An Empirical Study on the Factors Influencing the Customers Decisions to Use Online Food Delivery Services after the Covid-19 Pandemic

By

Yew Bee Teng

Research Project Submitted in Partial Fulfillment of the Requirements

for the Degree of Master of Business Administration

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DECLARATION

I hereby declare that:

(1) **This postgraduate research project is the end result of my work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.**

(2) **No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.**

Name of Student:	Student ID:	Signature:
1. YEW BEE TENG	M211101046	

Date: 16 February 2023

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And

To my family and all my loved ones,

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This research study will investigate the "Factors Influencing the Customers Decisions to use Online Food Delivery Services after the COVID-19 Pandemic". By using a cross-sectional analysis of 225 target respondents in Klang Valley, Johor, Pahang and Kedah, this study investigates the relationship between convenience, time-saving, cost-saving, and service quality with the decisions of customers to resume using online food delivery services after the COVID-19 Pandemic. This paper explores the link between convenience, time-saving, cost-saving, and service quality with the decisions of customers to continue using online food delivery services after the COVID-19 Pandemic. There is a significant relationship between convenience, time-saving, cost-saving, and service quality with the decisions that customers make in continuing to use online food delivery services after the COVID-19 Pandemic. In addition, I found that convenience has the greatest correlation with the decisions of customers to continue using online food delivery services. This study is significant for researchers, buyers, and sellers interested in online food delivery services, as it shows that convenience, time-saving, cost-saving, and service quality are the four important factors that customers take into consideration when using food delivery services after the COVID-19 Pandemic. The Social Sciences Statistical Package ("SPSS") was used to perform descriptive analysis, reliability analysis, correlation analysis, and testing of the hypotheses formed. The results of the study showed the positive and important link between the online food delivery service for convenience, time-saving, cost-saving, and service quality. In this analysis, there are some managerial consequences. Furthermore, some of the analysis' limitations have been established. For future research, guidelines have been given. Future researchers will also be able to find ways to strengthen this topic for future studies.

Keywords: *Online food delivery services, convenience, time-saving, cost-saving, and service quality.*

CHAPTER 1

INTRODUCTION

1.1 Introduction

Due to the lockdown order and movement restriction in 2020 and 2021 implemented as a COVID-19 pandemic outbreak control measure, the use of online food delivery services has increased significantly and become a popular trend worldwide (Durai, 2020). People began to shift from dining in restaurants to ordering food online. The COVID-19 pandemic encouraged consumers to eat at home and accelerated the adoption of delivery apps and other technologies. As customers get used to the convenience of restaurant-quality meals delivered to their doorsteps, delivery dayparts are growing beyond meals to include additional beverages.

Online food delivery service is the most convenient way of ordering food, with just a few quick taps of your finger on a screen anytime and anywhere, amazing and delicious food will deliver straight to your doorstep. Prior to the COVID-19 pandemic, the majority of urban consumers were warming up to the idea of online food delivery. This trend has shifted dramatically during the pandemic outbreak, with numerous regions reporting an increase in online food delivery services, including an increase of 65% in the Asia Pacific region, 150% in Latin America, 21% in North America, and 23% in Europe (Hussey, 2021). The online food delivery market in Malaysia is foreseen to be achieved USD 661.7 Million by 2030 with a more than 19.3% compound annual growth rate (“CAGR”) (Acumen, 2022). The new behaviors of the consumers driven by the pandemic will most likely be long-term behaviors, permanently changing consumer behavior (Poon et al. 2021). Therefore, the online food delivery service may be viewed as a critical need in the food industry for restaurants and food operators.

In Malaysia, there are many ways to order food online, ordering directly from the website or their own apps such as McDonalds and Pizza Hut and also via third-party food delivery applications. There are numerous food delivery platforms offering online food delivery services in Malaysia and the top three are Food Panda, Grab Food, and Beep. Other platforms grabbing a growing share of the food delivery market in Malaysia include AirAsia Delivery, Delivery Eat, and Oddle (KitchenConnect, 2022).

1.2 Background

In December 2019, in Wuhan, the first cases of the 2019 coronavirus outbreak were reported by China. Subsequently, it then spread rapidly to other countries all over the world. This led World Health Organisation ("WHO") to declare a Public Health Emergency of International Concern on 30 January 2020, and they also classified the outbreak as a pandemic on 11 March 2020 (WHO, 2020). Measures such as quarantine, mask-wearing in public spaces, social distancing from people around, and movement restrictions have all been strongly advised by WHO due to the significant risk of death and human-to-human transmission associated with COVID-19. Many countries have then passed legislation that mandates that residents should remain in their homes and work from home. Various limitations and restrictions were also imposed on store operations everywhere.

With Malaysians staying home under the Movement Control Order ("MCO") implemented by the federal government on 18 March 2020, many restaurants and food operators have started to provide home delivery services to tide them through this difficult period. This service not only offers convenience to people cooped up indoors but it is also an effort to keep their business operations going. The online food delivery services market in Malaysia increased tremendously. The number of food services and users who make use of online food delivery services has surged

during the pandemic outbreak. As per data published on the Statista website, the online meal delivery industry in Malaysia is forecast to generate USD 2.10 billion in revenue in 2022 and to increase at an average annual rate of 16.25% from 2022 to 2027, with a projected market volume of USD 4.46 billion by 2027 (Statista, 2022).

The growth projection was made in lieu of the COVID-19 pandemic which had changed many people's way of life to a brand new normal, with many features being made virtual such as food ordering. According to a Rakuten Insight survey of Malaysians, 58% reported that they made use of food delivery services more often during the COVID-19 pandemic. Just 2% of respondents claimed they had never used a food delivery service (Statista, 2022).

According to the research conducted by Grab partnership with Euromonitor International in 2021 which seeks to provide a deeper insight into the food delivery industry over a period of the next five years, including Southeast Asian consumers' appetite for various food delivery services, especially post-COVID-19, 78% of users in the area have made use of the service at least once per week between October 2020 and March 2021. Despite the COVID-19 pandemic restrictions gradually being eased, 87% of users still anticipate that their usage will remain the same or even increase. The main factor driving ongoing and increased use of meal delivery after the pandemic was its convenience (Grab, 2021).

The diet habits of many people have been changed due to the COVID-19 pandemic resulting in a high requirement for online food delivery services. People used to order food and eat it at their favorite restaurants before computers and mobile devices were introduced to the market. Internet and mobile technology have changed the experience of online food delivery services in the food industry and third-party logistics (Chai, et al., 2019). Customers using online food delivery services have access to a variety of restaurant menus and listings that allow them to view menus, prices, and even other users' reviews of various restaurants which

then allows them to compare different factors to make the decision. With the growth in the popularity of smartphones, online food delivery applications have dominated the delivery industry. The increasing usage and availability of mobile devices have given consumers an opportunity to use food delivery apps, a newer platform to order food online. The upsurge in the use and ownership of smartphone devices has significantly and simultaneously boosted global online food delivery services. Smartphone users are the main consumers of online Food and Beverages and are estimated to reach up to 3.4 billion in 2021. This growth is projected to increase by over 900 million in 2024, with a growing average of 31% year over year (Allo, 2022). Moreover, it has been projected that an increasing number of both customers and restaurants will utilize online food delivery services after the COVID-19 pandemic. E-commerce has evolved to become a popular trend, a new way of life that has increased convenience and efficiency of life. People now are used to getting what they want at whichever time they wish delivered to their home, including things like food. The Covid-19 pandemic has grown the e-commerce platform and made it one of the main distribution channels in the worldwide retail market (Bhatti et al., 2020).

Several researchers have provided a fundamental understanding of customers' behavioral intentions in using online food delivery services (Lau et al., 2019) and the different aspects affecting the use of online food delivery services (Jun et al., 2021). In addition, there have been studies that have examined the factors based on Technology Acceptance Model ("TAM") which helps to pinpoint whether or not an individual is able to adapt to innovation (Hong et al., 2021). There have also been studies that have examined the factors influencing customers' decision to use online food delivery services before and during the COVID-19 pandemic (Hong et al., 2021). However, despite the fact that the online food delivery services market has very significant growth potential, many studies have focused more on customers' perceptions of online food delivery services at the time of its

initial introduction although currently, there is not much information available about the factors which play a role in influencing customers intention and willingness in ordering food online frequently, especially after the pandemic. Therefore, this study aims to further investigate the continuing intention people have in making use of virtual food delivery services after the COVID-19 outbreak in terms of convenience, time-saving, price-saving, and service quality from online delivery apps.

1.3 Problem Statements

Overview

As the risk of fatality and human-to-human transmission from coronavirus is very high, WHO advised people to self-quarantine, maintain social distancing, and wear masks when they are in public. This has resulted in most states passing legislation mandating residents to stay in their homes or work from home, as well as imposing limitations and restrictions on food service operations. The MCO implementation in Malaysia in response to the pandemic starting on 18 March 2020 has driven customers to use online food delivery services like Food Panda and Grab Food rather than going to a physical restaurant to make purchases and order food. As a result, the restaurant and food service operators were eager to partner with online food delivery services in order to stay in business (Kamaruddin, 2020).

Research Gaps

The online food delivery industry in Malaysia boomed during the COVID-19 pandemic with the introduction of MCO on March 2020. Prior to the pandemic, the online food delivery market was still a developing trend in urban areas but has grown in popularity throughout the country after restrictions were introduced to dining in and having gatherings (Lim, 2020). As per data published on Statista, the online

meal delivery industry in Malaysia is forecast to generate USD 2.10 billion in revenue in 2022 and to increase at an average annual rate of 16.25% from 2022 to 2027, with a projected market volume of USD 4.46 billion by 2027 (Statista, 2022). According to a Rakuten Insight survey on food delivery apps done in Malaysia, 63% of respondents said they would continue to order food online frequently even after the pandemic. Another survey by Rakuten Insight showed that 24% of Malaysian respondents ordered food through delivery apps once or twice a week or several times a month and 4% of respondents ordered several times in a day (NJ, 2022).

The purpose of this study is to analyze the factors influencing customers' decisions to order food through online food delivery services after the COVID-19 pandemic. This study will provide an understanding of customers' motivation to use online food delivery systems and factors affecting online food delivery service usage. This is essential for restaurant and food service operators to understand customers' requirements and expectations in order for them to come up with more effective strategies to reap higher profits in businesses that make use of online food delivery services.

According to the results of a survey by Rakuten Insight on food delivery app usage in Malaysia, as shown in Figure 1 below, 76% of respondents had stated that they would still continue using food delivery apps often, after the pandemic due to the convenience that these apps bring about. The second most prominent reason provided by 56% of the respondents was that they were still trying to limit contact with other people as they were not yet vaccinated. 54% of respondents will continue using the food delivery apps due to time-saving and 23% of respondents stated that they are cheaper than dining out and had a good experience with the quality of service from food delivery apps. As per this survey, 56% of the respondents continued their frequent use of food delivery apps after the pandemic. However, today, it is no longer a valid concern as 84.2% of the population has been vaccinated

(MOH, 2022), and we have moved on to the new normal of COVID-19. The habit of using food delivery apps will continue even after the pandemic has been over as it is greatly beneficial to people.

