancy has an influence on customer online purchase behavior on OFD applications

H_{2b}: Effort expectancy has an influence on customer information satisfaction on OFD applications

2.2.3 Social Influence

Social Influence stands for the degree to which a person values using a new good, service, or system to interact with others (Venkatesh et al., 2012). To put the definition in the context of OFD applications, social influence involved other people which includes family members, friends and other customers that is influencing the users to purchase foods and beverages by using OFD applications. Customers who are surrounded by family, friends, colleagues and other customers, are the one who most likely open up to a suggestion and advices (Chotigo & Kadono, 2022a). As they are susceptible to opinion and suggestion, they will adopt more quickly when it comes to a new technology such as OFD applications. A new customer who has never used the food delivery app will demonstrate the purpose to examine and acquire information before deciding by inquiring, querying, or searching to improve their perception and knowledge (Chotigo & Kadono, 2022a). However, there is inconsistency as the researchers indicated that their respondents more likely utilize OFD applications because of media rather than peer pressure (Lee at al., 2019). However, the other scholars agreed that Social Influence has a significant affect towards customer information satisfaction customer tend to adopt a new technology as they gain a favorable opinion from family, friends and colleagues (Beyari & Abareshi, 2019; Chotigo & Kadono, 2022).

H_{1c}: Social influence has an influence on customer online purchase behavior on OFD applications

H_{2c}: Social influence has an influence on customer information satisfaction on OFD applications

2.2.4 Facilitating Condition

Facilitating Condition can be defined as the extent to which a person is convinced that a technological and organizational framework is in place to facilitate the use of the system (Venkatesh et al., 2012). This can be referred to the sufficient resources in using OFD applications which includes expanded high-speed technical infrastructure and a statewide network of 3G and 4G base transceiver stations that can facilitate the intention to use among customers (Doana, 2020). This is aligned with other researchers' technical standpoint, the importance of OFD applications for customers, stating that they require internet or 4G connections for proper usage and customers value the application's reliability and quality, while human support is crucial for high-quality services (Alalwan, 2020; Doana, 2020; Santosa et al., 2021). Therefore, customers are more likely to be satisfied with OFD applications if they receive adequate technical, organizational, infrastructural, and human support. Other than that, OFD applications nowadays are friendlier as its compatible with any type of electronic devices including smartphones, tablets and computers. It comes together with several interconnected payment gateway types that can facilitate the ease of consumers to use OFD applications (Alalwan, 2020; Doana, 2020). Hence, given the potential significance of the role that Facilitating Conditions play, it is also possible to propose that customers are

more likely to be satisfied with using OFD applications if they feel that there is an adequate level of technical, organizational, infrastructural, and human support available to them while using OFD applications (Alalwan, 2020).

H_{1d}: Facilitating conditions has an influence on customer online purchase behavior on OFD applications

H_{2d}: Facilitating conditions has an influence on customer information satisfaction on OFD applications

2.2.5 Hedonic Motivation

Hedonic Motivation is an entertaining pleasure brought on by using technology (Venkatesh et al., 2012). The significance of considering hedonic motivation as one of the contributing factors in this study is due to psychological mechanisms is directly affected the satisfaction to use OFD applications. As the world struck with the COVID-19 pandemic, and endemic has been officially announced in Malaysia, there is a psychological factor that influence consumers to use OFD applications. Individuals can employ specific mechanisms to deal with anxiety, panic, and depression brought on by isolation restrictions, exaggerated messages in the media, and family members or friends who have the COVID-19 disease (Gârdan et al., 2021). Not only psychological factor, functionalities and visual attraction also the key component of hedonic-type motivation in the context of OFD applications (López et al., 2016). Compared to the other scholars, this research demonstrate how visual attraction positively influences a variety of factors, including the pleasure experienced when shopping online, the development of favorable attitudes toward the virtual establishment, higher levels of satisfaction, longer visits to the site, repeat visits, greater purchase intent, and recommendation of the establishment (López et al., 2016). The majority of customers now partake in the hedonistic shopping lifestyle. Thus, frequent browsing makes customers shop for things outside of their needs. Some people experience pleasure and satisfaction after shopping when they adopt a hedonistic behavior. Previous study concluded from these that hedonic and utilitarian values have a large impact on customer satisfaction, which has a significant impact on behavioral intention (Ryu et al., 2010).