There are several factors such as convenience, time-saving, price-saving, and service quality of online food delivery apps in influencing customer decisions to order food online even when the COVID-19 pandemic has passed.

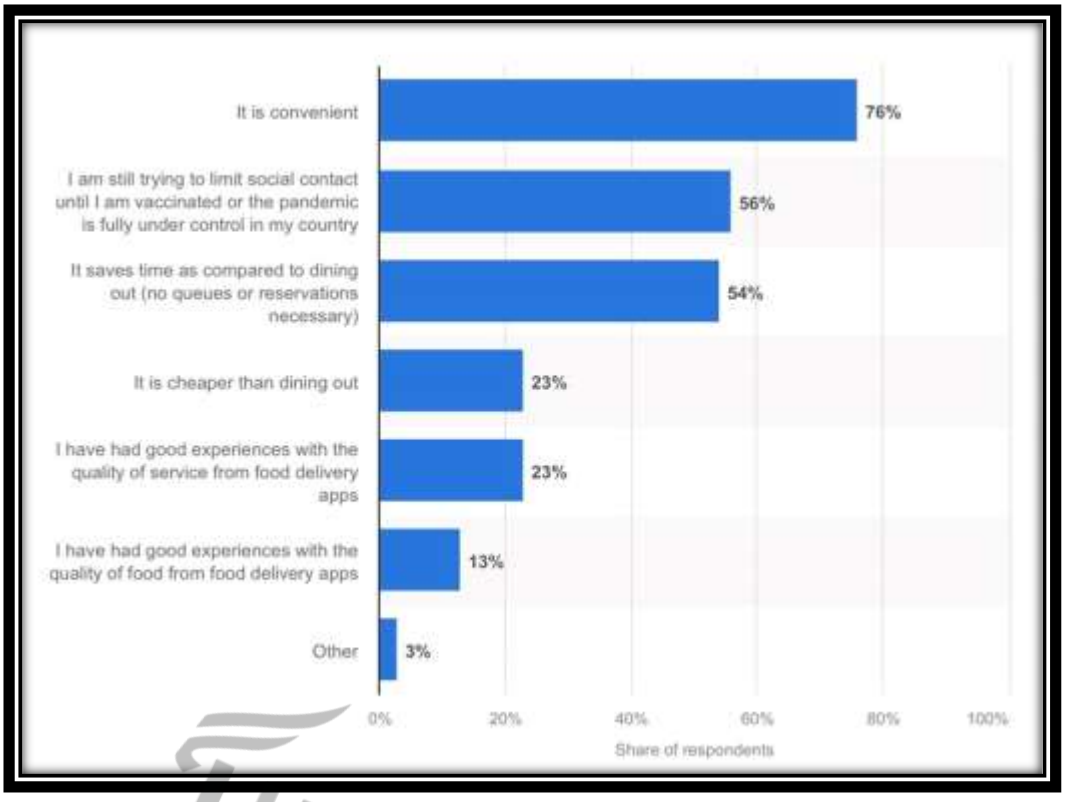

Figure 1: Reasons for continued frequent use of food delivery apps after the COVID-19 pandemic in Malaysia as of August 2021
(Source: Statista, 2022)

Implications (Theoretical/Practical)

Theoretically, the study provides insights into the factors that have contributed to the increased use of online food delivery services after the Covid-19 pandemic. The results of the study can inform policies that promote the use of online food delivery services to support the economy, which has been adversely affected by the pandemic. Additionally, the study contributes to the existing literature on consumer behavior and decision-making strategies in the context of online food delivery services. The findings of the study can be used to identify similarities and differences between the Malaysian and other regional markets, providing a better understanding of the dynamics of the online food delivery industry.

Practically, the findings of the study can be used to inform the development of new strategies and services by online food delivery companies to cater to consumer preferences in Malaysia. The results can be used to create targeted marketing campaigns designed to increase the use of online food delivery services in Malaysia. Furthermore, the study can contribute to the development of public policies that aim to stimulate the local economy by promoting the use of online food delivery services.

Contribution

The COVID-19 pandemic has given both customers and food service companies numerous opportunities to adopt new technology and develop new platforms for online food delivery. Many owners of decades-old traditional businesses, who have had to resort to fully shutting down their physical operations, can take e-commerce into consideration as a potentially essential complementary or alternative sales channel that they can adopt during the COVID-19 pandemic. This study contributes to the restaurant and food service operators understanding of the factors influencing customers' decisions for continuing to order food through online food delivery services after the COVID-19 pandemic in order to formulate effective strategies. The findings can be utilized to create targeted marketing campaigns designed to increase the use of online food delivery services in Malaysia. This will enable the efficient continuation of food delivery services to be used in the new normal after the pandemic. Restaurant and food service operators will then be able to stay up to date and better their online service so that they are able to attract a higher amount of customers to use their online food delivery service while increasing their revenue and profit.

1.4 Research Objectives

The research objective of this study is to investigate the factors of the customers decisions to continue using online food delivery services after the Covid-19 Pandemic. Despite the fact that the online food delivery service sector has significant growth potential, many studies have concentrated on customer attitudes toward online food delivery service during the early adoption stage and very little is known about the factors that impact the willingness of consumers to order food online regularly, particularly after the pandemic. Therefore, the purpose of this research is to investigate further the intention of customers to continue utilizing online food delivery services after the Covid-19 pandemic.

The end goal of this study is to aid in formulating effective strategies by restaurant and food operators services to improve and update their online service in order to attract more customers to use their online food delivery services while increasing their revenue and profit. The sub-sub objectives of this study involve:

1. To identify the factors that influence the decisions of customers to continue ordering food online after the COVID-19 pandemic.

2. To determine whether convenience influences the decisions of customers to continue ordering food online after the COVID-19 pandemic.

3. To determine whether time-saving influences the decisions of customers to continue ordering food online after the COVID-19 pandemic.

4. To determine whether price-saving influences the decisions of customers to continue ordering food online after the COVID-19 pandemic.

5. To determine whether the service quality from online delivery apps influences the decisions of customers to continue ordering food online after the COVID-19 pandemic.

1.5 Research Questions

A set of questions are recommended below to understand better the purpose of this research. The questions also support the research study on the variables that "Customers Decisions to use Online Food Delivery after the COVID-19 Pandemic".

1. Does convenience contribute to the decisions of customers to continue ordering food online after the pandemic?

2. Does time-saving contribute to the decisions of customers to continue ordering food online after the COVID-19 pandemic?

3. Does price-saving contribute to the decisions of customers to continue ordering food online after the COVID-19 pandemic?

4. Does the service quality from online delivery apps contribute to the decisions of customers to continue ordering food online after the COVID-19 pandemic?

1.6 Scope of Study

The purpose of this study is to analyze the factors influencing customers' decisions to order food through online food delivery services after the COVID-19 pandemic. By listing four independent variables (convenience, time-saving, price-saving, and service quality) after the COVID-19 pandemic whereby the factors are implemented and found from the previous research that has been done by other

researchers. This research involves 225 respondents from Klang Valley, Johor, Pahang, and Kedah with different working backgrounds and sectors with a structured questionnaire through an online survey that was sent out to them.

From the data collected, the researcher tends to use SPSS Statistics 26 software in analyzing the data whereby there are several analyses have been done by the researcher which are descriptive analysis, reliability analysis, and correlation analysis. This study only takes into account all of the possible factors that might influence the continuance intention of using online food delivery services after the pandemic, such as convenience, price and time saving, and service quality from online app factors. The study could be narrowed down to a specific group or other variables such as social influence and customer behavioral.

1.7 Significance of Study

In the age of COVID-19, the convenience of tech-enabled purchasing has become an essential mainstay for people. As our new normal shifts our buying habits and comfort levels, e-commerce continues to dominate the consumer arena. With all of the benefits of online shopping, people are turning to screens rather than storefronts (Boice, 2021).

The study “Factors Influencing the Customers Decisions to use Online Food Delivery Services after the COVID-19 Pandemic” is to give knowledge and aids to develop new strategies and services which food delivery companies need to use in tailoring their marketing campaigns to cater to the preferences of consumers in Malaysia so that they are able to increase the usage of online food delivery services in Malaysia. This study can also help in developing public policies which aim to stimulate the local economy through increasing online food delivery service used.

Policies can be used to develop which will motivate and provide incentives for consumers to use online delivery services. These policies can also provide

discounts and promotions so as to encourage increased usage of online food delivery services. The findings of this study can be utilized in the development of policies that will ensure the continued safety and quality of food that is delivered by online services, for example, measures like regular inspections for food safety and enforcing food safety standards.

Furthermore, the study can be utilized to make improvements in the user experience when utilizing online food delivery services. The results of the study can be used in designing more targeted marketing campaigns which highlight the benefits of the use of online food delivery services, like convenience and time-saving. This study can also pinpoint aspects that can be improved like delivery speed, customer service quality, food quality, and the range of payment methods.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

The literature review consists of various research papers on the factors influencing customers' decisions to use online food delivery services during and after the Covid-19 Pandemic. The purpose of the review of existing literature is aimed at developing a more comprehensive understanding of various factors affecting customers' decisions for continuing to use online food delivery services as documented by earlier researchers.

2.2 Underpinning Theory

Technology Acceptance Model is a theory regarding information systems. It explains the behaviour of technology users on how users accept new technology. It comprises two main factors, usefulness, and ease of use which will impact the service quality of the technology (Kang et al., 2019). The ease of use refers to whether the user can navigate the technology without great difficulty while the usefulness of technology refers to whether the utility of the technology can be achieved by the user. User intentions and attitudes are built based on these two factors in a range of business sectors, for example, online food delivery services and many more. The Technology Acceptance Model can be used to analyze consumer behaviour (Zhao et al., 2020), even in consumer behaviour towards food delivery apps (Choi, 2020). An essential attribute in consumer behaviour of food delivery app users is the quality of the information provided in the applications. Different aspects of food delivery apps such as customer rating and reviews, and diverse menu

selection contribute to the quality of information as it minimizes uncertainty of consumers.

The unified theory of use and acceptance of technology (UTAUT) which reflects social cognition theory is extended from the technology acceptance model that was developed by Venkatesh et al. (2003) in order to predict the behaviour intention of users when using new technology systems. There have been modifications made to the UTAUT model using other variables. It has also been integrated into the adoption of mobile technology. Various studies have used UTAUT to look into users' continued intention to make use of mobile technology (Marinković et al., 2020). Hence, by being an advanced technology adoption model, UTAUT is able to be used through the association of more variables or a higher rate of integration with other models in order to successfully show the factors that play a part in deciding the continuation of continuance intention after the COVID-19 pandemic.

The task-technology fit model, proposed by Goodhue et al. (1995) as a degree of fitness between technology and tasks to aid in individual daily tasks and also the use of technology. In the context of technology, the characteristics, and functions that technology has to offer to determine how individual tasks can be performed and also how individual requirements are met. The customers' continued intention of persisting in the use of food delivery apps after the pandemic is over is dependent on food delivery apps' features, which are convenience, speed, and contactless delivery of food. This matches with how users of such apps require efficient food supply and it also adheres to the rules and regulations that were introduced during the pandemic. In order to analyze the behavioral intention of users when adopting mobile technology in a variety of contexts, the task-technology fit model was introduced via previous studies (Zhao et al., 2020).

2.3 Review of Prior Empirical Research

Online Food Delivery Services

In order to address the changes and challenges of the COVID-19 pandemic and to match the demands of this unprecedented scenario, some restaurant and food operators change their business models to confront the challenges of the coronavirus outbreak and tend to seek opportunities to sustain their business during the pandemic outbreak, and one of the opportunities is online food delivery services. Several technological advancements have impacted the online food delivery market such as consumer demand online increasing and attracting both restaurants and third parties to offer online food delivery services (Muller, 2018). Restaurants and food operators offer online food delivery services via their own websites such as McDonald, KFC, and Pizza Hut, or through their party platforms such as Food Panda and Grab Food. The development of e-commerce has significantly changed food consumption patterns and more and more people choose to use online platforms to order food (Hwang et al., 2019). Online food delivery has been a popular trend in e-commerce, and it is a way to efficiently reach more customers (Ray et al., 2019).

The global market for online food delivery was estimated at USD130.2 billion in 2022 and is expected to grow to USD223.7 billion by 2027 with growth at a CAGR of 11.44% over the period considered (Statista, 2022). As COVID-19 has changed customers' behavior, they prefer online food delivery systems over face-to-face and dine-in services (Hwang et al., 2019). Customers enjoyed the concept of getting food delivered to their homes as it helps consumers stick to specialty diets without all the legwork and stress of cooking. The various food delivery services in the market take the hassle away from consumers on meal planning and preparation, whether the consumer prepares the meal himself, goes to a restaurant and dines in, or goes to a restaurant and purchases food to take back to the home or workplace. Food delivery services have significantly changed consumer behavior, particularly

among urban consumers, to the point that using online food delivery services has become normal and routine from day to day (Lau, et al., 2019). The online food delivery market continues growing and attracting new customers. In order to understand customers' decision-making processes and assist the food service industry in surviving in the modern day, it is necessary to understand the variables that drive customers to continue using online food delivery services after the pandemic.

Convenience

Consumers use online food delivery services for a number of reasons, but the most common reason seems to be the need for quick and convenient meals during or after a busy day. Rapid urbanization has created a situation in which urban residents have little time, particularly during the weekdays, to make their own meals or even dine at restaurants (Lau et al., 2019). Online food delivery services allow consumers to place orders and receive their food anywhere and anytime. As a result, individuals tend to order food online and many restaurants and food operators began to develop new business models by providing online food delivery services to customers. Nowadays, online food delivery services are well-developed that allowing customers to select food from a wide range of restaurants on the internet or apps, and to order food online anytime from anywhere without leaving their houses. Online food ordering has made their life easier, with just a click and a cashless payment mechanism, food may be ready in a matter of minutes and delivered to their doorstep. This has offered customers a high level of convenience (Tan al at., 2021).

Time-saving

An increasing number of people are utilizing food delivery services recently due to the growing pace of everyone's lives. When a person finds himself or herself short on time due to daily activities such as work and leisure, he or she will look for ways to save time. As a result of their hectic lifestyles, many people despise the effort of looking for food and waiting for food at restaurants in recent years. They would want that food to be provided to them as quickly and easily as possible. Additionally, food delivery also allows for the discovery of more restaurants. Online food delivery services are an option that is very convenient and accessible, especially for office workers when they are busy working throughout the day. This provides greater convenience for people with limited time who are unable to make their own meals at home or dine in at restaurants and thus, food delivery services are a preferred option. Furthermore, ordering food online can prevent in-store traffic and travel time caused by road congestion (Lau et al, 2019). Many office workers are unable to go out to eat during lunch breaks due to the monetary and time costs and also how inconvenient it is to dine out as they have to also account for the travel duration, time looking for car parking and possible long queues at the places that they wish to eat at. By utilizing online food delivery services, office workers are able to make use of the time that they usually spend on going out to eat and buy food to complete their tasks or spend the time relaxing and enjoying the time they have after a long and tiring day at work, as they do not have to spend time cooking something, or spending more time away from home waiting and traveling to get food (Tan et al, 2021).

Price-saving

Some key factors that determine customer satisfaction are price-saving, value-for-money deals in which offers and discounts are given to buyers by sellers. Price-saving or price-cutting promotions are frequently used as effective marketing

tools in the context of online food delivery services to attract both new and existing customers. Occasionally, some websites or apps may offer various discounts or promotions on the meal ordered and customers are satisfied with the discount coupons or the promotional benefits using online food delivery service (Nor et al, 2022). Search filter online makes it convenient for the buyer to make price comparisons between various online sellers. This has greatly benefited consumers as they are now able to purchase products at low prices which have significantly affected their behavioral intentions to purchase items online (Tan et al., 2021). Sometimes, the customers do not even have to pay for s charges implemented by restaurants, together with the additional vouchers and rebate coupons from various restaurants and even free delivery occasionally. Certain applications and websites also offer a variety of discounts and deals occasionally which allows consumers to save more money and get more discounts (Alalwan, 2020). Furthermore, customers can save on travel costs as they no longer need to travel to the restaurant and dine there. This will result in higher levels of customer satisfaction when using online food delivery services, and thus they will continue to utilize such services in the future.

Service Quality on Online Food Delivery App

Service quality is how a customer perceives the service throughout the process of making a purchase. It is also the comparison between the customer's perception of the service provided against their prior expectations. It is important for firms to capture a positive response from customers should they wish to achieve a competitive advantage (Yusra et al., 2020).

Researchers have found out that for the past two decades, Ease-of-use in technological innovations has had a significant positive interrelation with the use intention technology such as online food delivery services (Ray et al., 2019 & Venkateshet al., 2000). Quick, easily understandable, and convenient onboarding is

one of the most essential criteria for a good user experience. It should be quick and to the point, allowing new users to quickly order food without any complicated steps. It is essential for them to make the process of ordering food quickly, as they may turn to other food delivery apps with simpler interfaces instead. Detailed instructions should be given to guide users through the process of finding restaurants and ordering food. App navigation plays an essential role in enabling and increasing convenience for customers and also helps to reduce the time they spend to get food (Kumar, 2020). When creating a profile, there should be social registration or guest login options in order to help new users conveniently navigate the app when they wish to order food. There should also be an option to pick food from restaurants near them first, before restaurants located further away from them. Prioritizing restaurants nearer to the customers will ensure that the delivery will be quick and the results shown will be relevant. Key criteria that customers consider when utilizing food delivery apps are the range and variety of cuisine available, delivery charges and timings, restaurant ratings, and any vouchers or discounts available which should be able to be filtered on top of the home page of the app. By successfully fulfilling the criteria that customers consider, customers will then be satisfied with the service perceived after they have experienced the service quality, functionality, and convenience of the app interface, customer service, and variety of food available (Yusra et al., 2020).

2.4 Research Framework

Figure 2 below is the Research Framework proposed in this study. It is constructed with elements of independent variables, a hypothesis, and a dependent variable. This proposed Research Framework draws the imposition of four independent variables (Convenience, Time-saving, Price-saving, and Service quality) and one dependent variable (Customers Decisions to use Online Food

Delivery after the COVID-19 Pandemic) in this research. It can then aid in the identification of the problem through the use of a variety of ideas and theories. It highlights what is expected from the research and also defines the relevant and related variables in the study and illustrates how they relate to one another. It is constructed before data collection and then translated into a visual format.

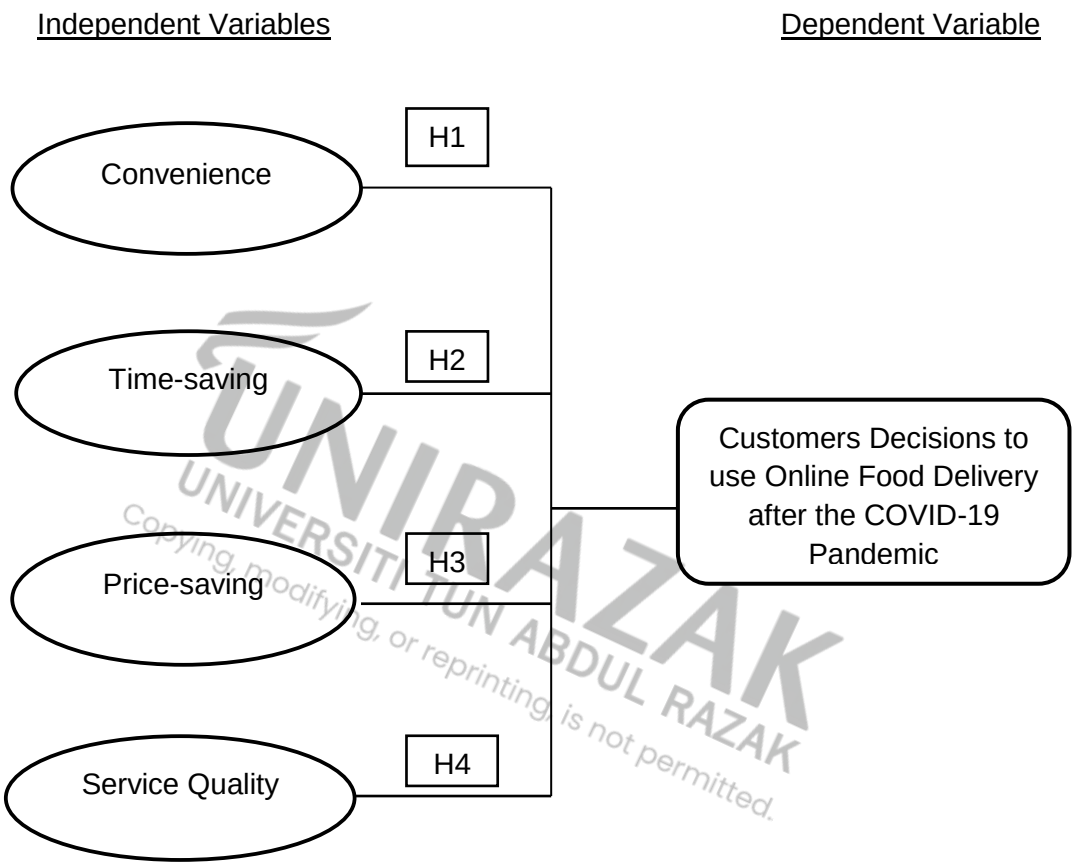

Figure 2: Research Framework

2.5 Research Hypotheses

A research hypothesis guides you on which aspect of the research to focus on and clarifies the research problem and research objectives. It argues for an empirical study to prove the existence of a relationship between variables as well as the effects of the independent variable on the dependent variable.