H_{1e}: Hedonic motivation has an influence on customer purchase behavior online on OFD applications

H_{2e}: Hedonic motivation has an influence on customer information satisfaction on OFD applications

2.2.6 Price Value

From the perspective of UTAUT2, price value can be defined as cognitive interaction between a consumer's perception of the applications' advantages and the associated cost (Venkatesh et al., 2012). OFD applications are at its topmost in this age and continue growing rapidly due to its several advantages in term of price. The use of OFD

applications is increasing dramatically due to their many advantages, including the ability to send food right to customers' doorsteps, a variety of payment modes, and alluring discounts, incentives, and cashback offers (Saad, 2021). The relevancy of price value can be seen more clearly on the study done by Ramos (2022) who showed that price value has to be one of the main factors affecting consumer's continuous usage of OFD applications. Based on the outcome, when consumers place orders, OFD applications must offer incentives. Rewards like coupons to be used later or discounts on delivery services were discovered to be crucial OFD applications qualities that affect consumers' intentions to continue using the service (Ramos, 2021). However, a different point of view as customers will experiencing greater dissatisfaction on the products that are less valuable or not able to meet the customers' expectation and preferences (Zeelenberg & Pieters, 2007). Zeelenberg & Peters (2007) claimed that customers will regrets with their decision to purchase those particular products. These statements of price value affecting customer purchase behavior online as well as customer information satisfaction consistently aligned by many other previous researchers (Aslam et al., 2018; Shujaat and Ahmed, 2015).

H_{1f}: Price Value has an influence on customer online purchase behavior on OFD applications

H_{2f}: Price Value has an influence on customer purchase intention on OFD applications

2.2.7 Habit

From UTAUT2 perspective, according to Venkatesh et al. (2012), prior experience is a requirement for habit to impact technology use, and habit is a crucial element in determining how well technology will be received in the future. In this research, researcher has put a definition of habit in the context of OFD applications, which is when a customer automatically carries out behavior due to familiarity of OFD applications. The inclusion of "habit" in the UTAUT2 will therefore serve as an overarching mechanism and support the theory's emphasis on intention as the primary motivator of use behavior (Tamilmani et al., 2019). Numerous studies have demonstrated that consumer habits are a predictor of technology use, and the Journal of the Association for Information Systems (JAIS) special issue on the technology acceptance model (TAM) lauds habits as a crucial alternative mechanism in forecasting consumer behavior (Tamilmani et al., 2019; Venkatesh et al., 2012). In the scope of customer information satisfaction, many studies exhibited that habit influence customer information satisfaction. If customers are equally satisfied with an online retailer, those with high levels of habit are more likely to make more purchases compared to those who lack such a habit (Khalifa & Liu, 2007). This is aligned with the results in the study of Rasli et al. (2020) also showed that satisfaction from using the OFD applications will eventually leads to continuous intention that results in unplanned use of OFD applications (Rasli et al., 2020). Customers gradually develop the habit of using mobile applications as a result of this behaviour. Thus, managing customers who have used delivery applications is a

crucial challenge because prior usage experience is a prerequisite for habit in influencing technology use (Tamilmani et al., 2019).

H_{1g}: Habit has an influence on customer purchase behavior online on OFD applications

H_{2g}: Habit has an influence on customer information satisfaction on OFD applications

2.2.8 Trialability

Trialability is the capacity of an idea to be tested on a small scale (Lin & Chen, 2012). An invention will be more easily embraced by customers if it allows for testing or trialability (Hayes et al., 2015). If people can test an innovation, the outcome's unpredictability is lessened, resulting in a more favorable satisfactory reaction to the innovation (Lin & Chen, 2012). According to Herbig and Kramer (1994), when it comes to technology adoption, a consumer's purchasing behavior is greatly impacted by their lack of prior exposure to the new technology. Because of this, businesses that release technological products usually provide a free, limited-time trial to entice buyers. This is the trialability design that these service providers have been implemented in order to achieved favorable reaction to the technology (Permata Sari & Khairi, 2022). However, OFD applications has evolved over the years and always updated their functionality and graphical user interface. This has led to the questionable issue on this construct as new customers in this current era will be experiencing different trialability design compared to an older customer with an older version of OFD applications. But, despite the various versions of OFD applications with different trialability design, there is always a trial experience during the first time usage that able to intrigue the customers as well as influencing their purchase intention and satisfaction. The above statement is actually proved by Winarti et al. (2021), where they found that trialability has significant effect towards customer information satisfaction. According to the same authors, the rate at which an innovation spread grows with the quantity of customer trials. Customers' purchasing power may improve due to the trial, and they may feel satisfied because the product meets their expectations. Consumers can test out innovative offers, assess them, and then choose to accept or reject them before committing to a purchase (Winarti et al., 2021).