The COVID-19 pandemic has accelerated the transition toward a more digital world and triggered changes in online shopping behaviors that are likely to have long-lasting effects. According to a survey conducted by UNCTAD (2020) on 3,700 consumers from nine emerging and developed countries, the pandemic has forever changed the online shopping behavior of consumers. Since the pandemic, more than half of respondents have increased their online shopping and rely on the internet for news, health information, and digital entertainment. According to the survey, consumers in emerging countries have made the greatest shift to online shopping. The pandemic has had a significant psychological and behavioral impact on people around the world. Consumer purchase behaviors have thus changed dramatically with many people increasingly relying on digital shopping services including digital delivery services to buy food.

The main objective of this study is specifically looking at how convenience, time-saving, price-saving, and quality of services from online delivery apps may influence the decisions of customers to continue using online food delivery services after the COVID-19 pandemic. The hypotheses are proposed as follows:

Hypothesis 1: Convenience has a positive effect on the decisions of customers to continue ordering food online after the COVID-19 pandemic.

Hypothesis 2: Time-saving has a positive effect on the decisions of customers to continue ordering food online after the COVID-19 pandemic.

Hypothesis 3: Price-saving has a positive effect on the decisions of customers to continue ordering food online after the COVID-19 pandemic.

Hypothesis 4: The service quality from online delivery apps has a positive effect on the decisions of customers to continue ordering food online after the COVID-19 pandemic.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology discusses and explains the data collection and analysis methods used in the research. It is concerned with how a researcher designs a study in a systematic manner in order to obtain valid and reliable results that address the research aims and objectives. The purpose of this chapter is to define a proper methodology for conducting the research so that the results obtained are accurate, reliable, and serve the objective of the research.

3.2 Research Design

The research design for this study is Case Study Descriptive Research Design. Descriptive research is an appropriate choice when the research aim is to identify factors that affect the decisions of customers to continue using online food delivery services after the COVID-19 pandemic. By gathering data on the various factors that play a role in the customers decision to continue using online food delivery services after the pandemic, this research will be successful in identifying the characteristics of such factors.

3.3 Sampling Design

A simple random sample is a method used by researchers to select a sample out of a large population. This method will be successful if there is an equal chance when it comes to choosing the subjects in the population. Simple random sampling is chosen by researchers to make generalizations about a population. The sampling design that is used in this research is random sampling.

The sampling size for this study is 225. The unit of analysis is the current and potential future adopters of online food delivery services that are located in Klang Valley, Johor, Pahang and Kedah.

A sample size of 225 was selected for this study based on the population size of Malaysia in 2022. As per statistics from the Department of Statistics Malaysia, the total population of Malaysia in 2022 is estimated at 32.7 million. The 225 respondents were selected from places located in Kedah, Johor, Pahang, and Klang Valley, being the north, south, east and west of peninsula Malaysia which consists of 51% of the total population. This is to ensure that a range of areas of Malaysia is covered in order to get more accurate data. The number of respondents selected was based on the population size of the area.

Table 3.3.1: Selection of Sample Size

Area	Population Size (million)	No. of Respondents Selected
Klang Valley	8.9	120
Johor	4	54
Pahang	1.6	21
Kedah	2.2	30
Total	16.7	225

3.4 Data Collection

Data collection is the process of obtaining and measuring data, information, or any variables of interest in a standardized and established manner that allows the collector to answer or test hypotheses and evaluate the results of the particular collection. There are two types of data collection, namely primary data and secondary data. Primary data collection for collecting the data from the source directly has been used in this study and questionnaires will be used to gather the primary data.

A self-administered Google Docs questionnaire survey was used to collect data and it was sent to respondents based in Klang Valley, Johor, Pahang and

Kedah. The self-administered questionnaire complemented the online survey approach as it is known that the response rate in Malaysia for surveys would be low and not as responsive. Simple and unbiased wording was used to ensure that respondents can comprehend the questions without much difficulty. Questions were adapted from earlier studies after minor modifications. Some items that had to be measured were convenience, time-saving, price-saving, and service quality of online delivery apps, and they are measured with a 7-point Likert Scale of 1- strongly disagree to 7 - strongly agree. The questionnaire is split into two parts. Section 1 focused on respondent demographics such as sex, age, race, education level, and employment status. Section 2 focuses on the independent variables influencing the customers decision to use online food delivery services after the COVID-19 pandemic.

SPSS software was used to analyze the data collected and identified several analyses that have been done, such as descriptive analysis, reliability analysis, and correlation analysis.

3.5 Pilot Test

In research, a pilot test is a small preliminary study used to test a proposed research study before a full-scale performance. The primary purpose of a pilot study is to evaluate the feasibility of the proposed research study and to improve its quality and efficiency.

In this research, a pilot test has been carried out through a self-administrated Google Docs questionnaire survey on 30 respondents from Klang Valley, Johor, Pahang and Kedah to test the proposed research study before a full-scale performance. The reliability and validity of the analysis for the pilot test run by SPSS software are as follows:

Table 3.5.1: Case Processing Summary for Pilot Test

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Table 3.5.2: Reliability Statistics for the Pilot Test

Reliability Statistics

Cronbach's Alpha	N of Items
.943	20

Cronbach's Alpha measures the internal consistency or reliability of a data set. In other words, Cronbach's Alpha test is to see if multiple-question Likert scale surveys are reliable. The general rule of thumb is that a Cronbach's Alpha of 0.70 and above is good, 0.80 and above is better and 0.90 and above is best.

As shown in Tables 3.51 and 3.52 above, there is a total of 30 respondents with 20 question items in the Construct of Questionnaire and the Cronbach's Alpha is 0.943. Since the coefficient of alpha value for the pilot test is 0.943, the reliability

level of the data collected is excellent and the full-scale research of this study can be carried on based on the constructed questionnaire.

3.6 Types of Analysis

The types of analysis for this research are inferential. Inferential data analysis aids in research by testing theories on a sample size taken from a group of subjects as it is not feasible to test the theory on every single individual. The conclusions obtained from the sample size can then be assumed to apply to the overall population too with the help of statistical analysis. For instance, the revenue of the online food delivery services was taken from only 2020 to 2022 and thus the theories will only be tested in these years, instead of every single year.

3.7 Measurement Scale for the Questionnaires

The 7-point Likert Scale has been used on the questionnaire in this study and the items that had to be measured were convenience, time-saving, price-saving, and service quality of online delivery apps.

A 1-7 Likert Scale was used as it is able to help us gain a better insight into the respondent's positive or negative responses. Using a 1-5 Likert scale could potentially result in respondents merely selecting the neutral response, 3 which does not capture the best sentiment of the respondents 7-point Likert items have been proven to be a more accurate reflection of respondents' true evaluations as it provides more data points to run statistical information (Manisha, 2021).

Strongly disagree Neutral Strongly agree

1----------2----------3----------4----------5----------6----------7----------8---------- 9

Note:

Scale 1	=	Strongly Disagree
Scale 2	=	Disagree
Scale 3	=	More or less disagree
Scale 4	=	Neither agree nor disagree
Scale 5	=	More or less agree
Scale 6	=	Agree
Scale 7	=	Strongly agree

3.8 Measurement of the variables

The measurement concept that was proposed in this research was tested through the use of closed-ended quantitative questions. This chosen measurement method is accurate for the purpose of this study as it has been reviewed previously by researchers with minor amendments. is essential that each variable's operations and calculations in this research are explained. The operationalization and measurement of the variables will be further explained below.

1. Convenience

   Convenience plays an important role to attract customers to make online purchases. This variable is important for different types of customers, not just millennials but also working parents with no time to cook for their families can utilize online food delivery services. The convenience variable will be measured similarly with 5 items with multiple choice questions using a 7-point Likert Scale.

2. Time-saving

Time-saving is another variable that has been identified as playing a significant role in the intention of customers for continuing using online food delivery services. The changing consumer lifestyles and lack of time make consumers experience more difficulty to shop at physical stores. This has caused consumers to change their shopping habits from physical locations to online as time-saving incurs in online shopping. A total of 5 multiple questions with a 7-point Likert Scale will be used to measure the time-saving variable.

3. Price-saving

Customers who use a food delivery app or website can compare prices from several websites and select the best offer for them. Thus, it offers useful information for online shoppers to buy products at a lower cost. Although most food delivery services charge a delivery and service fee, these costs are typically compensated by the time and effort saved by not having to go to the physical stores or prepare meals on their own. The price-saving variable was measured similarly with 5 items with multiple choices using a 7-point Likert Scale measurement of the questions.

4. Service quality from online delivery apps

The degree to which customers are satisfied with the level of service from online food delivery apps can also play a significant role in determining whether or not they would use these services. If customers have used online food delivery services in the past and had a favorable experience, they may be more likely to continue using online food delivery services in the future.

Therefore, a total of 5 multiple choices using a 7-point Likert Scale will be used to measure service quality from online delivery apps.

3.9 Statistical Techniques: Construct Measurement

Section A: Demographic Variables

The nominal and ordinal scale has been used to construct the questionnaire in this study.

Table 3.9.1: Section A - Demographic Variables

Section	Items	Scale of Measurement
A	• Sex • Age • Race • Education Level • Employment Status	• Nominal • Ordinal • Ordinal • Ordinal • Ordinal

Section B: Independent Variables

Table 3.9.2: Section B - Independent Variables

Section	Items	Number of Questions	Sources	Scales
B	Convenience	4	Tan et al., 2021	Interval (7-point Likert Scale)
		1	Lau et al., 2019	Interval (7-point Likert Scale)
	Time-Saving	3	Tan et al., 2021	Interval (7-point Likert Scale)
		2	Lau et al., 2019	Interval (7-point Likert Scale)
	Price-Saving	2	Nor et al., 2022	Interval (7-point Likert Scale)
		2	Tan et al., 2021	Interval (7-point Likert Scale)
		1	Alalwan, 2020	Interval (7-point Likert Scale)
	Service Quality	3	Yusra et al., 2020	Interval (7-point Likert Scale)
		2	Kumar, 2020	Interval (7-point Likert Scale)

Data Coding

Data coding is the process of driving codes from the observed data. Tables 3.9.3 and 3.98.4 below are the data coding for questions in Section A and Section B of the questionnaires respectively.

Table 3.9.3: Data Coding for Questions in Section A

Question No.	Coding
Section A	
1) Sex	1 = Male 2 = Female
2) Age	1 = Below 20 years old 2 = 20-30 years old 3 = 31-40 years old 4 = 41-50 years old 5 = Above 50 years old
3) Race	1 = Chinese 2 = Malay 3 = Indian 4 = Others
4) Education Level	1 = Secondary 2 = High School Diploma 3 = Bachelor's Degree 4 = Master's Degree 5 = Others
5) Employment Status	1 = Employed 2 = Unemployed

Table 3.9.4: Data Coding for Questions in Section B

Question No.	Label	Coding
Section B		
CO (Question 1 – Question 5)	Convenience	1 = Strongly Disagree 2 = Disagree 3 = More or less disagree 4 = Neither agree nor disagree 5 = More or less agree 6 = Agree 7 = Strongly agree
TS (Question 1 – Question 5)	Time-saving	1 = Strongly Disagree 2 = Disagree 3 = More or less disagree 4 = Neither agree nor disagree 5 = More or less agree 6 = Agree 7 = Strongly agree
PS (Question 1 – Question 5)	Price-saving	1 = Strongly Disagree 2 = Disagree 3 = More or less disagree 4 = Neither agree nor disagree 5 = More or less agree 6 = Agree 7 = Strongly agree
SQ (Question 1 – Question 5)	Service Quality	1 = Strongly Disagree 2 = Disagree 3 = More or less disagree 4 = Neither agree nor disagree 5 = More or less agree 6 = Agree 7 = Strongly agree

3.10 Conclusion

Research methodology is utilized to gather analyses, compile them and then interpret the obtained data. Sampling design elements like target population, position, and elements together with sampling techniques and size will be defined. A questionnaire is used as the main form of data collection from the audience. A variety of measurement scales, namely interval, ordinal and nominal scales are utilised in the classification of the demographics of the respondents. It is also used in the calculation of the outcome of the questionnaire's independent and dependent variables. A pilot test was carried out so as to lower the chance of error before the research was carried out on larger-scale audiences. The pilot test consisted of the distribution of the questionnaire sample to online food delivery service users. After it was confirmed that the questionnaire did not contain any errors, it was then distributed on a larger scale through Google Forms to online food delivery service users in Klang Valley, Johor, Pahang and Kedah. Through the use of the SPSS system, results from the questionnaire were tested for the level of reliability and validity. It will also be analyzed with descriptive analysis and correlation analysis.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Overview

The results from the questionnaire were tested and analyzed with descriptive analysis, reliability analysis, and correlation analysis through the use of the SPSS software. The hypothesis test will also be performed.

4.2 Sample Characteristics

A total of 225 respondents were interviewed and the characteristics of the respondents were grouped into 5 main groups: sex, age, race, education level, and employment status.

Table 4.2.1: Respondents Profile

Statistics		
	Valid	Missing
Sex	224	1
Age	224	1
Race	225	0
Education Level	224	1
Employment Status	225	0

Table 4.2.1 shows the summary of respondents for the survey. A total of 225 respondents took part in the survey. There are missing values for questions on sex, age, and education level. Based on the missing number given, there is 1 omitted for questions on sex, age, and education level out of 225 respondents. The reason for

the omission is believed to be an accidental oversight on the end of the respective respondents.

4.3 Descriptive Analysis

The details of the respondents' profiles are presented in the tables below.

Table 4.3.1: Respondents Sex

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	Female	155	68.9	68.9	69.3
	Male	69	30.7	30.7	100.0
	Total	225	100.0	100.0	

Table 4.3.1 shows the respondents by sex. Out of 255 respondents, 155 respondents were female, 69 were male, and with one missing value. The percentage of females consists of 68.9% and males consists of 30.7% of the survey. Based on the findings, it shows that the majority of the respondents in this survey are females. The reason could be females use more online food delivery services compared to male who prefers to dine-in the restaurants or purchase food at physical food stores.

Table 4.3.2: Respondents Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	20-30	25	11.1	11.1	11.6
	31-40	43	19.1	19.1	30.7
	41-50	84	37.3	37.3	68.0
	above 50	57	25.3	25.3	93.3
	below 20	15	6.7	6.7	100.0
	Total	225	100.0	100.0	

Table 4.3.2 shows the demographic details of the respondent's age category which is divided into 5 categories: below 20 years old, 20 to 30 years old, 31 to 40 years old, 41 to 50 years old, and above 50 years old. The number of respondents shows age category 41 to 50 years old has the highest number of respondents which is 84 (37.3%). The second highest age category is above 50 years old which is 57 (25.3%). The age category below 20 years old only consists of 15 respondents which are equivalent to 6.7%. Based on the findings, those aged 31 and above are the active groups as they are the working groups with purchasing power.

Table 4.3.3: Respondents Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bumiputra Sabah	2	.9	.9	.9
	Chinese	176	78.2	78.2	79.1
	Iban	2	.9	.9	80.0
	Indian	16	7.1	7.1	87.1
	Malay	29	12.9	12.9	100.0
	Total	225	100.0	100.0	

Table 4.3.3 shows the demographic details of the respondent's race. Chinese are the highest group who responded to the survey with 176 (78.2%), Malay 29 (12.9%), and follow by Indian 16 (7.1%).

Table 4.3.4: Respondents Education Level

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	Bachelor's Degree	83	36.9	36.9	37.3
	High School Diploma	56	24.9	24.9	62.2
	Master's Degree	41	18.2	18.2	80.4
	PHD	3	1.3	1.3	81.8
	Secondary	41	18.2	18.2	100.0
	Total	225	100.0	100.0	

Table 4.3.4 shows the respondent's education level. Among the respondents, the bachelor's degree holders were the highest number with 83 (36.9%) followed by High School Diploma holders at 56 (24.9%). Educational background is important for this survey as educated people are more likely to use digital services or mobile apps including ordering food online or via e-commerce platforms.

Table 4.3.5: Respondents Employment Status

Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	188	83.6	83.6	83.6
	Unemployed	37	16.4	16.4	100.0
	Total	225	100.0	100.0	

Table 4.3.5 shows the respondent's employment status. 188 respondents or 83.6% of the respondents are employed. This question in the survey is to know the capacity of the respondent on their spending or purchase powers.

The descriptive statistics of independent variables are presented in the tables below.

Table 4.3.6: Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
Convenience	5.6938	1.12531	224
Time-saving	5.5191	1.18835	225
Price-saving	4.7482	1.41972	224
Quality Service	5.5040	1.11821	223

All items for construct were assessed using a 7-point Likert Scale of 1- strongly disagree to 7 - strongly agree. Table 4.3.6 above shows four independent variables: Convenience, Time-saving, Price-saving, and Service Quality. The mean variables for are ranging between 4.7482 to 5.6938. The Convenience of online food delivery service is the highest mean of 5.6938 with a standard deviation of 1.125312 followed by Time-saving and Service Quality from the online delivery apps with a mean of 5.5191 (standard deviation of 1.18835) and 5.5040 (standard deviation of 1.11821), and lastly Price-saving with a mean value of 4.7482 and standard deviation of 1.41972. All the independent variables scored standard deviation above 1 which indicates that the data set is spread out over a wide range, suggesting that there is a large amount of variability in the data set.

4.4 Reliability Analysis

Table 4.4.1: Reliability Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.958	20

Table 4.4.2: Reliability Analysis for Independent Variables

Independent Variables	Cronbach's Alpha	No. of Items
Convenience	0.888	5
Time-saving	0.913	5
Price-saving	0.907	5
Service Quality	0.912	5

It is important to check the data collected for the study with reliability and validity. A questionnaire or survey's concurrent validity may be assessed using Cronbach's Alpha. Cronbach's Alpha measures the reliability of a given set of scores. Generally, it shows the level of interrelation between a set of measurements and helps to measure the level of closeness between particular individual items in a set of values.

To analyze the interpretation of the data, we may use Table 4.4.3 below as a reference. In general, a core of more than 0.70 is considered significant. However, some researchers suggested a higher value of 0.90 to 0.95 (Statistics How To, 2021).

Table 4.4.3: Cronbach's Alpha

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Statistics How To

As shown in Table 4.4.1, Cronbach's Alpha value is 0.958 for the 20 question items in the Construct of Questionnaire. Since the coefficient of Cronbach's Alpha for this case is 0.958, the reliability level of the data collected is excellent. High Cronbach's Alpha values indicate that response values for each participant across a set of questions are consistent.

The reliability test conducted for this study based on the four independent variables shows 0.888 for Convenience (5 items), Time-Saving shows 0.913 (5 items), Price-saving shows 0.907 (5 items), and Service Quality shows 0.912 (5 times). Since the Cronbach's Alpha for the four independent variables is more than 0.8, it can be concluded that the Cronbach's Alpha test for this study is reliable and the independent variables achieved the reliability level.

4.5 Correlation Analysis

Correlation coefficients measure how closely two variables are related to one another. When two variables are correlated, it indicates that when the value of one

change, the value of the other tends to change in a particular way. The degree of correlation (Statistics Solutions, n.d.) is categorized as follows:

1. Perfect correlation: When both the variables change in the same ratio
2. High degree of correlation: When the correlation coefficient range is above 0.75
3. Moderate correlation: When the correlation coefficient range is between 0.50 to 0.75.
4. Low degree of correlation: When the correlation coefficient range is between 0.25 to 0.50
5. Absence of correlation: When the correlation coefficient is between 0 to 0.25

Table 4.5.1: Correlations Analysis

Correlations

		Convenience	Time-saving	Price-saving	Quality Service
Convenience	Pearson Correlation	1	.781**	.519**	.766**
	Sig. (2-tailed)		.000	.000	.000
	N	224	224	223	222
Time-saving	Pearson Correlation	.781**	1	.636**	.755**
	Sig. (2-tailed)	.000		.000	.000
	N	224	225	224	223
Price-saving	Pearson Correlation	.519**	.636**	1	.700**
	Sig. (2-tailed)	.000	.000		.000
	N	223	224	224	222
Quality Service	Pearson Correlation	.766**	.755**	.700**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	222	223	222	223

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

As shown in Table 4.5.1, the correlation between Convenience, Time-saving, and Service Quality are all above 0.750 which means that there is a high positive correlation between these three variables. Whereas, the correction between Price-saving with the other three variables (Convenience, Time-saving, and Service

Quality) is moderate. The results indicate that Convenience, Time-saving, and Service Quality are significantly related to the use of online food delivery services.

4.6 Hypothesis Test

Hypothesis 1: There is a relationship between Convenience and Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic.

Hypothesis 2: There is a relationship between Time-saving and Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic.

Hypothesis 3: There is a relationship between Price-saving and Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic.

Hypothesis 4: There is a relationship between Service Quality from online delivery apps and Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic.

Based on Table 4.5.1, the significant 2-tailed of all the variables is 0.0000 which means that all the variables (Convenience, Time-saving, Price-saving, and Service Quality from online delivery apps) have a strong relationship and significantly related with Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic. Therefore, we can conclude that all hypotheses stated are acceptable as all hypotheses stated each variable (Convenience, Time-saving, Price-saving, and Service Quality from online delivery apps) has a relationship with the dependent variable (Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic). So, the hypotheses are accepted as all of the variables have a relationship with the dependent variable.