2.3 Customer Online Purchase Behavior on OFD Applications

In customer behavior research, the researcher must be able to explain the human behavior more precisely as the key determinants of consumer purchase behavior online needs differ and emerge frequently with diverse outlooks. Customer purchase behavior can be defined as the rate at which customers make purchases online is referred to as purchase behavior online (George, 2004). As mentioned by Ajzen (1991), consumer intentions, which in this research would be read as purchase behavior online, are an indicator of how willing consumers are to engage in a specific action. The author also asserted that intentions serve as a useful indicator of how serious people take a specific activity and how frequently they make an effort to engage in it (Ajzen, 1991). This can

be reflected by research that explores the impact of satisfied customers on online purchase behavior in OFD applications. It highlights the importance of re-purchase intention and revisit intention, which are measured by customer reaction to specific experiences (Daugherty et al., 2008). This aligned with Kim et al., (2004), suggests that online retailers can persuade customers to make a second purchase by providing in-depth product information, engaging chat conversations, and attractive store layouts. This research proposes influencing factors for purchase behavior online of OFD applications. There are eight proposed constructs that affect customer purchase behavior on OFD applications namely Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habit and Trialability. All of the proposed influencing factors have a significant effect towards customer purchase behavior on OFD applications. Thus, the following hypothesis is constructed:

H1: The influencing factors positively affect customer online purchase behavior of OFD applications.

2.4 Customer Information Satisfaction Towards OFD Applications

Customer information satisfaction is defined as customer dis/satisfaction with an overall information service experience, which include navigating through OFD applications and contents in an online service setting (Park & Kim, 2003). There is an effective measure that must be considered when it comes to the technology-mediated service and marketing which must take into account several dimensions of consumer satisfaction, which is obviously impossible to do with a single item scale (Wang & Tang, 2001). For research involving digital marketing, conventional methods of assessing customer satisfaction appear conceptually and practically unsuitable. Wang et.al, (2001) has proposed the construct of customer information satisfaction to highlight the true essence of "information" and "information processing" for digital products and services, as well as the nature of "information systems" for digital marketing. In line with this research, OFD applications is one of technology-mediated services which includes informational data and user interface design that needs to be accessed by its customer. Hence, service providers should be informed that their technology-mediated service is not just an interface connecting them with customers but also a system that seamlessly fits with the current business. Ba and Johansson (2008) comes with a finding that service providers should not only focusing on “pretty face” of the digital products or services but also embedding the system with a procedural and process design capabilities. This is proved that OFD applications is a whole system design that are able to satisfy their customers.

H_3: Customer information satisfaction has a significant effect on customer purchase intention on OFD applications

H_5: Customer Information Satisfaction mediates the relationship between the influencing factors and customer purchase intention on OFD applications.

2.5 Purchase Intention

Purchase intention is a situation between the consumer and the vendor when the buyer is ready to make a transaction with the seller (Raza et al., 2014). Hence, from the perspective of this study, purchase intention is defined as the behavior or desire to purchase a specific food and beverage products from a specific restaurant operator by using an online application. The early-mentioned circumstances are showing the proof of unreliable online application can be the worst reason in shaping the customer purchase behavior online which revert back to this research's problem statement. In other words, the more satisfied customer in utilizing the OFD applications, the more customers intentionally to repurchase the foods using OFD applications (Chotigo & Kadono, 2022a; Wang et al., 2021). If customer do not have intention to use OFD applications regarding the satisfactory level not meet their expectations, this eventually will shape their purchase behavior online (Chotigo & Kadono, 2022a). Additionally, in purchase intention, it include the subjective evaluation or prospect of purchasing food products. According to Sharma et al. (2007), this subjective evaluation refers to consumer behavior of weighing the benefits and disbenefits from many aspects which includes availability, functionality, price and many more. As a result, purchase intention can be used to measure the likeliness of consumers in purchasing food products and can be a fundamental indicator of foreseeing consumer purchase behavior (Hewei & Youngsook, 2022). According to Ajzen (1991) and others' research, the construct of online purchase intention was offered as a predicate of online purchasing behavior. Since there are several factors that can affect consumers' purchasing intentions, which can then affect their behavior when shopping online and eventually result in actual action (Laohapensang, 2009).