4.7 Negative Impact of Online Food Delivery Service

The negative impacts of the online food delivery market have increased during the pandemic. This consists of major congestion and poor air quality issues that can be brought about by increased use of vehicles for food delivery and also potential accidents. According to statistics, motorcycle fatalities increased from 64 percent to 67 percent from 2019 to 2020 (Supramani, 2021). The primary reason is that the food deliverymen are all rushing to complete their deliveries so that they can earn more commission and compete with the high levels of competition (Tamrin, 2020). Road accidents would then negatively affect other road users as not only will they cause traffic congestion creating a negative experience for other road users, but they will also result in poor air quality. When motorcycle accidents take place, there will be higher risks of fire emissions due to fuel leaks (Roswold, n.d.) that not only will endanger the rider but will also pollute the environment. Gas and fluid leaks that are brought on by the accident will also lead to the emission of harmful and toxic chemicals into the environment. This will lead to air pollution, which could affect the health of people living in that area. Air pollution could also result in health risks as it increases the risk of respiratory diseases and also is harmful to our lungs. Thus, the increased usage of food delivery services could bring about road accidents, negative impacts on other road users, and harm to the environment.

Another negative externality of the online delivery market is that it brings about increased usage of disposable cutlery, containers, and also the packaging. This brings about adverse impacts on our environment as most of the packaging used is plastic, a non-biodegradable material. As store owners have to ensure that the food is packed securely in order to prevent spills during delivery, they have to use more materials to package the food securely. Although some food delivery apps

such as Grab provide an option to opt for no cutlery, many people still opt for cutlery besides not needing it (Janairo, 2021).

The increase in the number of people who are utilizing online food delivery services could potentially lead to increasingly unhealthy food consumption patterns which can bring about poor diet and obesity as food prepared outside can be low in nutrients (Keeble et al., 2022).

The quality of food may be affected by food delivery as food has to be delivered which takes more time (Patel, 2021). The quality of food would then be different compared to eating at a restaurant. Furthermore, the visual aesthetic of the food would be affected as food has to be packaged in plastic packaging or takeaway containers instead of being served on a plate, making it less appealing. Due to long delivery distances, food may get cold by the time it is delivered to customers which further inconveniences them as they have to either reheat it or eat it cold. This is especially prominent in Malaysia as the roads are crowded and thus food delivery drivers usually get stuck in traffic.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATION

5.1 Major Findings

The objective of this research was to investigate the “Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic”. The independent variables are Convenience, Time-saving, Price-saving, and Service Quality. The novelty of this study is that the various demographic data involving sex, age, race, education level, and employment status were analyzed and evaluated in addition to the independent variables. A set of questionnaires consisting of 20 questions in total from 4 categories which are Convenience, Time-saving, Price-saving, and Service Quality from online delivery apps been distributed to 225 respondents to obtain results to support the hypothesis. After conducting data analysis on the 225 respondents, we learn that the customers decisions to use online food online services after the COVID-19 Pandemic are related to the four categories mentioned in the hypothesis.

In addition, respondents were given a 7-point scale to represent their opinion on the research questions, with 7 being strongly agree, and 1 being strongly disagree. The top answers to the research questions had the highest frequencies of responses with a “7”. The top responses for this research are stated below.

In terms of the convenience factor, the two top reasons given by respondents were that they have the ability to make cashless payments and that they are able to place orders without leaving home. The top response, with 107 respondents equivalent to 47.6% choosing the seventh option, shows that people prefer that they are able to make use of cashless payment methods. The second most popular response was that they were able to order food without leaving home, with 95

respondents, or 42.2% of respondents choosing the seventh option. Thus, it can be concluded that the respondents who chose the seventh option strongly agree with these two questions.

Regarding the time-saving aspect of utilizing food delivery services, the top response in the questionnaire is that online food delivery services reduce the time they usually need to spend preparing their food, with 38.2% (86) of respondents selecting the seventh option which shows that they strongly agree with this question.

In terms of service quality from online delivery apps, the range of payment methods available when using food delivery services makes it easy for users to pay was the top selected reason, with 36.4% of respondents choosing the seventh option for this question. This shows that they strongly agree that food delivery services make it easier for them to make payments.

As for the price-saving aspect of utilizing food delivery services, less than 20% of the respondents selected the seventh option, this then shows that the price-saving aspect is the least significant factor as compared to the other three factors.

Out of all the different factors, it can be concluded that the main driving factor for customers to continue using food delivery services after the pandemic is the option to make use of cashless payment methods and order food without leaving their homes, which is a great convenience for them. This also shows that convenience is a major consideration in the continued usage of food delivery services. On the other hand, price-saving is not a significant consideration for the decisions of customers to continue ordering food online after the pandemic.

5.2 Summary of Statistical Analysis

Descriptive Analysis

The summary of demographic information that was collected through the questionnaire shows that 225 participants took part. Among the 225 respondents, 155 respondents were female, 69 were male, and with one missing value. The percentage of females consists of 68.9% and males consists of 30.7%. Based on the findings, those aged 31 and above are the active groups and most respondents fall into the age category of 41 to 50 years old which consists of 84 (37.7%) of the respondents. 176 (78.2%) of the respondents are Chinese which has the highest share in this survey followed by 29 (12.9%) Malay and 16 (7.1%) Indian. In addition, there are 83 (36.9%) of the respondents are bachelor's degree holders and followed by High School Diploma holders of 56 (24.9%). Based on the employment status survey, 188 respondents, or 83.6% of the respondents are employed. Based on the results of the analyses, we can assume that the study's respondents hold more purchasing power. This study's results suggest that the information that is obtained from the results of the questionnaires submitted by the respondents will be able to play a role in assisting the research work.

Reliability Analysis

Cronbach's Alpha is used in order to determine the reliability of the 20 items that were designed to weigh 4 different independent variables (Convenience, Time-saving, Price-saving, and Service Quality from online delivery apps) and the dependent variables (Customers Decisions to use Online Food Online Services after the COVID-19 Pandemic). Based on the construct variables, Time-saving has the highest alpha value of 0.913. The second-highest alpha value is Service Quality at 0.912, followed by Price-saving at 0.907 and Convenience at 0.888. Since the alpha

value for the four independent variables is within the range of 0.888 and 0.913, it can be concluded that Cronbach's Alpha test for this study is reliable, and the independent variables met the reliability criteria.

Correlation Analysis

Based on the Correlation Analysis, the results indicate that Convenience, Time-saving, and Service Quality are significantly related while Price-saving with a moderate degree of correlation with the other three variables.

5.3 Time and Place of the Study

This study has been conducted on November 2022 until January 2023. The data was gathered through an online survey using Google Forms. The respondents reside in Klang Valley, Johor, Pahang and Kedah with different backgrounds, ethnicity, age, and education level.

5.4 Implications of the Study

The COVID-19 pandemic has brought about the age of technologically enabled purchases. It has since played an important role in people's lives. This study is able to help provide knowledge that will be able to help companies develop new strategies and public policies that can improve the services that they are providing to their customers. The findings in this study can help food delivery service providers come up with new offerings to food business owners with more benefits and better quality for their delivery services.

This can also aid in policy-making so that different incentives can be implemented to encourage the use of online food delivery services which will in turn boost the economy of the country. Furthermore, in this time and age after the COVID-19 pandemic, people are now more willing to accept and use food delivery

services. Food delivery services allow them to be convenient, save time and cost, and also offer service quality via food delivery applications. Thus, this study is timely as it is able to assist in the improvements that food delivery service companies can make to their service to provide a better user experience for the users in order to sustain this.

5.5 Limitations of the Study

This study on the factors that influence customer decisions to use online food delivery services after the COVID-19 pandemic in Malaysia consists of certain limitations as this study did not take into account all the possible factors that might influence the continuation intention of using online food delivery services after the pandemic.

The application of this study is constrained as it only takes into consideration Malaysian consumers who make use of food delivery services throughout and after the COVID-19 pandemic. Secondly, there is a possibility that the results do not accurately represent all Malaysian consumers who made use of online food delivery services during and after the COVID-19 pandemic due to the limited sample size of the respondents involved in this study.

The data collection of this study is limited to questionnaire survey-based methods. This could mean that certain factors affect customers' choices to make use of online food delivery services. It is difficult to ensure that people provide genuine responses to the questions in the survey as the survey was sent online. In retrospect, a personal interview may be more accurate when it comes to data collection.

The research is able to offer insightful information on the variables that play a role in consumers' choices to make use of online food delivery services both during and after the COVID-19 pandemic in Malaysia. It is however important to note that

the results from this research could not be representative of the widespread Malaysian consumers who make use of online food delivery services during or after the COVID-19 pandemic as there were limitations to this research.

In order to have a more thorough look at the issues present, further investigation into the variables that affect consumer choices in other countries with a larger population size around the world or narrowed down to a specific group of people or cities with higher demand and supply for online food delivery services is required. Other variables such as social influence and customer behavioral intention might also be included in the study. In addition, the findings should not be generalized as a whole due to convenience sampling biases. It is recommended to use another type of sampling method to reduce biases.

5.6 Recommendation for Future Research

This research is able to offer helpful insights into the different factors that affect a consumer's choice to utilize online food delivery services in Malaysia after the pandemic outbreak. The findings of this study can also assist companies in the food delivery sector so that they are able to understand the expectations of their consumers and tailor their services to their preferences. Also, expanding the research to other countries worldwide will aid in creating a more thorough and detailed look at this issue, which could be beneficial for companies that belong to the food delivery industry. As this study mostly relies on structured interviews as the sole data collection method, future research could involve a range of data collection methods such as personal interviews, and focus group discussions to collect their responses.

The quality of food is normally different compared to eating at a restaurant as food to be delivered takes time. There can also be further research done on how to ensure that the quality of food even after being delivered over long distances

remains the same, especially in Malaysia where roads are frequently congested during rush hour. This will ensure that customers feel more satisfied with the service that food delivery services provide.

5.7 Conclusion

In this research, convenience, time-saving, price-saving, and service quality from online delivery apps as the four independent variables are validated to have a significant relationship with the customer's intention for continuing to use online food delivery services after the COVID-19 pandemic. This is consistent with the findings of this research, with convenience being the most significant factor that influences consumers' attitudes toward food delivery services after the COVID-19 pandemic. Consumers are likely to adopt the use of food delivery services as a new normal in their daily lives, even after the pandemic as they are able to benefit greatly from it.

However, there are several issues and challenges that can be addressed to ensure a better user experience that food delivery service companies should look into such as ensuring that food remains warm for a longer period of time until it gets to the customer, ensuring that food remains in a presentable condition when delivered to the customer and reducing waste by investing in more environmentally friendly and sustainable packaging for the food. This will allow for both sustainability and further growth for food delivery service companies.

REFERENCES

Acumen Research and Consulting (2022, November 11). Malaysia Online Food Delivery Market Size, Share, Analysis by Top Regions (North America, Europe, Asia-Pacific, Others), Industry Trends, Market Research and Forecast. Retrieved from https://www.openpr.com/news/2805814/malaysia-online-food-delivery-market-size-share-analysis

Alalwan, A. A. (2020). Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. International Journal of Information Management, Volume 50, February 2020, Pages 28-44.

Allo Technology Sdn. Bhd (2022) Malaysia's Online Food Delivery Exploded with the Help of the Internet. Here's Why. Retrieved from https://www.allo.my/blog-malaysia-online-food-delivery-exploded-with-the-help-of-the-internet/

Antala, K. (2019, February 28). 6 Customer Experience Aspects That Any Food Delivery App Should Ensure. Retrieved from https://www.cmarix.com/blog/6-ux-necessities-food-delivery-apps/#:~:text=6%20Customer%20Experience%20Aspects%20That%20Any%20Food%20Delivery,Location%20Tracking%20Of%20Delivery%20And%20Live%20Support%20

Bhatti, A., Ur Rehman, S., Kamal, A. Z., & Akram, H. (2020). Factors Effecting Online Shopping Behaviour with Trust as Moderation. Jurnal Pengurusan, 60, 1–15.

Boice, M. (2021, March 19). The 13 Top Reasons Consumers Shop Online. Retrieved from https://www.junglescout.com/blog/reasons-consumers-shop-online/

Chai, L. T., & Yat, D. N. C. (2019). Online food delivery services: Making food delivery the new normal. Journal of Marketing Advances and Practices, 1(1), 62-77.

Choi, J.C. (2020), "User familiarity and satisfaction with food delivery mobile apps", SAGE Open, Vol. 10 No. 4, 215824402097056.

Dazmin, D. & Ho, M.Y. (2019). The relationship between consumer's price-saving orientation and time-saving orientation towards food delivery intermediaries (FDI) Services: An Exploratory Study. Global Scientific Journal, GSJ: Volume 7, Issue 2, February 2019, Online: ISSN 2320-9186.

Department of Statistics Malaysia (2022). Current Population Estimates, Malaysia, 2022. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=155&bul_id=dTZXanV6UUdyUEQ0SHNWOVhpSXNMUT09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09

Durai, A. (2020, January 4). Food delivery will continue to be a big trend in 2020. Retrieved from https://www.thestar.com.my/food/food-news/2020/01/04/food-delivery-will-continue-to-be-a-big-trend-in-2020.

Gavilan, D., Balderas-Cejudo, A., Fernandez-Lores, S. & Martinex-Navarro, G. (2021). Innovation in online food delivery: Learnings from COVID-19. International Journal of Gastronomy and Food Science, Volume 24, July 2021, 100330.

Goodhue, L.D. & Tho,pson, L.R. (1995). "Task-technology fit and individual performance". Mis Q. 1995; 19 (213-): 236.

Grab (2021, September 3). Online food delivery spend to more than triple in Southeast Asia by 2025. Retrieved from https://www.grab.com/sg/press/others/online-food-delivery-spend-to-more-than-triple-in-southeast-asia-by-2025/

George, D., and Mallery, M. (2003). Using SPSS for Windows step by step: a simple guide and reference.

Hong, C., Choi, H., Choi, E-K. & Joung, H-W. (2022). Factors affecting customer intention to use online food delivery services before and during the COVID-19 pandemic. Journal of Hospitality and Tourism Management. 2021 Sep; 48: 509–518.

Hussey, A. (2020, October 5). The Global State of Foodservice Delivery. Retrieved from https://www.kerry.com/insights/kerrydigest/2020/global-foodservice-delivery

Hwang, J., Kim, H. & Kim, W. (2019). Investigating motivated consumer innovativeness in the context of drone food delivery services. Journal of Hospitality and Tourism Management, Volume 38, March 2019, Pages 102-110.

Jaadi, Z. (2019, October 15). Everything you need to know about interpreting correlations. Retrieved from https://towardsdatascience.com/eveything-you-need-to-know-about-interpreting-correlations-2c485841c0b8

Janairo, J. I. B. (2021). Unsustainable plastic consumption associated with online food delivery services in the new normal. Cleaner and Responsible Consumption Volume 2 (2021) 100014.

Jun, K., Yoon, B., Lee, S. & Lee, D-S. (2021). Factors Influencing Customer Decisions to Use Online Food Delivery Service during the COVID-19 Pandemic. Foods. 2022 Jan; 11(1): 64, PMCID: PMC8750313, PMID: 35010192.

Kamaruddin, N. J. (2020, March 18). Positivity in negativity: Covid-19 sees 30 pct jump in delivery orders. Retrieved from https://www.bernama.com/en/general/news_covid-19.php?id=1822364

Kang, J. & Namkung, Y. (2019) “The information quality and source credibility matter in customers’ evaluation toward food O2O commerce”, International Journal of Hospitality Management, Vol. 78, pp. 189-198.

Kanyakumari, M. (2020, March 25). At your doorstep: More Malaysian food businesses offer delivery amid movement control order. Retrieved from https://www.channelnewsasia.com/asia/malaysia-covid-19-movement-control-order-food-business-delivery-1324156

KitchenConnect(2022, February 11). The Best Food Delivery Platforms in Malaysia. Retrieved from https://kitchenconnect.com.my/blog/food-delivery-platforms-malaysia/

Manisha, K. (2021, November 19). Everything you need to know about the Likert Scale. Retrieved from https://www.surveysensum.com/blog/everything-you-need-to-know-about-the-likert-scale/

Kitchenconnect (2022, February 11). The Best Food Delivery Platforms in Malaysia. Retrieved from https://kitchenconnect.com.my/blog/food-delivery-platforms-malaysia/

Kumar, V. (2020). Factors Influencing Customers Satisfaction of Online Food Delivery Apps. Technical Research Organisation India. ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-7, ISSUE-10, 2020

LaMorte, W. W. (2022, November 3). The Theory of Planned Behavior. Retrieved from https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/BehavioralChangeTheories3.html#:~:text=Behavioral%20intention%20%2D%20This%20refers%20to,or%20disapprove%20of%20the%20behavior.

Lau, T.C. & Ng, D. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. Journal of Marketing Advances and Practices, Volume 1, Issue 1, 2019.

Lim, J. (2020, June 19). MCO a big win for online food deliveries and cloud kitchens. Retrieved from https://www.theedgemarkets.com/article/mco-big-win-online-food-deliveries-and-cloud-kitchens

Keeble, M., Adams, J. & Burgoine, T. (2022). Investigating experiences of frequent online food delivery service use: a qualitative study in UK adults. BMC Public Health volume 22, Article number: 1365 (2022)

Marinkovic, V., Dordevic, A. & Kalinic, Z. (2020). “The moderating effects of gender on customer satisfaction and continuance intention in mobile commerce: a UTAUT-based perspective”, Technology Analysis and Strategic Management. Taylor & Francis 2020; 32(3): 306-318.

Ministry of Health Malaysia (2022, October 6). Vaccinations in Malaysia. Retrieved from https://covidnow.moh.gov.my/vaccinations/

Moneycompass (2020, August 7). Online food delivery market to see robust growth over next 4 years. Retrieved from https://moneycompass.com.my/2020/08/07/online-food-delivery-market-to-see-robust-growth-over-next-4-years/

Muller, C. (2018). Restaurant delivery: are the “ODP” the industry’s “OTA”? Part II. Boston Hosp. Rev 6 (3), 1-18.

NJ (2022, April 7). Do Malaysians Depend On Food Deliveries Too Much? Retrieved from https://thefullfrontal.my/do-malaysians-depend-on-food-deliveries-too-much/#:~:text=The%20reason%20why%20food%20deliveries%20are%20so%20popular,delivery%20apps%20one%20to%20two%20times%20a%20week.

Nor, M. M. A. I. M., Wafli, M. F. A., Zaharuddin, N. N. & Akhuan, N. M. (2022). Factors Affecting Customer's Behavioral Intention to Use Online Food Delivery Services (OFDS). Malaysian Journal of Social Sciences and Humanities (MJSSH) (e-ISSN : 2504-0), 8562 2022, Volume 7, Issue 7, e001598, DOI:https://doi.org/10.47405/mjssh.v7i7.1598.

Patel, B. (2021, November 12, 2021). Advantages and Disadvantages of the Online Food Ordering System. Retrieved from https://www.spaceotechnologies.com/blog/online-food-ordering-system-advantages-disadvantages/

Poon, W. C. & Tung, S. E. H (2021). The rise of online food delivery culture during the COVID-19 pandemic: an analysis of intention and its associated risk. European Journal of Management and Business Economics, Emerald Publishing Limited, e-ISSN: 2444-8494, p-ISSN: 2444-8451, DOI 10.1108/EJMBE-04-2021-0128.

Ray, A., Dhir, A., Bala, P. K. & Kaur, P. (2019). Why do people use food delivery apps (FDA)? A uses and gratification theory perspective. Journal of Retailing and Consumer Services, Volume 51, November 2019, Pages 221-230.

Rivera, M. (2019). Online Delivery Provider (ODP) services: Who is getting what from food deliveries? International Journal of Hospitality Management, Volume 80, July 2019, Pages A1-A2.

Roni, M., Mohamad, S. H., Borhanordin, A. H., Hussin, H., Rashid, I. M. A., & Shafiai, S. (2022). Online Food Shopping Motives during COVID-19 Pandemic for Improving Behavioural Intention: Conceptual Model and Propositions. Webology, 19(1), 2458–2474.

Roswold, J. (n.d.). Serious burn injuries resulting from car, truck and motorcycle crashes. Retrieved from https://www.kansascityaccidentinjuryattorneys.com/library/burninjuries-suffered-in-car-and-motorcycle-crashes.cfm

Statista (2022, March 28). Market size of the global online food delivery sector 2022-2027. Retrieved from https://www.statista.com/statistics/1170631/online-food-delivery-market-size-worldwide/

Statista (2022, October 5). Reasons for continued frequent use of food delivery apps after the COVID-19 pandemic in Malaysia as of August 2021. Retrieved from https://www.statista.com/statistics/1282297/malaysia-reasons-for-using-food-delivery-apps-after-covid-19/

Statista (2022, October 5). Behavioral change of food delivery apps usage during COVID-19 pandemic in Malaysia as of June 2020. Retrieved from https://www.statista.com/statistics/1143406/malaysia-food-delivery-apps-usage-during-covid-19/

Statista (2022, November). Online Food Delivery – Malaysia. Retrieved from https://www.statista.com/outlook/dmo/online-food-delivery/malaysia?currency=usd

Statistics How To (2021, July 2). Cronbach's Alpha: Definition, Interpretation, SPSS. Retrieved from https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/cronbachs-alpha-spss/

Statistics Solutions (n.d.). Correlation in SPSS. Retrieved from https://www.statisticssolutions.com/correlation-in-spss/

Supramani, S. (2021). 70% of p-hailing riders disobey traffic rules while on delivery runs: Miros. Retrieved from https://www.thesundaily.my/local/70-of-p-hailing-ridersdisobey-traffic-rules-while-on-delivery-runs-miros-JE8024694

Tamrin, S. (2020). Food delivery soar, but rider bears the cost. Retrieved from https://www.freemalaysiatoday.com/category/nation/2020/07/07/food-deliveries-soarbut-riders-bear-the-cost/

Tan, S. Y., Lim, S. Y., & Yeo, S. F. (2021). Online food delivery services: cross-sectional study of consumers' attitude in Malaysia during and after the COVID-19 pandemic. F1000 Research 10:972, DOI:10.12688/f1000research.73014.1

UNCTAD (2020, October 8). COVID-19 has changed online shopping forever, survey shows. Retrieved from https://unctad.org/news/covid-19-has-changed-online-shopping-forever-survey-shows

Venkatesh, V., Morris, M.G., Davis, G. B. & Davis, F. D (2000). User acceptance of information technology: toward a unified view. Mis Q. 2003; 27(3): 425-478.