H_4: Customer purchase intention has a significant effect on customer online purchase behavior

H_6: Customer purchase intention mediates the relationship between customer information satisfaction and customer online purchase behavior on OFD applications

2.6 Visibility

Visibility is a measure of how much a person watches other people utilizing the innovation (Johnson et al., 2018). The term "visibility" is thought to have originated from the principles of the "diffusion of innovation theory" and refers to how well-known innovative technology, such as OFD applications, seems to be to potential adopters or users (Kaur et al., 2021). Greater visibility is likely to confirm that different user preferences in terms of special offers, incentives, and listings are being fulfilled (Talwar et al., 2020b). Based on the presumption that a more popular OFD applications must be providing better incentives, cancellation opportunities, listings, or product promotion (Talwar et al., 2020b). Visibility as a moderator has been proven by many researchers includes study assessed by the researcher discovered in a different study that visibility influenced the relationship between customers' perceived benefit-related barriers and purchase intentions (Talwar et al., 2020a). From the same author, they claimed that this might be interpreted to mean that consumers with better visibility perception will derive

higher preference value from OFD app use, which, in turn, will increase its relationship with purchase intention (Talwar et al., 2020a). There is a consistency in other researcher's finding, claimed that visibility and intentions are closely related in new inventions like as e-commerce and mobile services. In several disciplines relevant to this research, academics contend that visibility forecasts the adoption of technology (Van Slyke et al., 2010). In addition, Johnson et al. (2018) discovered that consumer propensity to use mobile applications, such as mobile payment services, is highly influenced by visibility.

H_7: Visibility moderates the relationship between customer information satisfaction and customer purchase intention on OFD applications.

2.7 Conceptual Framework

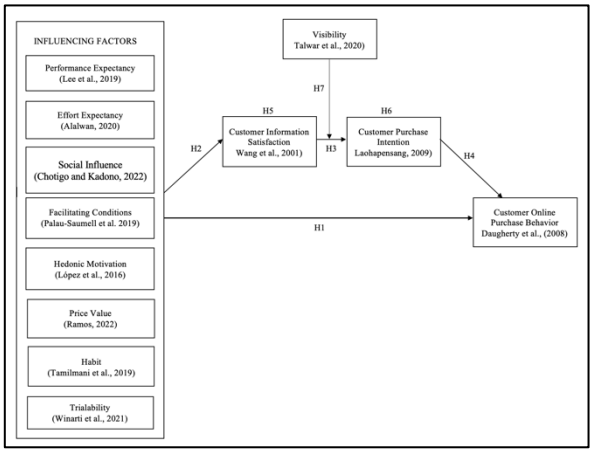

Figure 1: Conceptual Framework

3 Methodology

3.1 Research Design

Referring to the research objectives, this study aims to provide in-depth understandings towards the customer information satisfaction and its determinants towards OFD applications usage. This study will adopting quantitative research reflecting the research paradigm which is positivism paradigm. Creswell (2009) defined quantitative design as a "quantitative or numeric description of trends, attitudes, or opinions of a population and study that sample of population". This method was chosen due to a survey design's advantages, which include being less expensive and encouraging a quick response during the data collection session (Apuke, 2017; Creswell, 2009). Therefore, it is essential to ensure all the targeted respondents are technologically accessible to the OFD applications system. By primarily collecting the data through online questionnaire, this study will pursue descriptive research by describing each variables involved and provides provides a true depiction or characteristics of the individual's behavior, attitudes, perception, abilities, beliefs, and knowledge.

3.2 Population and Sampling Plan

As for population and sampling plan, this research will be targeted the respondents among Foodpanda user in Malaysia, specifically in Klang Valley area. Klang Valley area was located in urban city of Selangor and consists of five main areas which are The Federal Territory of Kuala Lumpur (FT Kuala Lumpur), Gombak, Petaling, Klang, and Hulu Langat. In order to achieve inclusive sampling criteria, the respondents not only must be located in the targeted geographical segment but also accessible towards the OFD Applications, particularly in terms of utilization and purchasing foods products. The respondents also must be aged above 18 years old and utilizing smartphones frequently. In this case, the respondents located in rural area, aged below 18 years old and who does not taken any possession on smartphones will be exclude from this research activity. As unit of analysis of this research is consumers of OFD applications, the targeted respondents will be approached through online questionnaire by using Google Form and distributed via WhatsApp Messenger and Social Media platform. With larger area that is need to be covered and in order to achieve desired generalization of the population with lower potential bias, it is practically impossible to get in touch every Foodpanda users in those area. Hence, convenience sampling method were adopted in this research as it is low-cost and time efficient compared to the other sampling method.

In determining the sample size, this research will conduct G*Power calculation as it isthe most recent method and likelihood to successfully identify a real relationship or difference between groups and assess the probability of that study. Based on the calculation, the total of 88 respondents will be involved in this research.

3.3 Data Collection Procedures

Through convenience sampling, the online questionnaire initially will be constructed using Google Form, an online software that allows the user to create quizzes, surveys and other form of content. The procedures later then continue by distributing the online questionnaire conveniently throughout the targeted respondents through social medias such as Facebook, Instagram and WhatsApp Messenger effectively during peak hour for a better response.

The procedure will begin with pre-testing to identify potential issues with respondents' interpretation of the online questionnaire. The questionnaire will be distributed among friends, colleagues, and targeted samples to reduce bias and errors. Data from pre-testing will be analyzed to improve the questionnaire's development. The way they completed the questionnaire will be observed in terms of response latency, confusion towards any ambiguous phrases and words, and unfamiliar references to reduce any type of potential bias and mistakes. Later, a pilot study will be conducted with real customers to improve reliability and validity. Feedback from the pilot subjects will be analyzed to identify potential biases. From that, all the information from pilot study will be amended and redressed into more clarified version of questionnaire.

3.4 Instrument Development

The tool or instrument that will be utilized in this proposed study is questionnaire. To build desired questionnaire, all variables in this research will adopt as well as adapt from previous study. The online questionnaire will consist of 6 sections which is Section A: Demographic Profile, Section B: Influencing Factors, Section C: Customer information Satisfaction, Section D: Customer Purchase Intention, Section E: Customer Online Purchase Behavior and Section F: Visibility. As for demographic profile will be using nominal scale and as for other sections will using interval scale which consisting of likert scale (1: Strongly Disagree/ 2: Disagree/ 3: Neither Agree or Disagree/ 4: Agree/ 5: Strongly Agree).

Table 1: Measurement of Questionnaire Section

Section	Measurement	Number of Items	Sources
A: Demographic Profile	• Gender • Age • Occupation • Current based location • Frequency in using online food delivery applications • Year starting using online food delivery apps	6	(Saad, 2021)
B1 Influencing Factors: **Performance Expectancy**	• I find online food delivery applications useful in my daily life. • Using online food delivery applications enables me to accomplish the purchasing process more quickly. • I can save time when I use online food delivery applications for purchasing foods • I find online food delivery applications enhance effectiveness in purchasing foods • I find online food delivery applications is fast	5	(Venkatesh et al., 2012; Zakaria et al., 2022)
B2 Influencing Factors: **Effort Expectancy**	• Learning how to use online food delivery applications is easy for me. • I find online food delivery applications is easy to use.	5	(Lee et al., 2019; Venkatesh et al., 2012)

	• It is easy for me to become skillful at using online food delivery applications • My interaction with online food delivery applications is clear and understandable • I would find it easy to get online food delivery applications to do what I want it to do.		
B3 Influencing Factors: **Social Influence**	• People who are important to me think that I should use online food delivery applications for purchasing foods • People who influence my behaviour think that I should use online food delivery applications for purchasing foods. • People whose opinions I value prefer that I use online food delivery applications for purchasing foods. • I think I more likely to use online food delivery applications if my family and friends use it. • I use online food delivery applications because of my colleagues who use it.	5	(Chotigo & Kadono, 2022b; Lee et al., 2019)
B4 Influencing Factors: **Facilitating Condition**	• I have the resources necessary to use online food delivery applications. • Online food delivery applications are compatible with other technologies I use. • I can get help from others when I have difficulties using online food delivery applications. • I have the knowledge necessary to use online food delivery applications. • I have access to relevant information on the use of online food delivery applications	5	(Alalwan, 2020)

B5 Influencing Factors: **Hedonic Motivation**	• Using online food delivery applications for purchasing foods is fun. • Using online food delivery applications for purchasing foods is enjoyable. • Using online food delivery applications for purchasing foods is very entertaining. • I feel excited in using online food delivery applications • Using online food delivery applications is amusing.	5	(Lee et al., 2019; Ryu et al., 2010)
B6 Influencing Factors: **Price Value**	• I can save money by using online food delivery applications for purchasing foods by comparing the prices offered at different online stores. • I like to search for cheap deals at different online stores when I purchase foods through online food delivery applications • Online food delivery applications provide extensive promotional price for delivery service. • Foods product in online food delivery applications is reasonably priced. • Online food delivery applications offer better value for money.	5	(Lee et al., 2019; Ramos, 2022)
B7 Influencing Factors: **Habit**	• Purchasing foods through food delivery applications is almost like a habit for me. • I must use food delivery applications for purchasing foods. • Using food delivery applications for purchasing foods has become natural to me. • Using online food delivery applications is a part of my daily routine. • I am addicted in using online food delivery applications.	5	(Lee et al., 2019; Rasli et al., 2020)

B8 Influencing Factors: **Trialability**	• Before deciding whether to use any online food delivery applications, I can properly try them out • I can experiment with online food delivery applications as necessary • I do not have adequate opportunities to try out different things on the online food delivery applications • Online food delivery applications were available to me to adequately test run various function. • During my first time using online food delivery applications, there is trial design available.	5	(Chakraborty, 2022; Winarti et al., 2021)
C: **Customer Information Satisfaction**	• I am satisfied with the usefulness of online food delivery applications. • I am satisfied on how easy to use online food delivery applications. • I am satisfied on how compatible online food delivery applications can be. • I am happy to enjoy purchasing foods from online food delivery applications. • I am pleased on how purchasing foods from online food delivery applications become a habit. • I am pleased to be influenced by peers to use online food delivery applications. • I am pleased with the price set by online food delivery applications. • I am pleased with trial experiences provided by online food delivery applications. • Overall, I am satisfied using online food delivery applications.	9	(Alalwan, 2020; Wang & Tang, 2001)
D: **Customer Purchase Intention**	• I intend to continue using online food delivery applications in the future. • I will always try to use online food delivery applications in my daily life. • I plan to use online food delivery applications more frequently.	5	(Alalwan, 2020)

	• I shall transact my online purchasing in online food delivery applications in the future. • I would strongly recommended others to use online food delivery applications.		
E: **Customer Online Purchase Behavior**	• I often using online food delivery applications when I am busy. • I tend to use online food delivery applications because it easy to use. • I started to use online food delivery applications because I was influenced by peers. • I often to use online food delivery applications because of the support provided by the applications. • I naturally use online food delivery applications. • I likely to use online food delivery applications because of fun. • I likely to purchase foods from online food delivery applications because of lower price. • I tend to use online food delivery applications as I can try before use.	8	(Alalwan, 2020; Lee et al., 2019; Peña-García et al., 2020
F: **Visibility**	• I have seen others use online food delivery applications. • It is easy to observe online food delivery applications being used. • I have had plenty of opportunities to see others using online food delivery applications. • I have received extensive information about online food delivery applications by seeing others use it. • Watch other people using online food delivery applications help me to learn how to use it.	5	(Johnson et al., 2018; Talwar et al., 2020b)

3.5 Data Analysis

A data set of the respondents are summed up and organized using descriptive statistics. A data set is a collection of observations or responses from a sample or the whole population. As the data for this research is collected quantitatively as mentioned

before, the first step in data analysis is to describe the characteristics from respondents' responses to see whether the sample is representing the whole population. This includes reliability, validity and frequency of the research data. For example, the characteristics that will be the concern for this study includes age, gender, residence-based location, and frequency usage of OFD applications.

The inferential statistics, will aid in determining whether the collected data supports or contradicts the hypothesis and whether it can be applied to a wider population. In this research, Statistical Package for the Social Sciences SPSS Statistical Software from International Business Machines Corporation (IBM) and Partial Least Square Structural Equation Modeling (PLS-SEM) will be used for the purpose of data analysis. The analytics software was based on the rationale concerning with testing a theoretical framework from prediction perspective and this research consist of extending the existing knowledge or theory in UTAUT2, hence, when the goal of the research is to examine theoretical extensions of existing ideas in order to better grasp complexity, this study should be analysed using PLS-SEM

4 Conclusion

Although this is only a conceptual paper, it is believed that by providing in-depth understanding towards the determinants of customer information satisfaction in OFD applications usage, this research is able to provide an important contribution practically and academically. OFD applications might be one of the best technological advancements ever existed that able to assist customers purchase their foods, but digging into the contributing factors from customers perspective will help service providers and restaurant operators to construct a plan and strategize their business in satisfying the consumers' needs and wants. Based on this paper, it was proved that through the lens of UTAUT2, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Price Value, Habit and Trialability has their own significant effect towards the customer information satisfaction. Hence, with the novelty and uniqueness of customer information satisfaction, trialability and visibility in this research, it can be beneficial towards the bridge of knowledge in academic world.

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