World Health Organisation (2020). Coronavirus disease (COVID-19) pandemic. Retrieved from https://www.who.int/europe/emergencies/situations/covid-19

Yeo, V. C. S., Goh, S. K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services, Journal of Retailing and Consumer Services, 35, 150-162.

Yusra, Y. & Agus, A. (2020). The influence of Online Food Delivery Service Quality on Customer Satisfaction and Customer Loyalty: The Role of Personal Innovativeness. Retrieved from https://www.researchgate.net/publication/339551642_The_Influence_of_Online_Food_Delivery_Service_Quality_on_Customer_Satisfaction_and_Customer_Loyalty_The_Role_of_Personal_Innovativeness

Zhao, Y. & Bacao, F. (2020). What factors determining customer continuingly using food delivery apps during 2019 novel coronavirus pandemic period? Int J Hosp Manag, PMCID: PMC7480677, PMID: 32929294.

APPENDICES

Appendix A: Questionnaire Reference

Section	Items	Number of Questions	Sources	Scales
B	Convenience	4	Tan et al., 2021	Interval (7-point Likert Scale)
		1	Lau et al., 2019	Interval (7-point Likert Scale)
	Time-Saving	3	Tan et al., 2021	Interval (7-point Likert Scale)
		2	Lau et al., 2019	Interval (7-point Likert Scale)
	Price-Saving	2	Nor et al., 2022	Interval (7-point Likert Scale)
		2	Tan et al., 2021	Interval (7-point Likert Scale)
		1	Alalwan, 2020	Interval (7-point Likert Scale)
	Quality Services	3	Yusra et al., 2020	Interval (7-point Likert Scale)
		2	Kumar, 2020	Interval (7-point Likert Scale)

Appendix B: Permission Letter for Conducting Survey

UNIRAZAK
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UNIVERSITI TUN ABDUL RAZAK SDN BHD
195A, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia.
T +603 2730 7000 F +6032730 7070
E umi@unirazak.edu.my
www.unirazak.edu.my

Our ref. : UNIRAZAK/GSB/01/1026/22
Date : 30 December 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Student Name : Yew Bee Teng (M211101046)
Research Project Title : An Empirical Study on the Factors Influencing the Customers Decisions to Use Online Food Delivery Services after the Covid-19 Pandemic

Please be informed that the above mentioned student is currently pursuing Master of Business Administration at the Graduate School of Business, Universiti Tun Abdul Razak, Malaysia. She has been a registered student since November 2021 semester. She is required to complete the above research project as a full requirement to the degree of Master of Business Administration at Universiti Tun Abdul Razak.

As such, we would be most grateful if you could allow her to conduct a survey, collect, process and analyse data pertaining to her research area. The data obtained will be strictly used for academic purposes and respondents' anonymity ensured.

If you have enquiries with regard to the above, please do not hesitate to contact us at 03-2730 7081 or email at abdulrahman@unirazak.edu.my.

Thank you.

Yours sincerely,

Abdul Rahman Bin Omar Amiah
Deputy Dean (Operation)
Graduate School of Business
Universiti Tun Abdul Razak

cc: Sir Sapowan Sanusi, Supervisor

Appendix C: Questionnaire

Section A: Demographic Profile

Please place a tick "√" for each of the following questions.

1. Gender: ☐Male ☐Female

2. Age: ☐Below 20 years old ☐21 - 30 years old ☐31 – 40 years old
☐41 – 50 years old ☐above 50 years old

3. Race: ☐Malay ☐Chinese ☐Indian
☐Others (Please Specify): _____

4. Educational Qualification: ☐Secondary ☐High School Diploma
☐ Bachelor's Degree ☐ Master's Degree
☐ Others (Please Specify): _____

5. Employment Status: ☐Employed ☐Unemployed

Section B: Evaluate the factors that influence mobile payment in Malaysia

In this section, we seek your opinion regarding the factors influencing the customers decisions to use online food delivery services after the COVID-19 Pandemic. Please indicate the extent to which you agreed or disagreed with each statement using 7 points Likert scale.

(1) = Strongly disagree
(2) = Disagree
(3) = More or less disagree
(4) = Neither agree nor disagree
(5) = More or less agree
(6) = Agree
(7) = Strongly agree

Please circle one number per line to indicate the extent to which you agreed or disagreed with the following statements.

Convenience

No	Factors	SD	D	ND	N	NA	A	SA
Q 1	Online food delivery services allow me to order food anytime I want	1	2	3	4	5	6	7
Q 2	Online food delivery services allow me to order food anywhere I want	1	2	3	4	5	6	7
Q 3	Online food delivery makes my daily life more convenient	1	2	3	4	5	6	7
Q 4	I like that I am able to order food without leaving home	1	2	3	4	5	6	7
Q5	I am able to easily make cashless payments	1	2	3	4	5	6	7

Time-saving

No	Factors	SD	D	ND	N	NA	A	SA
Q1	I am able to save time by using online food delivery services	1	2	3	4	5	6	7
Q 2	Online food delivery services reduce the time I usually spend getting my food	1	2	3	4	5	6	7
Q 3	Online food delivery services reduce the time I need to spend preparing my food.	1	2	3	4	5	6	7
Q 4	Online food delivery services allow me to purchase food as quickly as possible	1	2	3	4	5	6	7

Q 5	The priority delivery option helps me save even more time	1	2	3	4	5	6	7

Price-saving

No	Factors	SD	D	ND	N	NA	A	SA
Q 1	I am able to save money by comparing the prices of different foods	1	2	3	4	5	6	7
Q 2	Online discount coupons and bundles help me save money often	1	2	3	4	5	6	7
Q 3	I am able to get food at lower prices on different websites	1	2	3	4	5	6	7
Q 4	I am able to get more discounts online than in restaurants	1	2	3	4	5	6	7
Q 5	Subscriptions to memberships on food delivery apps help me to save money	1	2	3	4	5	6	7

Service Quality

No	Factors	SD	D	ND	N	NA	A	SA
Q 1	The app interface is easy to navigate	1	2	3	4	5	6	7
Q 2	The range of payment methods makes it easy to pay	1	2	3	4	5	6	7
Q 3	Social and Guest registration makes purchasing food quick	1	2	3	4	5	6	7
Q 4	The function to sort restaurants based on distance is very useful	1	2	3	4	5	6	7
Q 5	The feature to filter restaurants based on ratings is useful	1	2	3	4	5	6	7

Thank you for Your Participation

Appendix D: Personal Data Protection Statement

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, University Tun Abdul Razak ("UNIRAZAK") is hereby bound to take notice and require consent in relation to the collection, recording, storage, usage and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-
   (i) For assessment of any application to UNIRAZAK
   (ii) For processing any benefits and services
   (iii) For communication purposes
   (iv) For advertorial and news
   (v) For general administration and record purposes
   (vi) For enhancing the value of education
   (vii) For educational and related purposes consequential to UNIRAZAK
   (viii) For the purpose of our corporate governance
   (ix) For consideration as a guarantor for UNIRAZAK staff/students applying for his/her scholarship/ study loan
2. Your personal data may be transferred and/or disclosed to the third party and/or UNIRAZAK collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UNIRAZAK shall be destroyed and/or deleted in accordance with our retention policy applicable to us in the event such information is no longer required.
4. UNIRAZAK is committed to ensuring the confidentiality, protection, security, and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading, and updated. UNIRAZAK would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form, you hereby authorize and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.
2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UNIRAZAK will not be able to fulfill our obligations or to contact you or assist you in respect of the purposes and/or for any other purposes related to the purpose.
3. You may access and update your personal data by writing to us at [y.b.teng2111@ur.unirazak.edu.my].

Appendix E: SPSS Data Output

Frequency Table: Demographic Profile

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	Female	155	68.9	68.9	69.3
	Male	69	30.7	30.7	100.0
	Total	225	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	20-30	25	11.1	11.1	11.6
	31-40	43	19.1	19.1	30.7
	41-50	84	37.3	37.3	68.0
	above 50	57	25.3	25.3	93.3
	below 20	15	6.7	6.7	100.0
	Total	225	100.0	100.0	

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bumiputra Sabah	2	.9	.9	.9
	Chinese	176	78.2	78.2	79.1
	Iban	2	.9	.9	80.0
	Indian	16	7.1	7.1	87.1
	Malay	29	12.9	12.9	100.0
	Total	225	100.0	100.0	

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	1	.4	.4	.4
	Bachelor's Degree	83	36.9	36.9	37.3
	High School Diploma	56	24.9	24.9	62.2
	Master's Degree	41	18.2	18.2	80.4
	PHD	3	1.3	1.3	81.8
	Secondary	41	18.2	18.2	100.0
	Total	225	100.0	100.0	

Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	188	83.6	83.6	83.6
	Unemployed	37	16.4	16.4	100.0
	Total	225	100.0	100.0	

Descriptive Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
Convenience	5.6938	1.12531	224
Time-saving	5.5191	1.18835	225
Price-saving	4.7482	1.41972	224
Quality Service	5.5040	1.11821	223

Reliability Analysis

Reliability Statistics

Cronbach's Alpha	N of Items
.958	20

Correlations Analysis

Correlations

		Convenience	Time-saving	Price-saving	Quality Service
Convenience	Pearson Correlation	1	.781**	.519**	.766**
	Sig. (2-tailed)		.000	.000	.000
	N	224	224	223	222
Time-saving	Pearson Correlation	.781**	1	.636**	.755**
	Sig. (2-tailed)	.000		.000	.000
	N	224	225	224	223
Price-saving	Pearson Correlation	.519**	.636**	1	.700**
	Sig. (2-tailed)	.000	.000		.000
	N	223	224	224	222
Quality Service	Pearson Correlation	.766**	.755**	.700**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	222	223	222	223

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

APPROVAL PAGE

TITLE OF PROJECT PAPER: **AN EMPIRICAL STUDY ON THE FACTORS INFLUENCING THE CUSTOMERS DECISIONS TO USE ONLINE FOOD DELIVERY SERVICES AFTER THE COVID-19 PANDEMIC**

NAME OF AUTHOR : YEW BEE TENG

The undersigned certify that the above candidate has fulfilled the condition of the project paper prepared in partial fulfilment for the degree of Master of Business Administration.

SUPERVISOR

Signature : _____

Name :

Date :

ENDORSED BY:

_____

Dean

Graduate School of Business

Date: