THE EFFECTIVENESS OF SELF-ORDERING KIOSK ON SERVICE RESPOND TIME AT MCDONALD'S

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SUPERVISOR APPROVAL

I hereby declare that I have checked this report entitled
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DECLARATION

"I hereby admit that this is my own work except for summary of excerpt of which I had mentioned the source"

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Date: 22 JANUARY 2024

DEDICATIONS

This study is fully dedicated to my parents, who have always supported me
financially, emotionally, spiritually, and morally. They have also served as a guide
and source of strength when me felt like giving up.To all of my friends, classmates,
mentors, brothers, sisters, and other family members who have supported and
advised me to complete this study.Finally, i would like to express our gratitude to the
Almighty God for providing me with a healthy life as well as for his guidance,
strength, mental capacity, protection, and talents in this research

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ABSTRACT

This study aims to investigate the impact of McDonald's self-ordering kiosk efficacy on service response times. This study located in Jasin, Melaka. These days, many restaurants use self-ordering kiosks to grow their businesses. In 2023, population of Jasin will be as much 154,300. Therefore, this study was researched as many as 306 according to Krejcie & Morgan table.The researcher used SPSS software version 27 for this study.The study use quantitative study to get feedback from customers. Three (3) of the major independent factors and one (1) of the dependent variables, as a result of the researcher's analysis, are independent variables. The dependent variable is service respond time at McDonald's , while the independent variables include time saving, accuracy, and experience. Researchers will use survey methods, such as questionnaires, to gather information regarding how this research will be conducted in order to respond to this question.

In pursuit of the objectives, a descriptive analysis targeting the perceptions of the effectiveness of self-ordering kiosk on service respond time at McDonald's. Incorporating evidence from descriptive statistic theoretical relationship between independent variable and dependent variable. The research incorporates inferences and conclusions of 46 studies in the review.

The study discovers that time saving, accuracy and experience give a positive to services respond time at McDonald's. Research concludes that time saving, accuracy and experience effectiveness of Self-ordering kiosk on service respond time at McDonald's

Keywords: Time saving, Accuracy, Experience and Service respond time at McDonald's

ABSTRAK

Kajian ini bertujuan untuk mengenal pasti keberkesanan kiosk pesanan sendiri pada masa maklum balas perkhidmatan di McDonald's. Kajian ini dilakukan di Jasin, Melaka dengan memberikan soal selidik melalui borang soal selidik untuk dijawab oleh pembeli makanan di McDonald's.Populasi di Jasin adalah sebanyak 154,300. Disebabkan itu pengkaji hanya mendapatkan tinjauan daripada pengguna sebanyak 306 berdasarkan jadual Krejcie & Morgan. Dengan itu, pengkaji menggunakan perisian SPSS versi 27 untuk mendapat hasil kajian malah pengkaji juga menggunakan kaedah kuantitatif untuk mendapatkan tinjauan daripada pengguna. Berdasarkan hasil kajian, didapati bahawa penjimatan masa, ketepatan menu dan pengalaman berkait dengan masa bertindak balas perkhidmatan di McDonald's. Sebanyak 306 borang soal selidik diedarkan berdasarkan jadual Krejcie dan Morgan melalui populasi pendudukJasin, Melaka.

Dalam usaha mencapai objektif, analisis deskriptif menyasarkan persepsi keberkesanan kiosk pesanan sendiri pada masa respons perkhidmatan di McDonald's. Menggabungkan bukti daripada hubungan teori statistik deskriptif antara pembolehubah bebas dan pembolehubah bersandar. Penyelidikan ini menggabungkan kesimpulan daripada 46 kajian dalam ulasan.

Kata Kunci: Penjimatan masa, Ketepatan menu, Pengalaman dan masa tindak balas perkhidmatan

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

In recent years, the development of information technology has allowed manufacturers, especially in the food sector, to serve as their clients more effective, efficient, and high-quality services. An example of ICT that enables consumers is self-service technology (SST). For instance, SST regularly makes use of this kiosk. Self-service kiosks (SSK) are used by restaurants to ensure consumers can look for, change, and pay for the food and beverage orders it choose. As we know, the fast food business is using self-service technologies more often in order to save operational costs and increase the efficiency of service. Self-service ordering kiosks may offer customers with excellent experiences, just like other technology. What can be found, first we use the traditional method of meeting the service is face to face. That is the direct interaction between the customer and the service worker. However, with the development of technology. Everything has already changed to a more sophisticated world where. Such encounters are increasingly being replaced by technology-based self-service, where customers interact with technology. Major multinational fast food food chains like a McDonald's are additionally using this concept.

1.2 Introduction

These days, businesses are slowly replacing conventional methods of providing services by implementing various technological advancements, such as information-

and transaction-related technologies.(Lee,2013). One of the factors that is becoming more and more significant in many service industries is technology, which helps with obtaining customers, service quality, and transaction execution. In particular, a lot of service companies have embraced a range of techniques using self-service technologies (SSTs) in the service delivery process. (Anderson et al.,2013). Modernizing industril capabilities and boosting competitiveness across all manufacturing industries is the goal of facing the Industrial Revolution, Version 4.0 (IR4.0), which is at the top of the digital agenda, specially in the food service sector. Industry has accepted the current revolution in dining, where engaging and interesting travel to restaurants produces a more immersive experience. The technological revolution that has taken place in the world has changed how individuals live and work. Some consider that such reform marks the beginning of a new period of transition in terms of opportunity and growth. Therefore, As to the global market, industry 4.0's usage of self-service technology is essential for cost reduction and enhancing the consumer satisfaction (Considine & Cormican, 2017). Using a digital interface known as self-service technology, customers can create services without the involvement of service personnel directly.

1.2.1 Effectiveness of Self-Ordering Kiosk

The service sector of today has seen a growing integration of self-service technology (Park et al., 2021) especially self-ordering kiosk and it's critical to understand how customers want to use it. The fast-food industry understands the importance of using technology to continuously improve their services as the technology era continues to grow (Park et al., 2021). Information technology has changed how the hospitality sector provides high-quality services, increasing client effectiveness and efficiency (Law et al., 2019). Self-ordering kiosk is becoming more and more common in today's service industry especially in fast-food restaurants. Self-service technologies, also known as SSTs, are technological interfaces that let customers use services without having to deal with customer service representatives directly (Yoon,2020).

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Kiosks give vendors the opportunity to enhance their customer service, which has additional beneficial effects (Baba.,2020). Self-ordering kiosks appear to have put more responsibility on the customers (Ugwuanyi et al., 2021). This is because of the fact that the extensive use of self-service technology in restaurants, like self-service kiosks, can present certain difficulties. Because they are not familiar with the technology, some customers might avoid using the services or think the self-service kiosk is less user-friendly, which would make them unhappy with the service.When using self-service kiosks, negative emotions like dislike and fear were more common because of things like crowding and standing in line. (Günay et al.,2014). It's interesting to think that people who use self-service kiosks alone may feel more negatively because they are not influenced by others around them. (Günay et al.,2014). Customers may use self-ordering kiosks on the chance of the moment even if they had no intention of using them at first because of promotional effects (Hong,2018).

In the food service sector, self-ordering kiosks offer improved financial KPIs, consumer loyalty, and favourable employee feedback.(Ottonbacher & Gnoth,2005).For Self-service Technology (SST) is one of the ICTs that allowed customers to conduct their services (such as personal use, self-service, or a mix of both) by not the assistance of staff or service providers with only a little help from them (Britner,2002).For example like self ordering kiosk. It can be defined as interactive, made to be used by the general population, and information processing (Meuter et al., 2000).Self-Ordering Kiosks can be used in several different industries and sectors to learn given this. Service differentiation kiosks have been introduced by fast food companies improving operational flexibility and revenue (Bitner et al., 2000).he ability to quickly and easily buy food while getting personalized service are both benefits of using kiosks (Bitner et al., 2000). Kiosks give vendors the opportunity to enhance their customer service, which has additional beneficial effects (Baba.,2020). In essence, this kiosk allowed customers to place purchases quickly and easily without having to wait in line at the counter

1.2.2   Service Respond Time at McDonald's

Waiting areas are influenced by physical design elements like lighting, architecture, and layout to produce aesthetically pleasing spaces that are comfortable, nice and and have clear distraction elements like screens and words (Polas,2018). Customers' experiences waiting were enhanced by design features of the waiting area, such as the use of color and layout. (Chien,2014). When the actual waiting time differs from the estimated waiting time, the customers' perception of the entire "service experience" will be impacted.Customer satisfaction certainly was affected by perceived waiting times, particularly during idle periods (Rose,2017).

Customers who use self-ordering kiosks benefit from things like shorter wait times and ease of use. Additionally, from an economic perspective, Self-ordering kiosk application can lead to lower labor costs, set up services, staff cuts, and higher customer satisfaction (M.K.Kim.,2019). A short wait time and quick line are crucial for taking customers to fast food restaurants, in addition to low prices, friendly staff, and excellent food quality (Koh H.L. 2014).For convenience stores, this means improving the number of service counters and quickening preparing meals during busy times. As we know, McDonald's use a Self-ordering kiosk for give a fast services to their customers. That means, customer don't need to que or waiting so long times to order their foods. When their use a self-ordering kiosk their not take time to long to order a menu. Unable to receive service right away, customers who must wait their turn frequently do so impatiently (Dhamarwirya,2012).

McDonald's is going to start cashless services in 2016 so that customers can pay at self-ordering kiosks with their debit or credit cards. This decision was made in response to their frequent observations of lengthy lineups and ongoing observation of changing customer demand.(History of McDonald's,2018). To enhance the customer knowledge, McDonald's Malaysia welcomes technological advancement and offers useful digital services.McDonald's Malaysia is a well-liked option for Malaysians searching for a quick and reasonably priced meal because of its reputation for affordability and convenience.Only 17 McDonald's locations had embraced the new technology, and not all of them had self-service kiosks (Locate Us, 2018)

1.3 Research Question

RQ1:: Is self-ordering kiosks response time effective for McDonald's users?

RQ2: Are there correlations between the variables of self-ordering kiosk

response time that facilitate McDonald's users?

RQ3: What is the dominant variable that affects the self-ordering kiosk service response time at McDonald's?

1.4 Research Objectives

RO1:To determine the effectiveness of using self-ordering kiosks on

McDonald's users.

RO2: To examine correlation of the on McDonald's users.

RO3: To investigate the most effective self-ordering kiosk response time variables that contribute to McDonald's users.

1.5 Problem Statement

Self-service kiosks are the primary area of attention. A self-service kiosk is a stand alone touch-screen device that enables customers to create a service on their own without the assistance of an agent (Yang et al., 2014). The purpose of a self-service kiosk is to help the user while they are using it.However, customers do not necessarily find technology-based services to be useful all the time. Customers are always given convenience features by self-service kiosks so they may quickly become used to the technology. Self-ordering kiosks could speed up the ordering process, lower labour expenses, and improve service levels (Kokkinou, 2013). Therefore, a self-ordering kiosk that enables customers to watch the ordering process and cuts down on the time they anticipate spending is necessary in a QSR environment (Liebman, 2003). One QSR that has already used the self-ordering kiosk is McDonald's. In order to keep up with current market trends, McDonald's Malaysia

began renovating its stores in 2017 with digital platforms, including self ordering kiosks. Being able to complete the bespoke order by paying with cash or a credit card at the kiosk makes the self-ordering kiosk far quicker and more efficient. Futhermore, Self-service kiosks be increasing for a number of reasons. With an exceptional digital experience and user-friendly interfaces, this technology helps restaurants meet customer expectations. Additionally, a self-ordering kiosk gives the consumer control over the ordering procedure, making it simpler to peruse the menu and modify orders. The crew at the restaurant may minimise lines, raise average check sizes and order volumes, and increase efficiency with the help of a thoughtfully designed kiosk. (Ravenel,2016). The fastest-growing trend is self-ordering kiosks, which let consumers order and pay for their meals using their smartphones for ease and security. In addition to increasing table turn times, lowering labour costs, and better understanding customer needs with useful information, it gives clients piece of mind (Mexen, 2015). Customers can use self-ordering kiosk services with broad touch screens to place meal orders, change their menu selections, and even pay their bills without interacting with the staff (Rastegar, 2018).

Last but not least, The customer completes the task at a self-ordering kiosk. Therefore, for the procedure to go smoothly, the customer's consent is essential before using the self-ordering kiosk. For a restaurant, getting customers to adopt new technologies is difficult (Kincaid, 2017). Although younger generations are more accepting of self-ordering kiosks nowadays, older generations seem to prefer the traditional method that encourages human interaction (Toh, 2018). Some customers, known as technophobes, find technology to be unsettling and frustrating (Kincaid, 2007). especially when the technological constraint occurred mid-process. The restaurant owner must think about age demographics and technology while developing a self-ordering kiosk. Age and the choice for self-service have a negative link, with the proportion decreasing as age increases, according to a prior study on the topic of age and self-ordering kiosk technology (Troxell, 2014). reveals that older people are reluctant to use new technologies due to concerns about making mistakes and their social obligations (Knowles, 2018). Customers have frequently been turned off by technical concerns that can arise during operations, such as poor programming usability and support maintenance of antiquated procedures, especially during peak hours (Travia,2008). Any negative experience, especially one involving a self-

ordering kiosk, affects how customers view the technologies, drastically lowering their use and acceptance. (Toh,2018). The researcher will use a quantitave study to know the effectiveness of self-ordering kiosk on service respond time at McDonalds Jasin,Melaka.With this study, the researcher hopes to be able to help and further develop the level of effectiveness of self-ordering kiosks for users and companies that use them.

1.6 Significant of Study

a) To help consumer understand to use a self-ordering kiosk in their life.
b) Give staff find new ways to market their product.
c) To make future research contribution of the study to the field of knowledge.
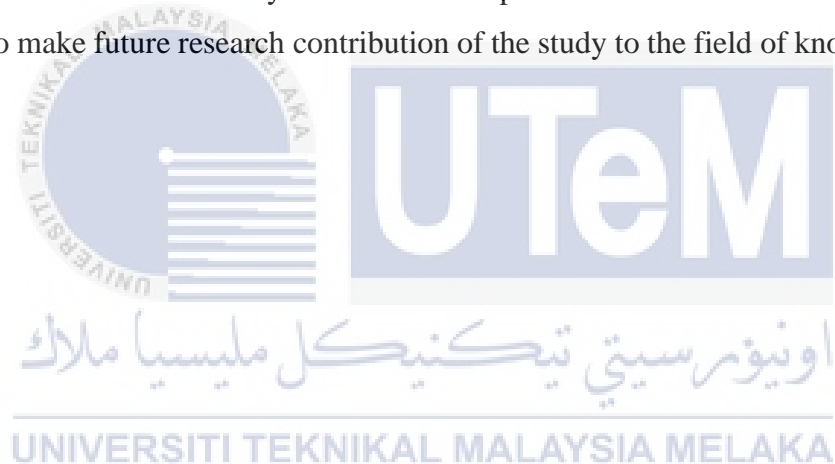
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review of published research that is relevant to ongoing research is known as a literature review. A literature review, according to (Ramdhani, 2014), is a discussion of earlier studies in related fields and data gathered from a particular field during a particular time period. It can also be explained by saying that the design is the first consideration in any study. Therefore, in this study the researcher focused on certain areas related to the effectiveness of self-ordering kiosk on service response time at McDonald's

2.2 Time Saving

In both private and public counter services, waiting to be served or for numbers to be called is an everyday reality that can be upsetting. Free time, pre-process waits, not obvious waits, unexplained waits, unfair waits, alone waits, and group waits are all examples of waiting time. Due to the economic and physical costs involved, waiting is never considered a negative experience. Moreover, delays cause waiting times during times when customers have high expectations for the quality of the service (McDougall,2000). Perceived waiting time is the amount of time spent waiting for a service (McGuire,2016). Whether or not the customer is occupied, whether they are in the waiting stage, whether or not they are anxious, whether or not the wait is certain, whether or not the reason for the wait is explained, whether or

not the customer is alone, and ultimately whether or not the effort of waiting adds value to their experience all influence how long they perceive their wait to be (Palawatta,2015). Since time is money or time is business, it is regarded as one of the limited resources that should be used carefully. Time is valued as an unstable component of productivity by both customers and providers (input = output) (McGuire,2016).

Long wait times can affect how consumers perceive their overall "service experience," and how long a customer feels like they should wait varies depending on the location and quality of service received (Palawatta,2015). Customer delight is impacted because they believe that their "expected reasonable waiting time" was longer than their "perceived waiting time." (Lee,2000). By enabling clients to independently browse the menu, choose their preferred goods, personalise their orders, and make payments, self-ordering kiosks have the potential to reduce the amount of time it takes for a service to respond. The technique of minimising the amount of time clients must wait at self-ordering kiosks before placing their orders is referred to as waiting time reduction. In order to provide clients with a seamless and efficient self-ordering procedure, it is important to maximise its efficiency and speed. The self-service sector has marketed SSKs by emphasizing the simultaneous lowering of waiting times and operating expenses.(Avery, 2008).

Businesses hope to increase order throughput, boost customer satisfaction, and improve overall operational efficiency by using wait time reduction tactics.Using technological interfaces to let customers use technology to address their problems, businesses can quickly delight their customers. (Bitner et al., 2002). Self-ordering and shorter wait times have grown in popularity across a variety of businesses, especially in the retail and food service sectors. These solutions streamline the ordering process and shorten wait times in an effort to increase customer satisfaction. Self-ordering systems eliminate the need for customers to stand in queue by allowing them to place their orders directly through a digital interface, such as kiosks or mobile apps. The theory of queues and other operations management techniques have been used as a more practical approach to determine the ideal point where the cost of providing service and customers' waiting times are both minimized (Dickson et al., 2005).. Overall, self-ordering systems have a number of benefits in terms of cutting wait times by doing away with lines, increasing order accuracy, improving operational efficiency, and expanding customization options.It's important to take

waiting times seriously, particularly in fast food establishments.
(Dhamarwirya,2012).

2.2.1 Improved Efficiency

In the restaurant industry, the majority of self-service technology adoption involves a screen display ordering system that is set up at a table and allows customers to place food and drink orders as well as make payment requests. Smartphone apps, digital menu boards, self-service kiosks, online coupons, and mobile ordering are a few of the latest innovations in the quick service restaurant sector. With the help of a sizable touch screen, kiosks allow patrons to order food, personalize their selections from the menu, and even pay their bill without having to speak with workers (Rastegar,2018). Additionally, the self-ordering system has reduced the amount of time each customer must wait before receiving service. An electronic ordering system that allows customers to place their orders online is known as a self-ordering system.

The system will reduce the amount of time and stress customers experience while waiting in line to be attended to by customer service representatives, so they won't have to wait in line forever (Ekabua,2015). To enhance the customer's experience, cut costs that are either directly or indirectly related to their staff, increase customer retention, and implement new technology into their operations, The company provides high-quality self-ordering kiosk services (Tsou,2017). According to Meuter et al, 2000 based upon technology based interface, Self-ordering Kiosks are classified depending on types of "telephone, internet, interactive kiosks".The gap between the company's level of service and what customers expect is what is known as service quality (Nuryanto,2020). A product or service that is of high quality should have an obvious impact on customer satisfaction and value.

It has been stated that providing excellent service in the service sector is essential to gaining an advantage over competitors (Muala,2016). Furthermore, user interfaces (UI) have also been improved efficiency. Customers may explore menus, customise their orders, and complete transactions more quickly with the help of user-friendly interfaces with intuitive design and obvious navigation options. These

devices typically have a touch-sensitive color display (P. A. Albinsson,2003) which is used in the majority of interactions. When considering input technologies, touch-sensitive displays have become more practical than physical keyboards and speech recognition (C.Guinn, 2004), connection via mobile devices (A.Huang,2005) used by the user or through kiosk sensors like cameras (A.D.Christian,2000).   Especially for intuitive interface. This is where an intuitive interface's power becomes useful. We can make a bother happen into an effortless, effective experience by giving clear customization options, expediting ordering procedures, and optimizing menu navigation.Simplify menu navigation, ordering steps, and customization options. Research suggests a clear layout with minimal text and large buttons leads to faster ordering (Huang et al., 2020). Other than that, seamingless payment integration that feels as smooth as butter. Consider diverse payment methods (cash, card, mobile wallets) and prioritize contactless options to expedite order placement (Park et al., 2023). Overall wait times can be decreased by using this information to more effectively allocate resources, forecast demand, and optimise the menu. SSTs' efficiency and efficacy in enhancing customer service is an advantage.

2.2.2 Enhanced Customer Satisfaction

A business's efforts to increase their customers' entire experience and happiness are referred to as "enhancing customer satisfaction." It entails addressing the wants and preferences of the client, fulfilling or exceeding their expectations, and making sure they have a favourable opinion of the company's goods, services, or contacts with them.The kiosk usage needs to be easy and effortless (Filieri et al., 2015).Beyond offering a minimal level of service or completing transactions, improving customer happiness entails other factors. Its main goal is to establish a positive emotional and sensory bond between the client and the company. Customers are more likely to remain devoted, make repeat purchases, refer the company to others, and uphold a long-term relationship when they are pleased.

The importance of trust in predicting customers' adoption of technology in quick-service restaurants has been hotly disputed(Ozturk et al., 2016). It is because fast processing and order confirmation which is minimize waiting times and

provide clear order status updates (Stanley et al., 2023). No long lines, no lingering uncertainty. It reduces a bothersome wait times that we've all encountered and gives you the instant gratification of knowing that your order is in the system and on its way to being fulfilled. Fast processing and order confirmation improve the overall customer experience by doing away with the guessing game and simplifying the procedure, transforming even routine transactions into productive, enjoyable exchanges.

Additionally, use digital receipts and order-tracking. In this enable easy record-keeping and order status monitoring (Baba et al., 2020). This feature allows it to easily store the order status and receipt electronically, so that one can access them with a few clicks. This digital organization makes record-keeping simple and order monitoring stress-free by giving it the power to stay informed and in control. Easy access to the information it require, whenever it's necessary it, means that missing deliveries and misplaced receipts are a thing of the past.Prior research on the restaurant industry revealed that trust influences technology use in a good way(Saumell et al., 2019). This entails creating user-friendly interfaces, inviting settings, and interesting interactions. Increasing customer satisfaction is a dynamic and continuing process that calls for a focus on the needs of the consumer, ongoing efforts to improve, and a dedication to providing excellent experiences.

Other than that, track kiosk usage and customer feedback. With this company can identify areas for improvement and personalize the experience(Yüksel & Baki, 2022).Through "tracking kiosk usage and customer feedback," it can access a wealth of data regarding how users interact with the device. Not only can identify which buttons confuse users, as well as can also see which features are the most popular and even uncover hidden patterns in ordering behavior. By using this data, it can pinpoint areas where the kiosk experience can be improved and create an improvement roadmap. They can streamline complicated menus and fix annoying issues, as well as can also customize the experience based on current user preferences.Accepting this never-ending feedback loop will turn a kiosk from a static device into a dynamic partner that changes with those who use it to provide a consistently enjoyable and practical experience.

2.2.3 Capacity Utilization

Self-ordering kiosks are seen as a modern and imaginative use(Yeo et al., 2017). But simple and complicated orders are available on the McDonald's menu. Complex orders with customizations could take longer to process at the kiosk, which would reduce usage and throughput. Eventhought self-ordering kiosk usage and post-purchase behaviour in quick service restaurant (Siniah et al.,2011). Increasing kiosk availability can also help with capacity utilisation because it can guarantee that there are enough self-ordering kiosks on hand to meet customers demand during busy times.The propensity for individuals to use new technology was a key factor in their behavioral intentions toward Self-ordering kiosks(Lin, 2006). At the same time, we know that customers are worried about the amount of work required to use new technology and its level of complexity (Aboelmaged ,2013). Because technology is easy to use and comes with clear instructions, people are more likely to intend to use it in their daily lives. As a result, perceived ease of use has become one of the key factors influencing intention to use for capacity utilization (Gunawarada,2015).

Encouraging adoption requires a kiosk interface that is easy to use, has clear instructions, and has intuitive navigation. Complicated user interfaces can cause dislike and resistance, particularly in older or less knowledgeable customers. It can be a factors influencing consumers' intention to use self-ordering kiosk in restaurant (Yong Jian ,2018). If customers think kiosks will save them time, increase order accuracy, and provide convenient customization options, they are more likely to use them. This is especially important to customers of McDonald's who place a high value on consistency and speed. Information technology has completely changed how high-quality services are delivered in the hospitality sector, increasing client effectiveness and efficiency (Law te al,2019).

Many restaurant brands are implementing self-ordering kiosks, especially in the fast food industry like McDonald's. Examples of Self-ordering kiosks include cashless touch screen kiosks and self-order and pay tablets in restaurants (Hanks et al., 2016). In general, self-ordering kiosks with clear instructions and support provide better user experiences, more productivity, fewer errors, improved accessibility, increased customers confidence, and more efficient operations for the restaurant or organisation. Successful kiosks are designed with many human factors in mind (Anitsal, 2006).

2.2.4 Improved The Purchase

Anything that is offered to the market to satisfy needs and wants is a product. In order for the offered goods to be consumed and satisfy customers' needs and desires, it is anticipated that they attract interest and attention (Kotler,2012). stated that the capacity of a business to give a product an identity and characteristics that allow customers to recognize it constitutes product quality (Schiffman,2007). Then its clarifies how a product's quality can be divided into a number of categories, such as: performance; features; dependability; suitability; durability; feasibility;glimmer; and perceived quality (Tjiptono,2012). A product's quality may indicate that it is being sold to customers in order to satisfy their needs (Brata,2017).

Favourable consumer behaviour exists if the technology adoption process is effortless and easy (Alalwan et al., 2017). Price is the amount of money needed to purchase goods or services or the amount of value that has to be exchanged in order to meet the anticipated demands for the goods and services (Kotler,2012). The amount of money needed to purchase a combination of goods and services is known as the price (Sumarni,2010). When prices are set too high, sales generally fall or customers become bored in the product. On the other hand, if the price is set too low, the seller may not make as much money as they should.

Additionally, marketing strategies that work, like sales and limited-time discounts, can attract customers and promote repeat business.Brand recognizing, powered by elements like familiarity and reputation, affects customer loyalty and fast-food chain preferences (Alam,2019). At the same time the overall dining experience can be improved and customers' tendency to make a purchase can be influenced by the surrounding restaurant environment, which includes cleanliness, environment, and comfortable seating.Furthermore, customers are still attracted to pricey eco-friendly products (Mukaromah,2019). The buying decision refers to the stage in which the customer decides they have no other option but to select a product and then pay for it in order to have the ability to use it (Amstrong,2011). The ability to buy a product when one feels that it can satisfy expected needs and desires is known as the purchase decision (Afroz,2013). When a customer reaches a moment where they feel the need to purchase a good or service, they make a purchase decision (Brata,2017).

2.3 Accuracy

When using traditional ordering techniques, order accuracy can occasionally be compromised due to misunderstandings between customers and order takers. This could lead to errors and potentially cause delays in error correction. Determining critical factors that influence consumer purchasing decisions is crucial, particularly when introducing new technologies. (Jeon et al., 2020).Customers can immediately input their orders into self-ordering kiosks, reducing the possibility of a misunderstanding and improving order accuracy. Orders that are accurate at the outset require fewer time-consuming revisions, which leads to faster service overall.To increase order accuracy for self-ordering systems, a company created an easy-to-use interface that guides users through the ordering process. Make sure it is easy to use and provides clear instructions at every stage. Designing a user-friendly kiosk interface is crucial to ensuring that customers have a seamless and straightforward self-ordering experience.

Specific item descriptions may also increase order accuracy. in order for the establishment to completely detail every menu item, including its ingredients, preparation techniques, and possible allergies. This allows customers to make more informed decisions and reduce the likelihood of placing the incorrect order.From the point of view of the food service industry, customer opinions of the self-ordering kiosk operation are reflected in performance standards (Cobanoglu et al., 2015). The ability of a fast-food chain to deliver accurate service based on the food that they serve is known as accuracy. Reduction in the number of mistakes made by customers when placing their food orders helps fast-food chains and restaurants operate more accurately (Peetawan, W., 2019). Besides that, food quality is related to the attributes of food that customers expect. The three primary elements that determine food quality are taste, appearance, and quantity (Yildiz, E., & Yildiz, S., 2015).

Customers are using these technologies more frequently because they believe they offer independent transaction benefits (Lee and Lu, 2016). With the use of self-service technologies, customers can create self-service offerings without asking for the help of staff (Meuter et al, 2000). Other than that, quality control must verifies desire to be put in place in self-ordering systems in order to increase order accuracy. These checks help in identifying and resolving any issues or problems before orders being filled or delivered to customers.

2.3.1 Customer Satisfaction

Satisfaction as the difference between actual and expected results after using a product or service (John Dudovskiy,2012). Customer satisfaction had been a crucial factor in marketing for decades, influencing factors like brand loyalty, repeat business, and attitude changes that happens after a customer makes a purchase. Customer loyalty and business profits had a direct relationship with customer satisfaction (Sabir Ghafoor,2014). (Hong,2018) found that customer satisfaction was positively impacted by delivery speed and ease of use, and that customer satisfaction also positively impacted future willingness to use Self-ordering kiosks. When a customer feels satisfied with a specific result, they recommend the brand to others or spread good word of mouth (Hurst,2012). By implementing such technology, restaurants may improve customer satisfaction and service efficiency while making eating more exciting and gratifying (Dhingra, 2018).

The ability to choose has an effect on customer satisfaction (Ali,2016). Like when given the option to select their own menu items, customers of restaurants may be happy and provide positive reviews. Other than that, if goods or services meet customers' expectations, they may become loyal customers (Hanaysha & Hilman, 2015). Customer satisfaction was influenced by a lot of variables, such as taste, promotion, physical design, price, physical environment, and product and service quality. The two main elements that this earlier study showed had the biggest effects on customer satisfaction were physical design and service quality (Manjunath,2016). (Bhagat,2016) had the same general objective but stated some additional elements that affect customer happiness, such as healthier fast food menus and brands; however, it was discovered that environmental factors and physical design had no having on satisfied customers. According to the study, the most important variables are variety, taste, price, and staff or service quality.

Customers are thought to be the blood functions' lifeblood (Barlan-Espino, 2017). Therefore, a company needs customers to remain in business. They are the ones who consistently have a significant impact on the fast-food establishment. Thus, one factor contributing to the expansion and prosperity of fast-food restaurants is customer satisfaction with the food and operational services. In order to successfully serve their customers, fast-food establishments need to

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understand their needs and requirements. It is possible to define customer satisfaction as satisfying the needs of the customer (Rajput & Gahfoor, 2020).

2.3.2 Operational Efficiency

The value of operational efficiency. As the spread of services in today's society has increased, the industry has continued to grow. Individuals depend more on a wide range of services to simplify and ease their lives. In order to maintain loyal customers and positive customer satisfaction, services must continue operation efficiently (Ghimire,2012).It can happens when the right people, processes, and technology are brought together to deliver goods or services to clients by changing basic steps in response to changes in the market (Apruebo,2010). One of the elements that makes the business operate more efficiently is the kitchen and dining area. (Maguire,2014) stated that kitchen operations use a lot of resources, and by enhancing building systems, efficient operations would lower the utilization rates.

The need for the business to reduce waste while protecting the resources that are most important to its ability to turn a profit (Hackfurth,2014). Efficiency is related to layout, which takes look at physical resources as a whole, such as the location of equipment storage, as well as design elements that optimize the flow of materials and customers (Greasley,2013). It is because as soon as food enters the kitchen, proper storage must begin. Food must be kept in storage at the right temperature for a reasonable amount of time.Using the correct paperwork for receiving and issuing supplies, maintaining an accurate and current inventory of food items, regularly evaluating the state of food that has been stored, and rotating supplies based on the first-in, first-out (FIFO) system to reduce spoiling are all examples of efficient storeroom management (Drysdale,2010).

A more effective supply strategy would be to identify ingredients that are seasonal and at times unavailable early in the conceptual stage (Barrish,2013). Similar to this, sanitizing and cleaning equipment is a crucial part of the food safety program since food comes into contact with tools and equipment.Equipment has to be properly cleaned and sanitized to prevent this from happening. Ensure that both customers and employees are safe in the workplace. Workers must receive training

on how to operate the equipment properly (Drysdale.2010). In addition to the before stated issues, businesses also need to make sure that the right people are bringing the best processes with the influence of the newest technologies (Montoya,2011).

2.3.3 Cost Reduction

It may be difficult to save expenses while improving order accuracy because doing so frequently necessitates investing in technology and process enhancements. Regularly review processes, identify bottlenecks, and implement improvements to reduce costs and enhance accuracy over time. As we know, The use of the kiosk must be simple and easy (Filieri et al., 2015). Self-ordering kiosks are one example of a modern and imaginative application (Yeo et al., 2017) because good inventory management aids in supply chain optimization, carrying cost reduction, stockout prevention, and operational efficiency enhancement.Businesses can shorten the amount of time that inventory is maintained in stock by using effective inventory management, which lowers the carrying costs for taxes and finance. To influence a customer's purchasing behavior either directly or indirectly, it should be a reliable predictor (Jeon et al., 2020).

(E.Newton,2021) more said that the most impactful and applicable technologies for the business were self-service kiosks, mobile apps, robotics, and the Internet of Things (IoT). For effective operation, every restaurant, especially fast-food chains, needs technology that stays up to date with current trends (Toast,2023). McDonald's, one of the largest fast-food chains, has integrated digital menu displays, electronic payment systems, and artificial intelligence (Wulan,2022). Because technology is very important in life today, McDonald's had to cut cost which its their not use human energy but it use self-ordering kiosk for cost reduction. To cost reduction, McDonald's believes that a self-order kiosk will make customers feel more at ease when placing orders because it offers the menu in digital form and lets users choose what they want by touching the device's display. These kinds of technological developments are changing the capabilities of systems and service departments, which has an impact on the customer experience (R.N.Bolton.et

al.,2018). Offering a self-order kiosk allows an to offer a service that attracts customers in more successfully (O.Z.Jian et al,2019).

According to Venkatesh et al. (2012), the pricing value communicates the monetary cost to the consumer of adopting technology. (Tsai,2019) said that a touchscreen device that allows users to discreetly provide services without staff involvement is referred to as a self-service kiosk. The traditional interaction between the service provider and the customer is being replaced by Self-Ordering kiosk (S.A.Yaacob at all,2021) customers are able to place orders on their own (N.Rosyidah,2021). With using this Self-Ordering kioks it help business management in a variety of ways. It directs management toward achieving defined goals.

2.3.4   Reduce Complaints and Return

McDonald's should try to reduce complaints and returns by improving order accuracy. Businesses may increase customer happiness, lower expenses related with returns, and boost overall operational efficiency by making sure orders are fulfilled accurately and completely.(Escobar-Rodrguez,2013) price value orientation refers to the financial gains made by the customers. Efforts done by organizations to reduce the volume of client complaints and product returns are referred to as "reducing complaints and returns." Customers can complain or return an item for a refund or exchange if they are unhappy with their purchase or have problems with the goods or service they receive. Perceived value, comprising perceived quality and felt offering, acts as a link in the negative correlation between price and students' intention to purchase, protecting the fast-food industry in Malaysia (Xioa,2018). Price has an impact on customer satisfaction and the purchase intentions of fast-food customers (Khan,2013).

Complaint is defined as helpful information or criticism regarding past actions or behaviors from an individual or group; therefore, by illuminating market feedback, they can improve the current situation or further actions and self-behavior (Williams et al., 2015). Social influence is an understanding of how much influential people agree with their particular behaviors (Wang,2020). Social influence is the

result of those close to the person using a new system having an impact on the person's behavior (Na et al, 2021). While using a self-ordering kiosk it can have a complaints from customers who didn't know how to use it. Individuals that are very close to are given the power to influence and persuade for everything and they also tend to think that using new technology is important (Jeon et al., 2020).

2.4 Enhanced Customer Experience

Improving customer experience is a key component for firms trying to build customers loyalty and growth. It entails putting a lot of effort into enhancing each interaction a customer has with your business, from the first point of contact through the whole customer experience. In desire to maintain their competitive edge, companies try to increase customer satisfaction, thinking that doing so will improve organizational outcomes.(Martíneztur et al., 2011). Customer loyalty, brand reputation, and customer pleasure can all be increased by continually providing exceptional customer service. Customers would adopt technology if they found it to be fun and interesting (Lee et al., 2019).Understanding customer needs is an ongoing process. Customers are anticipated to repeatedly use these applications as long as they are happy with their experience using a service technology(Amoroso and Lim, 2017).

Futhermore, improving the customer experience requires employee involvement and training. Employees are better able to provide outstanding service and have pleasant relationships with consumers when they are interested, motivated, and well-trained. According to Morosan and DeFranco's (2016) research, there is a considerable correlation between customer technology use intention and habit. Because the customer experience can be dramatically impacted by motivated and knowledgeable personnel.It entails customizing goods, services, and interactions to each customer's particular requirements, preferences, and traits. Businesses may build stronger relationships, improve consumer happiness, and encourage long-term loyalty by offering individualized experiences.

Personalization strives to improve customers' contentment, loyalty, and overall relationship with a business by making their experience more relevant and interesting. However, it's crucial to make sure that personalization initiatives are carried out in a responsible and privacy-aware manner, respecting client choices and legal requirements for data protection. According to Self-ordering kiosks, customer satisfaction would rise as a result of working with self-ordering kiosks, which would have a good impact on commitment (Eriksson and Nilsson, 2007).

2.4.1 Empowerment and Control

For there to be effective control, each activity or function must be assigned to a capable manager or supervisor, who will then provide them with an operating statement on time that includes information about standard, actual, and variable expenses along with recommendations. Enhancing the customer experience requires empowerment and control on all parties. Giving customers the skills, knowledge, and authority to make knowledgeable decisions and take independent action is known as empowering them.Restaurant operators must understand how to use technology advancements to their advantage in order to sustain client loyalty and concurrently attract new customers (Issa et al., 2018). Self-ordering kiosk technology may have emerged as a reaction to the debacle of quick-service restaurant services and to increase worker productivity (Jeon et al., 2020).Like, personalized communication channels. Giving customers the freedom to select the methods of contact that work best for them (such as phone, email, chat, and social media) offers them power over how they interact with their business.

According to Anselmsson (2001), customers want some sort of control over a procedure or result. In the meantime, in order for the consumer to have control over the Self-ordering kiosk, they must comprehend it to some degree or receive instructions on how to use it (Lee & Allaway, 2002). According to Collier's (2006) research, consumers who have more control over how they use Self-ordering kiosk will have a more positive attitude toward it as a result of feeling less anxious overall and inwardly tense when using it.

According Füller et al. (2009), customers' readiness for online value co-creation was found to be largely influenced by their perceptions of empowerment and enjoyment, while Lee and Allaway (2002) demonstrate the effects of "personal control" on adapting to SSTs. Adoption of SSTs is known to depend critically on one's "attitude towards SSTs" (Curran and Meuter, 2005, Dabholkar and Bagozzi, 2002). Curran et al. (2003) developed the SST Attitude-Intention Model, which provides a clear explanation of how customers' attitudes toward SSTs affect their intention to choose. Lee and Lyu (2016) identified "personal values" and "consumer traits" as critical factors in influencing customer attitudes and an intention to use SSTs.

2.4.2   Convience and Speed

The term "convenience" relates to how quickly, easily, and easily a customer may interact with a business or access its goods or services. It entails minimizing customer effort and ensuring that the experience is as seamless and trouble-free as is practical. The main goals of convenience are to reduce friction, do away with extra steps, and offer smooth interactions. On the other side, speed describes how quickly and effectively customers' wants are satisfied. If customers believed a new system would save them time and effort in comparison to the current system, they would be more willing and confident in applying it (Dwivedi et al., 2017).

Customers were more focused on service speed than just food and atmosphere. Restaurant managers should prioritize placing more emphasis on the business system, including staff training that will increase service speed.(Parsa,2013) .To ensure customer satisfaction, companies should prioritize the quality of their products and services. Creating contentment has a number of advantages for the quality movement. (Apruebo,2010)

Customer satisfaction can be attained by offering excellent services to customers, such as being friendly, helpful, and alert of those in need, as well as respectful, welcoming, and ready to serve with a smile.(Perdigon,2009). Since employees are the ones who interact directly with guests, management has a

responsibility to ensure that they follow hygienic practices. One way to do this is by requiring kitchen staff to wear an apron and safety caps in addition to their full uniform, which is an advantage in promoting a hygienic culture. (Abdullah,2013).Last but not least, the ambience, cleanliness, and comfort of the seats in a restaurant can all improve the whole dining experience and influence customers' propensity to make a purchase. Furthermore, consumers are still drawn to pricey eco-friendly products (Mukaromah, Kusuma, & Angraini, 2019).

2.4.3 Personalization and Upselling

Customizing goods, services, or experiences to a customer's unique needs, preferences, and attributes is referred to as personalization. People use technology because they find it enjoyable and find the process to be more engaging when they finish it. Customers are more likely to use a technoloapplications based on technology that directly increase customer decisions to use them. People are more likely to be enthusiastic about utilizing new technology when it provides them with an enjoyable experience when used for service-based purposes (Ulaan, Pangemanan, & Lambey, 2016). When consumers can try self-service technology that has an enjoyable element, they are more likely to feel satisfied and repeat the behavior (Norazah & Norbayah, 2011).

Businesses employ personalisation and upselling as techniques to improve customer satisfaction and spur revenue growth. Escobar-Rodrguez and Carvajal-Trujillo (2014) discovered that facilitating conditions positively influence the intention to make an online transaction.Upselling entails recommending more expensive or improved choices to clients in order to boost their spending and happiness, whereas personalization is on delivering a unique and tailored experience for each customer.

Self-ordering kiosks, according to Liu et al. (2010), indicate customers will be ready to use a technology if they perceive it to be user-friendly. This indicates that technology usability has a major influence on users' willingness to use it. The user thinks that newly developed technology will ease their life and reduce

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the amount of work involved in finding information (Holdack, Lurie-Stoyanov, & Fromme, 2020).

2.4.4 Visual and Detailed Menu Presentation

The way a menu is graphically created and presented to guests with the intention of improving their overall eating experience is referred to as visual and detailed menu presentation. By implementing such technology, restaurants may improve customer satisfaction and service efficiency while making eating more exciting and gratifying (Dhingra, 2018) This aspect emphasizes the menu's aesthetic design. In order to make an appealing and aesthetically pleasing menu, it is necessary to include appealing design elements, such as colors, fonts, photos, and layout.

According to Jeon et al. (2020), the elements of facilitating conditions reflect easy-access screen capacity in terms of touch speed, system composition, and screen movement from the viewpoint of self-ordering kiosk technology.A self-ordering kiosk, also referred to as an interactive kiosk, is a small, self-sufficient structure that is used to display information or make operations easier.(Eleni,2019). McDonald's offers self-ordering kiosks, which are large touch screen devices that let customers place food orders, personalize meals, and pay their bills without having to deal with staff.

Regardless of the fact that technology has changed the food service sector in Malaysia over time, the sector has not yet adopted Self-ordering kiosk or digital ordering.(Izzat Zulkifly,2019). because of the high cost of implementation. In actuality, this technology relieves a restaurant's financial strain over the long term. (Park,2017). More and more fast food chains, like McDonald's, are using Self-ordering kiosk as a practical tool to help them with growing customer demand and resolving uncertainties in the new service setting.

2.5 Service Respond Time at McDonald's

The time it takes for a self-ordering kiosk to react to a customer's input or request is known as the service response time. This may involve the time it takes for the menu to load, for the kiosk to process an order, or for the kiosk to start dispensing food or beverages.There are several variables that might affect the self-ordering kiosk's service response time, including the kind of kiosk, the software it runs, and the hardware it uses. Service respond time its more important especially at fast-food restaurant. Because it will occur when customers become aware of how long they have to wait in any fast-food establishment. Customers will be more satisfied with the restaurant if they are pleased with the wait time (Naik, Gantasala & Prabhakar, 2010).

In the restaurant industry, service respond time should come first and foremost for customers. In essence, customer satisfaction can be defined as discernment less desire, even though measuring is difficult. Customer satisfaction is significantly influenced by the customer's viewpoint and desires (Afzal, 2013). While waiting times stress customers, high-quality service and comfortable surroundings contribute to a higher degree of customer satisfaction (Baird, 2014). Regular clients typically have more reasonable expectations than sporadic ones. According to some researchers, waiting time satisfaction is related to customer expectations and satisfaction (Monroe, 2012). When customers visit restaurants for the first time, they exhibit a variety of reactions. In this instance, a single incident has the power to alter a customer's perception from the outset. Thus, it is crucial to deliver excellent service and create a comfortable environment.

A self-ordering kiosk's service response time can vary based on several factors, including the complexity of the order, the volume of customers using the kiosk, and the staff members on hand to assist customers.Self-service kiosk adoption contributes to shorter wait times, more convenient transactions, better menu design, and higher order accuracy.(Rastegar,2018) On the other hand, 1-2 minutes is the average service response time for a self-ordering kiosk.This says that after placing their order at the kiosk, a customer can anticipate finishing it and receiving their food or drink in one to two minutes. This is a lot quicker than the typical wait time for food preparation and serving after a cashier receives an order.They said that

only when one server serves one customer at a time can the system's efficacy be assessed.(Ismail and Shokor ,2016)

2.6 Research Framework

Research framework is an organized strategy or model known as a research framework directs the planning, execution, and analysis of a research endeavor. It offers a methodical and logical framework for doing research and guarantees that all pertinent components of the study are taken into account.

Independent Variable

Dependent Variable
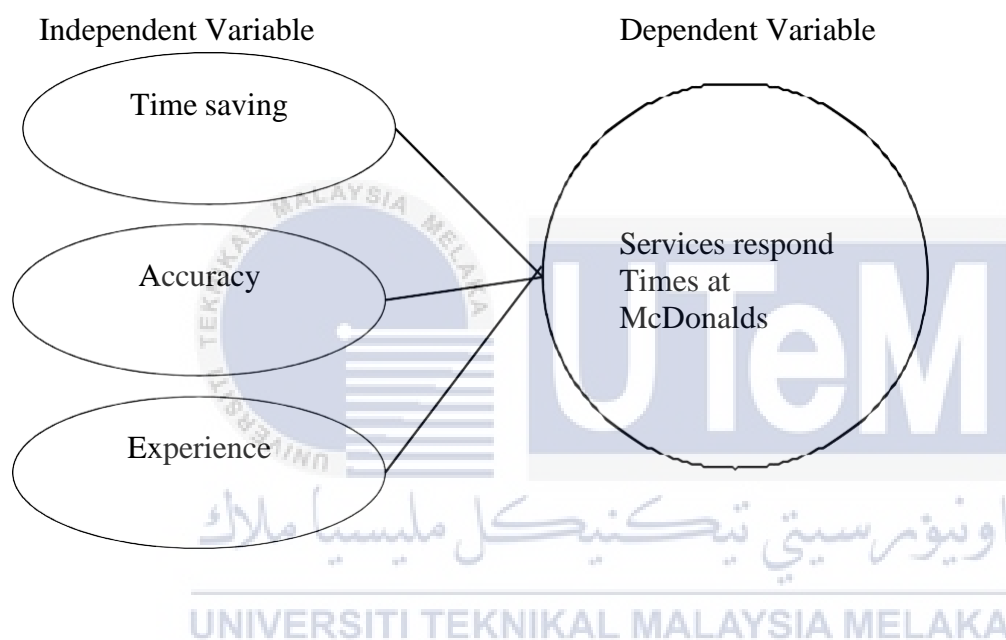
Figure 1: Research Framework Independent Variable and Dependent Variable

2.7 Research Hypothesis

H1: There is a significant relationship between the time saving and the service respond time at McDonald's.

H2: There is a significant relationship between the accuracy and the service respond time at McDonald's..

H3: There is a significant relationship between the experience and the service respond time at McDonald's.

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CHAPTER 3

RESEARCH METHODOLOGY

3.1   Introduction

The methodology used for research will be explained in this chapter. There are procedures to follow when conducting a quantitative study. It is also necessary to describe the producers and procedures employed. The analytical method is one of the elements of the research process. As a result, research methodology describes particular procedures or methods that incorporate research methodology into the study, the approaches, and the research design. The method for conducting research should be done in a sequential manner.

3.2   Research Design

The "procedures for collecting, analyzing, interpreting, and reporting data in research studies" are known as a research design.(Creswell, 2007). It is the general strategy for linking the relevant (and possible) studies to the conceptual research concerns. In other words, the study design establishes the process for gathering the necessary data, the techniques to be used to do so, and how all of this will help to answer the research question.(Grey, 2014). The broad strategy or plan that describes how a research study will be carried out is referred to as the research design. It contains the precise approaches, procedures, and methods that will be used to gather and evaluate data as well as the justification for these decisions. Data collection is

guaranteed to be valid, reliable, and pertinent to the research question or hypothesis being examined by a well-designed research project.(Smith, 2019).

Exploratory research is usually conducted when a researcher has just begun an investigation and wishes to understand the topic generally. Descriptive research aims to describe or define the topic at hand. Explanatory research is aims to explain why particular phenomena work in the way that they do.(Robson,2002). Because every design has a different ultimate goal, his classification system is based on the study area's aim. For instance, a descriptive study's goal is to paint a picture of a scenario, person, or event or to demonstrate how various elements interact to one another and occur naturally. (Blumberg,2005). Descriptive studies, on the other hand, are considerably more appropriate for a newly discovered or understudied field of research because they do not attempt to explain why an event occurred.(Punch, 2005).

When there is insufficient information regarding a phenomenon or a problem that has not been precisely identified, exploratory research is conducted. (Saunders et al., 2007). It only aims to study the research issue in various depths rather than attempt to offer complete, definitive solutions to the research questions. As a result, its focus is on solving brand-new issues for which little to no prior study has been done.(Brown, 2006). Even in the worst case scenario, exploratory research establishes the first research design, sampling strategy, and data gathering technique and serves as the foundation for more conclusive research.(Singh, 2007).

3.3   Research Methodology

The three main methodologies or approaches for conducting research are qualitative methods, quantitative methods, and mixed methods.(Creswell, 2003). The methodical and organized process that researchers use to carry out their studies or inquiries is referred to as research methodology. It involves the overarching framework and tactics used to collect, examine, comprehend, and communicate facts and conclusions. Research design, data collection procedures, data analysis strategies, and ethical considerations are only a few of the components that research methodology involves. Given that this research requires all data collection and

analysis, a quantitative technique is used to answer the research questions. In this study, researcher use quantitative method .

3.3.1 Quantitative Research

Statistical methods are used to assess numerical data collected for a quantitative study in order to understand a phenomenon.(Gunderson,2000). It is a method in which the researcher uses techniques for investigation, such as surveys and experiments, and gathers information using specified instruments that provide statistical data. (Creswell, 2003). The biggest benefit of quantitative research is that its techniques provide accurate, quantifiable results that may be extrapolated to a vast population.(Marshall, 1996). In disciplines like psychology, sociology, economics, education, and the natural sciences, quantitative research is frequently employed. It gives scientists the tools they need to conduct statistical analyses, measure variables, look at cause-and-effect correlations, and make predictions. It is crucial to keep in mind that there are many different research procedures, and that the usefulness of a particular strategy relies on the study's goals, setting, and research issue. Additionally, it is appropriate to verify and validate previously developed theories about how and why occurrences occur by the testing of hypotheses that are developed prior to the collection of data.

3.4 Location of Research

This study was conducted in Jasin,Malacca. The rationale behind this choice is from the understanding that Jasin, Melaka is a popular location where all the people spots are located and their operations are centered in this region. All the locals including the residents of the state itself like to come in Jasin, Melaka. Besides that, company McDonald's also open new branch in this place to get more customer. The strategic place make them to open other franchise in this place. Therefore, there is a possibility to get all the necessary and relevant data from this place.

3.5 Research Strategy

To succeed to answer research questions and achieve research goals, the research strategy is needed (Saunders et al.,2015). In this study, a survey or questionnaire method was employed to comprehensively analyze the the effectiveness of Self-Ordering Kioks on service respond time at McDonald's. Following the research framework, the survey was divided into four sections to gather respondent information, covering demographics, independent variables (reduce wait times,increase order accuracy and enhanced customer experience), and the dependent variable (Service Respond Time at McDonald's).

For the purpose to assess the correlations between the independent and dependent variables, the research survey was created using a five-point Likert scale. Rensis Likert invented the Likert scale, which is simple to use when creating survey statements and permits the collection of particular viewpoints (Johns, 2010). The scale went from 1 (strongly disagree) on the negative end of the range to 5 (strongly agree) on the positive end. Respondents can effectively express their opinions thanks to this scale selection, which also offers an organized method for data analysis.

Table 3.1: Five-point scala Likert

Strongly Disagree	Disagree	Somewhat	Agree	Strongly Agree
1	2	3	4	5

3.5.1 Survey Method

The typical survey question is "what," "who," "where," "how much," or "how many," with an emphasis on current events and no need to regulate behavioral occurrences(Yin, 2009). According to (De Vaus ,2002), Surveys may provide information on qualitative or quantitative data collection methods.This involves questionnaires method. By responding inquiries concerning the kind of post-contract

cost control strategies utilized, the number of techniques used, and the evaluation of these approaches, the survey strategy described by (Yin ,2009) indicates the category of approach to this study. The survey strategy is the most suitable for this kind of research. The end goal, which entails the establishment of a kaizen costing framework, would require the survey strategy to be quantitative, in this case including surveys(De Vaus,2002). The questionnaires will be organized using a Likert scale format. This is crucial since the development of the kaizen costing structure necessitates the input of multiple parties.

Table 3.2: Section for Questionnaire

Section A	Demographic
Section B	Independent Variable
Section C	Dependent Variable

3.5.2   Questionnaire Development

Table 3.3: Questionnaire Development Table

1.	Section A : Demographic	Sources
	1.Gender	Sulaiman and Chau (2021)
	2.Age	
	3.Races	
	4. Occupation	
2.	Section B : Time Saving	
	1.Self-ordering kiosk is easy to use.	Roland et al. (2017)
	2.Using self-ordering kiosk is fun	
	3.I prefer to use self-ordering kiosk	
	4.The self-ordering kiosk is well maintained.	
3.	Section B : Accuracy	
	1.Use of self-ordering kiosk gives me satisfaction.	

	2.The self-ordering kiosk reflects my order correctly.	Yu et al. (2021)
	3.The costs incur at the self-ordering kiosk is worth it.	
	4.I will choose to use self-ordering kiosk	
4	**Section B : Experience**	
	1.All product items are exhibited by the self-ordering kiosk.	Silva et al. (2021)
	2.The kiosk makes self-ordering process convenience.	
	3.It is also easy to mix-and-match my order on the self-ordering kiosk	
	4.The screen of the self-ordering kiosk is readable	
5.	**Section C : Service Respond Time at McDonald's**	
	1.The self-ordering kiosk software works accurately.	Liao et al. (2014)
	2.The speed of kiosk service is fast	
	3.The kiosk gives clear self-ordering instructions.	
	4.The restaurant staff will apology for any delay in service.	
	5.Overall, using the self-ordering kiosk makes me satisfied	

3.5.3 Sampling Size

Determining the appropriate sample size to study the effectiveness of Self-ordering kiosk on service respond time at McDonald's.To be able to ensure the validity and generalizability of study results, sample size is important.

The right sample size needs to be chosen after taking look at many of variables. These variables include the intended degree of accuracy, the anticipated impact size, the population's diversity, and the amount of statistical power needed for the investigation. Furthermore, the particular research design, including the statistical

method and sampling strategy selected, may also have an impact on sample size analysis.

Given the importance of the research topic and the intention to investigate the influence of reduce wait times, increase order accuracy and enhanced customer experience, it is beneficial to aim for a sufficiently large sample size. More representative results and higher statistical power of the analysis are produced by larger sample sizes, which also produce stronger and dependable outcomes.

It is important not to forget that the sample size should be determined by taking all of the time constraints, resources that are available, and the effectiveness of data collection. As a results, a sample of 306 respondent by McDonald's loyal customers in Malaysia will be used to establish the sample size for this study. The sample size for this research will be based on Morgan and Krejcie (1970) sample size table.

Table 3.4 Krejcie and Morgan (1970) sample determination table

Table for Determining Sample Size from a Given Population					
N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368

3.5.4 Population and Sample

The targeted population for this research is the the effectiveness of Self-Ordering Kiosk on service respond time at McDonald's based on Krejcie and Morgan table. Total sample draw from the population mentioned above are 306 respondents due to the population in this research is 154 300 population. In this research, have 233 respondent has returned their survey. 233 usable survey data which its 76.1% data is complete. 73 respondent not returned the survey which its 23.8%.

3.6 Time Horizon

In this part, it was divided into two types. Which it longitudinal study and cross-sectional study(Saunders et al. 2012). In this research, cross- sectional study will be choose because it will be done where data will only be collected only once because the limited time constrain of the research.

3.7 Data Analysis.

The Statistical Package for Social Sciences (SPSS) will be utilized to analyze the data in this investigation. In quantitative research, SPSS is an invaluable tool for organizing large datasets and evaluating techniques for data collection and tabulation. SPSS will be used in this study to guarantee the validity, accuracy, and reliability of the data. It will also make it easier to explore and enhance the variables that are being studied.

Version 27.0 of SPSS was used by the researchers to examine the questionnaires. With this method, one variable can be significant for descriptive statistics in a two-variable analysis. After that, the data will be characterized and assessed using the statistical analysis. To effectively present the results, descriptive statistics, validity analysis, reliability analysis, and Pearson correlation analysis will be used.

3.7.1 Descriptive Analysis

Researchers can learn important features and patterns within a dataset by using descriptive analysis, a statistical method that is essential to the meaningful summarization and presentation of data. When examining the effectiveness of Self-ordering kiosk on service respond time at McDonald's ,descriptive analysis becomes instrumental in providing a comprehensive overview of the variables involved.

Researchers can effectively summarize and present important information about accuracy, experience, and time savings by using descriptive analysis techniques. A simple but effective summary of the data is provided by descriptive statistics and visualizations, making it possible to identify trends, patterns, and possible relationships between these variables. It is important to remember that although descriptive analysis sets the basis for more in-depth investigation and interpretation, it cannot establish connection or measure the degree of associations between variables.

3.7.2 Reliability (Cronbach's Alpha)

An evaluation known as reliability analysis establishes the dependability of the measuring device used in the research. When the same instrument is used repeatedly, it measures the consistency of the measurement results over time to show how dependable and consistent the measurements are. In order for data to be considered "reliable," it must consistently produce the same outcomes for the same subject or study under various conditions. In the same way, surveys are considered trustworthy if participants consistently provide accurate responses.

SPSS for Windows will be used in the study to assess dependability. Before using the questionnaire as the main research tool, a trial run will be carried out to make sure that the data are valid and trustworthy. The purpose of the trial is to ascertain how accurately the instrument measures the parameters it is supposed to. If the answers to a question stay the same over time, then the question is dependable. Specifically, the Cronbach Alpha statistical test will be used in the reliability

measurement, which will be conducted with the SPSS software. If a variable's Cronbach's Alpha value is more than 0.60, it is regarded as reliable.

3.7.3 Correlation (Pearson Coefficients)

An analytical method for assessing the importance and direction of correlations between independent and dependent variables is Pearson's correlation analysis. It determines how strongly the variables interact and yields a correlation coefficient, often represented by the letter "r," which ranges from -1 to 1. A perfect negative relationship is denoted by a -1. In addition, 1 represents a perfect linear relationship, whereas 0 is random.

Table 3.5: The Pearson Correlation Coefficient range

Range of Absolute Correlation Coefficient (r)	Strength of Correlation
0.8-1.0	Very strong
0.6-0.79	Strong
0.4-0.59	Moderate
0.2-0.39	Weak
0-0.19	Very weak

The researcher will perform a Pearson correlation analysis in this study to examine the relationship between reduce wait times, increasing order accuracy , and enhanced customer experience. The relationship between reduce wait times, increasing order accuracy , and enhanced customer experience will be calculated by calculating the correlation coefficient (r). The correlation coefficient will show the strength and direction of the relationship between these variables.

3.7.4 Validity Analysis

The relationship between the research data and the real objects under study was evaluated by the validity test. The Windows platform's Statistical Package

for the Social Sciences (SPSS) was utilized for this assessment. The measuring tools were questionnaires, and the validity of the surveys depended on how well they captured the desired measurements. When the questions on a questionnaire accurately reflect the characteristics that are meant to be measured, it is considered valid.

The correlation between item scores and total scores will establish the validity. Spearman rank correlation was used if the data were ordinal, and product-moment correlation was used if the data were interval. The findings could be used to assess the validity of each question item, which remained in for the research indicators.

Assessing the validity of the instrument required contrasting the computed "r-statistic" with the crucial "r-table" values. The conclusion can be summed up like this:

- If the significance (sig) value of r is less than 0.05 or the calculated r-statistic is larger than the critical r-table value, the item is considered valid.
- If the calculated r-statistic is less than the critical r-table value or the significance value of r is more than 0.05, the item is deemed invalid. In these situations, it is best to discard the invalid item or items and repeat the analysis process with the valuable items only. Retesting with the correct item is necessary if there is an invalid item.

In conclusion, by comparing the obtained r-statistic with the critical r-table values and correlating the item scores with the total scores, the validity of the questionnaire items representing the research indicators was evaluated. After removing any invalid items, the analysis was carried out with the remaining valid items.

3.7.5 Linear Regression

An algorithm known as "linear regression" uses a linear relationship between an independent and dependent variable to forecast future events. It is a statistical technique for predictive analysis used in data science and machine

learning.(Vijay,2023).The predictor or explanatory variable that does not change as a result of changes in other variables is also known as the independent variable. But variations in the independent variable also affect the dependent variable. The response or outcome variable under analysis or study is known as the dependent variable, and the regression model predicts its value. Which its:

> X-axis = Independent variable
>
> Y-axis = Output / dependent variable
>
> Line of regression = Best fit line for a model

3.7.6   R Square

In linear regression, the R-squared (R^2) statistic is a measure of how well the regression model fits the observed data. It gives an indication of the percentage of the dependent variable's variance that can be accounted for by the model's independent variables. Higher numbers suggest a better fit of the model to the data, and R-squared runs from 0 to 1. Mathematically, R-squared is defined as the proportion of the total sum of squares (SS total) of the dependent variable that is explained by the regression model. R-squared is interpreted as the proportion of the dependent variable's overall variation that is accounted for by the model's independent variables. If R-squared is 0.80, for instance, it means that the independent variables in the model can account for 80% of the variation in the dependent variable, while the remaining 20% is attributed to chance or other factors that the model does not account for. It's crucial to remember that R-squared does not, by itself, assess the reliability or validity of a regression model. The coefficients' statistical significance, the suitability of the model assumptions, or the model's level of predictive accuracy are not disclosed by this goodness-of-fit measure. When interpreting the outcomes of a linear regression analysis, these factors should be assessed along with R-squared.

3.7.7 F Value

The F-value is a statistical metric used in linear regression to evaluate the overall significance of the regression model. It is calculated by contrasting the variability that the regression model can account for with the variability that it cannot. An analysis of variance (ANOVA) test, specifically the F-test, is used to determine the F-value. The explained sum of squares, or SS regression, is the variation in the dependent variable that the regression model can account for. The residual sum of squares, or SS residual, is the variation in the dependent variable that the model cannot account for. (p, n - p - 1) degrees of freedom, where p is the number of predictors and n is the number of observations, are connected with the F-value. A critical value drawn from the F-distribution with the corresponding degrees of freedom is compared to the F-value. The regression model is said to have a statistically significant overall effect in explaining the variability in the dependent variable if the calculated F-value is greater than the critical value. In other words, there is proof that the dependent variable and at least one of the model's predictors are significantly correlated. The p-value, which denotes the F-value's statistical significance, is frequently reported along with it in reports. A low p-value (usually less than a predefined significance level, such as 0.05) denotes the statistical significance of the regression model. The F-value and its p-value are indicators of the overall significance of the regression model but not of the strength or direction of the individual predictors. For so, you would need to study the individual coefficients and their accompanying statistics.

3.7.8 T Value

The t-value is a statistical metric used in linear regression to evaluate the significance of each coefficient (parameter) in the regression model. It shows the contribution that a specific independent variable makes to the dependent variable's prediction. The estimated coefficient is divided by its standard error to get the t-value. A crucial value drawn from the t-distribution with the required degrees of freedom is compared to the t-value. The estimated t-value shows that the relevant coefficient is

statistically significant if it is greater than the critical value (usually at a predefined significance threshold, such as 0.05). There is proof that the independent variable significantly affects the dependent variable, to put it another way.

The sample size and the number of predictors in the model are typically what determine the degrees of freedom for the t-value. The degrees of freedom for a linear regression with a single independent variable would be (n - 2), where n is the total number of observations. For multiple linear regression with p independent variables, the degrees of freedom would be (n - p - 1). The associated p-value is typically supplied along with the accompanying t-value. Under the null hypothesis that the coefficient is equal to zero, the p-value is the likelihood that a t-value as extreme as the computed one will be seen. The coefficient is statistically significant if the p-value is low (typically less than the predetermined significance level). It can identify which factors have a significant impact on the dependent variable and which ones do not by using the t-value, which offers details about the importance of each individual predictor in the regression model.
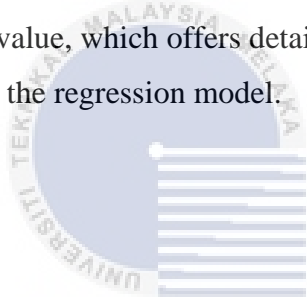
3.7   Summary

In this chapter, the researcher will describe the approach customers to conduct this study. The research strategy involves careful planning to ensure the collection of accurate data. To gather information on the time saving,accuracy and experience of effectiveness of self-ordering kiosk, an online questionnaire survey was chosen as the primary data collection method. To obtain the required data, a sample of respondents was selected.

Before distributing the actual questionnaire survey, it is important to conduct a pilot test to ensure its effectiveness with the target audience. The pilot test serves the purpose of testing the questions to ensure they are appropriate and comprehensible to the respondents. The researcher aims to achieve accurate data collection, so it is crucial to refine the language used in the questionnaire, ensuring it is easy to understand.

Moreover, bilingual language is utilized to cater to respondents who may not fully comprehend the questions, ensuring the certainty of their responses. By following this methodological approach, the researcher aims to gather reliable and

meaningful data regarding the relationship between time saving,accuracy and experience of the effectiveness a self-ordering kiosk on service respond time at McDonald's

CHAPTER 4

RESULTS & DISCUSSION

4.1 Introduction

A thorough explanation of the data analysis of the research findings as a consequence of numerous statistical tests is given in this chapter. The Statistical Package for Social Science (SPSS) version 27.0 was utilized by the researchers to analyze all of the data. For the data analysis in this study, descriptive statistics and frequency tests were the statistical approaches employed. The researcher also tested hypotheses using the Multiple Regression Analysis test and the Pearson Correlation test.

4.2 Descriptive Statistic for Respondent Profile

Descriptive statistical analysis was employed to find the frequencies and percentages for each question in the questionnaire. Data were obtained from self administered questionnaires, completed by 233 respondent (n=233), a 60% response rate. Assuming that only half of the total population of 306 respondent.

4.2.1 Gender

The results of the gender of 233 respondents are as shown in the table below. A total sum of 133 male participants (57.1%) and 100 female participants (42.9%) participated in the survey research.
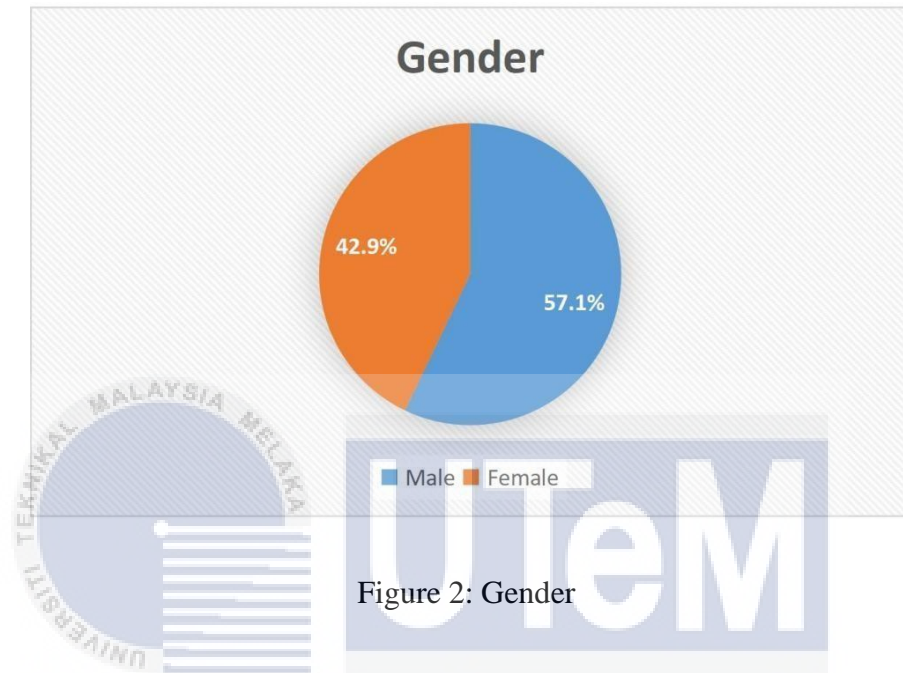

Figure 2: Gender

4.2.2 Age

The ages were grouped and separated into fifth classification. The majority of the participants fell within the age group of 34-41 at a percentage of 26.2%. This is accompanied by the age groups categories below 18 years old, 18-25 years old, 26-33 years old and 42 years old and above with percentages of 24.0%, 20.2%, 16.3% and 13.3% respectively.
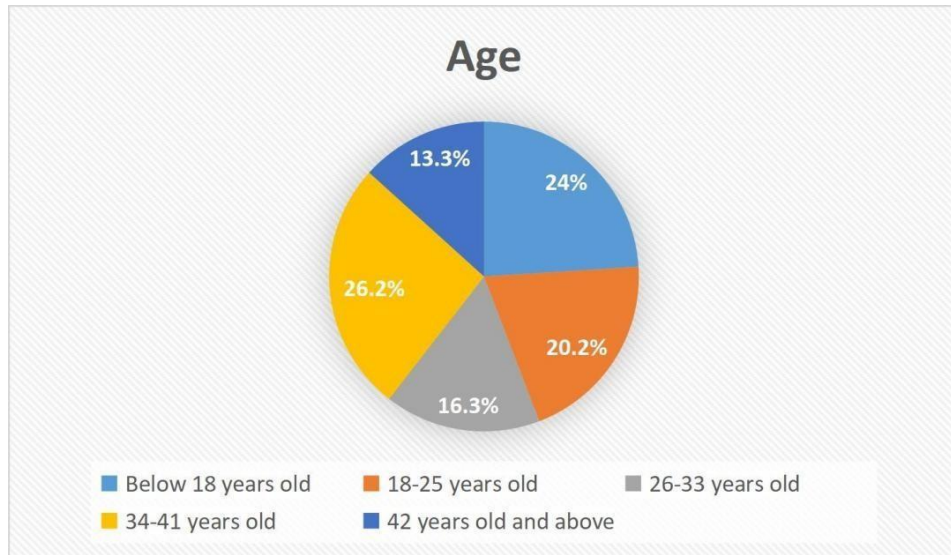
Figure 3: Age

4.2.3 Races

Based on the four categories under races. The majority of the participants fell within the races is Indian at percentage 36.5%. While the Malay, Chinese and other is 34.3%, 29.2% and 0.0%.
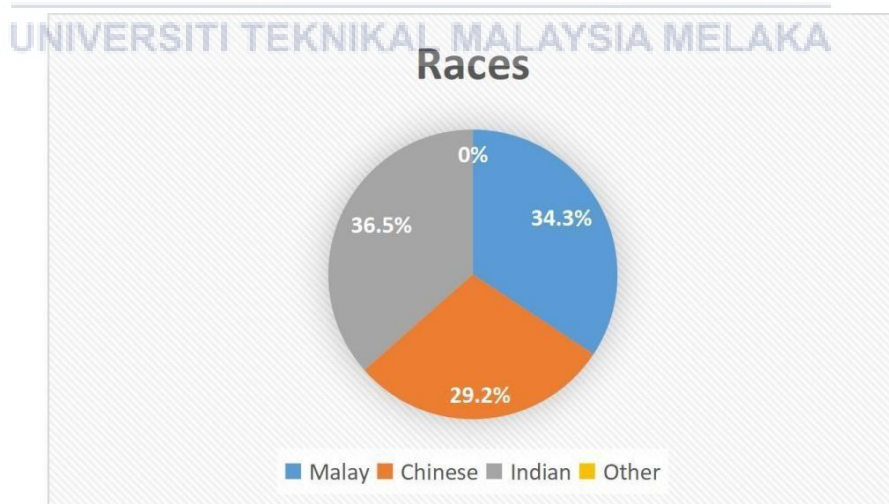

Figure 4: Races

4.2.4 Occupation

Based on the four categories under the occupation. The results presented in the table below shows that majority of participants (27.5%) were self-employed; which was the largest group of respondents
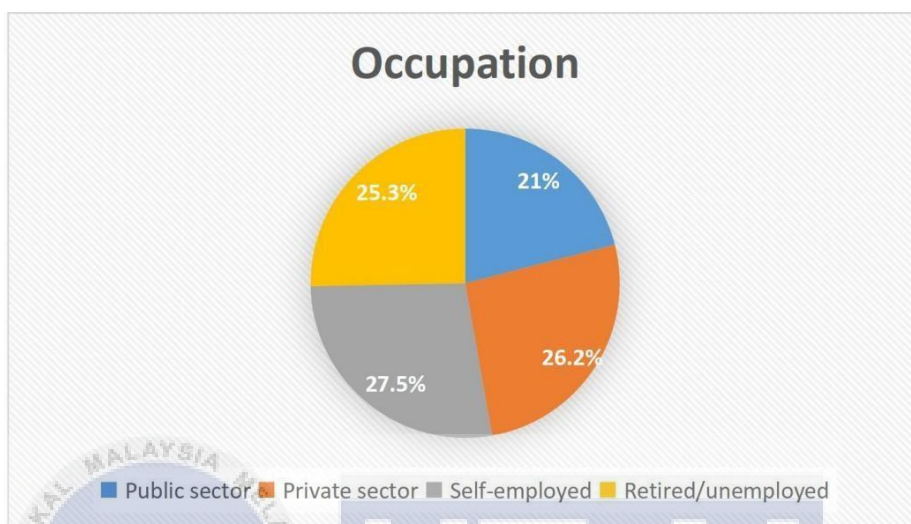
Figure 5: Occupation

4.2.5 Normality Test

According (Brown,2006),the skewness value have fall within the range of -3 < skewness < 3, as for the kurtosis values, it has to within the range of -10 < kurtosis < 10. Based on the table 4.2. the lowest skewness value was -0.853 and the highest skewness value was -1.367, meanwhile, the lowest kurtosis value was 0.023 and the highest kurtosis value were 1.673. Based on the results, we can state that the data was normally distribute

Table 4.1 :Mean, Std.Deviation,Skewness and Kurtois

Variable	Mean	Std. Deviation	Skewness	Kurtois
Time Saving				
1. TS1	4.46	.719	-1.169	.701
2. TS2	4.31	.783	-.995	.504

3. TS3	4.35	.848	-1.075	.179
4. TS4	4.41	.644	-.920	1.091
Accuracy				
1. A1	4.46	.748	-1.306	1.123
2. A2	4.47	.630	-.975	.892
3. A3	4.61	.584	-1.367	1.546
4. A4	4.32	.821	-1.025	.313
Experience				
1. E1	4.52	.602	-.953	.532
2. E2	4.44	.661	-.853	.023
3. E3	4.55	.607	-1.255	1.673
4. E4	4.54	.594	-1.030	.721

4.3 Reliability

Cronbach's Alpha is an internal technique used in this study. A crucial component of the test is determining the validity and reliability of the research. The bias and distortion in this study are defined and measured using reliability and validity. The degree of a linear relationship between two variables is determined by the validity. The consistency of the outcomes obtained from an evaluation is referred to as reliability. (Personal, 2017).

(Pukkaew,2013),This study produced a trustworthy result. Thus, it can provide a broad statement for the research.For ordered rating scale survey instruments, like a Likert scale that gauges participant attitudes, Cronbach's alpha is the coefficient that is utilized. Cronbach's alpha was also employed to assess the research's internal consistency's dependability. Therefore, the results are more dependable the higher the consistency level. When the value of Cronbach's alpha is at least 0.6, it will be accepted. Aside from that, the reliability coefficient of Cronbach's alpha typically falls between 0 and 1. Nonetheless, the majority of researchers will view 0.6 as the minimum number that can be accepted as a way to achieve the goal of the study.

Table 4.2: Rules of Thumb

Cronbach's Alpha	Internal Consistency
α > 0.9	Excellent
α > 0.8	Good
α > 0.7	Acceptable
α < 0.6	Questionable
α > 0.5	Poor
α < 0.5	Unacceptable

Source: Adoption from George (2003)

4.3.1 Pilot Test Result

Table 4.3: Pilot Test Independent Variable and Dependent Variable

Variables	Cronbach's Alpha	N
Time Saving	.911	30
Accuracy	.868	30
Experience	.877	30
Services respond time at McDonald's	.929	30

Source: SPSS

Table 4.3 shows the result of Cronbach's Alpha that had been obtain for independent variable in this study and dependent variable.. Each independent variable has four question while dependent variable have five questions that customers have answered. Firstly, the Cronbach's Alpha is time saving is 0.911. It has excellent result and has the greater Cronbach's Alpha compare to all independent variable. Experience has 0.877 Cronbach's Alpha value which mean it has good result. Meanwhile, the value of Cronbach's Alpha for accuracy is 0.868.Even though it has the least value of Cronbach's Alpha for all the independent variable, but it still produces a good result for the Cronbach's Alpha. This data had been attained by four question that had been answer by customers and the mean of the four question had been calculated using SPSS. Other than that, for dependent variable, the Cronbach' s

Alpha is 0.929. It still has a good results eventhough small then other independent variable. This data had been attained by five question that had been answer by customers and the mean of the five question had been calculated using SPSS.

4.3.2 Data Cronbach's Alpha

Table 4.4: Realibility result for Independent variable and Dependent Variable

Variables	Cronbach's Alpha	N
Time Saving	.921	233
Accuracy	.956	233
Experience	.884	233
Services respond time at McDonald's	.862	233

Source:SPSS

Table 4.4 shows the result of Cronbach's Alpha that had been obtain for independent variable in this study and dependent variable.. Each independent variable has four question that customers have answered. Firstly, the Cronbach's Alpha accuracy is 0.956. It has excellent result and has the greater Cronbach's Alpha compare to all independent variable. Experience has 0.884 Cronbach's Alpha value which mean it has good result. Meanwhile, the value of Cronbach's Alpha for time saving is 0.921. Even though it has the least value of Cronbach's Alpha for all the independent variable, but it still produces a good result for the Cronbach's Alpha. This data had been attained by four question that had been answer by customers and the mean of the four question had been calculated using SPSS. Other than that, for dependent variable, the Cronbach' s Alpha is 0.862. It still has a good results eventhough small then other independent variable. This data had been attained by five question that had been answer by customers and the mean of the five question had been calculated using SPSS.

4.4   Correlation

A method of testing a hypothesis about a problem in a population by using data measured in a sample is called hypothesis testing, or significance testing. The primary purpose of hypothesis testing is to demonstrate whether or not the research goal has been met. Furthermore, hypothesis testing had been used to determine the strength of the relationship between the independent and dependent variables. Regression test analysis and Pearson's correlation are the two methods that can be used for hypothesis testing. The correlation strength and significance value in this study were determined using Pearson's correlation test. Stated differently, it's also employed for quantifying the linear connection between two variables. The strength and direction of the linear relationship between two variables are measured by the Pearson correlation coefficient, which is a number that ranges from -1 to +1.

Table 4.5: Correlation Coefficient Values

Correlation Coefficient	Interpretation
-0.90 to -0.99	Very high negative correlation
-0.70 to -0.89	High negative correlation
-0.40 to -0.69	Medium negative correlation
-0.00 to -0.39	Low negative correlation
0.00 to 0.39	Low positive correlation
0.40 to 0.69	Medium positive correlation
0.70 to 0.89	High positive correlation
0.90 to 0.99	Very high positive correlation

Source: Adoption from Collis and Hussey (2009)

Table 4.6: Correlation for Independent Variable and Dependent Variable

		Time Saving	Accuracy	Experience	Service respond time at McDonald's
Time Saving	Pearson Correlation	1	.939**	.849**	.940**
	Sig.(2-tailed)		<.001	<.001	<.001
	N	233	233	233	233
Accuracy	Pearson Correlation	.939**	1	.894**	.934**
	Sig.(2-tailed)	<.001		<.001	<.001
	N	233	233	233	233
Experience	Pearson Correlation	.849**	.894**	1	.890**
	Sig.(2-tailed)	<.001	<.001		<.001
	N	233	233	233	233
Service respond time at McDonald's	Pearson Correlation	.940**	.934**	.890**	
	Sig.(2-tailed)	<.001	<.001	<.001	
	N	233	233	233	233

Source: SPSS

Based on table 4.6, this hypothesis was tested using simple regression. The following data describes the relationship between time saving and service respond time at McDonald's. This result show very high positive correlation between time saving and service respond time at McDonald's because the Pearson Correlation

51

value is 0.940. Meanwhile, the P value is 0.001 where the correlation is significant at the 0.01 level. This result indicates that time saving has significance relationship with service respond time at McDonald's . Hence, the hypothesis 1 is accepted.

Futhermore, Based on table 4.7 again.The following data describes the relationship between accuracy and service respond time at McDonald's. This result show medium positive correlation between accuracy and service respond time at McDonald's because the Pearson Correlation value is 0.934. Meanwhile, the P value is 0.001 where the correlation is significant at the 0.01 level. This result indicates that accuracy has significance relationship with service respond time at McDonald's . Hence, the hypothesis is accepted.

Last but not least, Based on table 4.7. The following data describes the relationship between experience and service respond time at McDonald's. This result show medium positive correlation between experience and service respond time at McDonald's because the Pearson Correlation value is 0.890. Meanwhile, the P value is 0.001 where the correlation is significant at the 0.01 level. This result indicates that experience has significance relationship with service respond time at McDonald's . Hence, the hypothesis is accepted.

4.5 Multiple Regression

In most instances, multiple regression is used in research to get more insight into the relationship between the independent and dependent variables. In 1980, Pearson was the first to use the term "multiple regression." A technique for predicting the unknown value for two or more variables is called multiple regression. The purpose of this study is to evaluate the value of the effectiveness of Self-Ordering Kiosk on service respond time at McDonald's. The study's independent variables include the time saving, accuracy and experience. The results of this study's multiple regression are displayed in the table below. The findings of this study's multiple regression analysis will be discussed in relation to its goal.

Table 4.7: Regression (Model Summary)

Model	R	R Square	F Change	df1	df2	Sig
1	.958	.918	854.124	3	229	<.001

a)Constants: Time Saving, Accuracy and Experience

b)Dependent Variable : Service respond time at McDonald's

Table 4.7 above shows the result of model summary of multiple regression analysis toward independent variable and dependent variable. The model tests the relationship between dependent variable and independent variable in this research. The dependent variable for this study is service respond time at McDonald's. This model indicates the value of R and R square. The result of R value is 0.958. Then the R square is 0.918. it is mean that 95.8% of the dependent variable is explained by the independent variable. The reminding 4.2% maybe will explain by other variables which are not included and tested in this regression analysis.
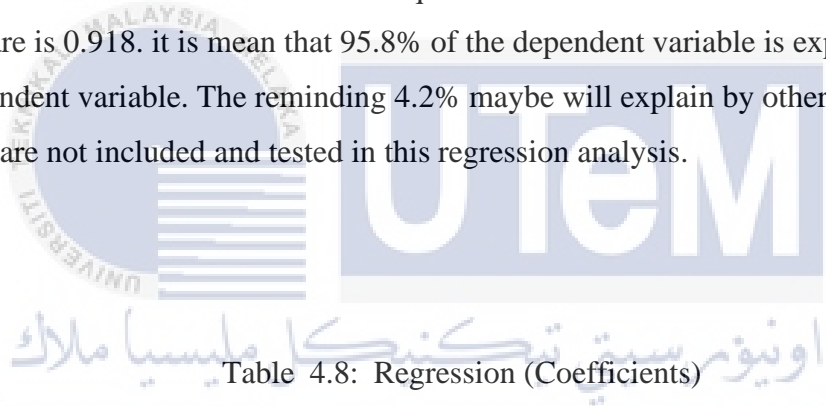
Table 4.8: Regression (Coefficients)

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.295	.099	2.992	<.001
Time Saving	.436	.047	9.347	<.001
Accuracy	.223	.063	3.521	<.001
Experience	.277	.047	5.862	<.001

a)Dependent Variable: Service respond Time at McDonald's

Table 4.8 shows the resulted of significant value between two variable which is dependent variable and independent variable. The dependent variable in this

study is about service respond time at McDonald's . There are three independent variable which is time saving, accuracy and experience.

In this study it shows that the time saving has a strong relationship that contributed to and service respond time at McDonald's. This is because this time saving has the highest regression coefficients value which is 0.436. The result of standardize coefficient show that the value of Beta is 0.514. Through that the value of standard deviation of time saving toward the service respond time at McDonald's is 9.347.

Furthermore, the result of regression coefficient for accuracy is 0.223. The accuracy has the least value of R compare to all independent variable. This result show that accuracy has a weak influence on service respond time at McDonald's. The result of standardized coefficient shows value of Beta for accuracy is 0.229. The result of standard deviation for accuracy is 3.521. This result indicated that accuracy can increased preparation for service respond time at McDonald's but with the least impact.

Next, for the experience and has the moderate value of R which is 0.277 . The time saving the highest and accuracy the least impact for experience is 0.249. The result standard preparation for service respond time at McDonald's. The Beta value of standardized coefficient for independent variable can increased preparation for service respond time at McDonald's by valuedeviation of blended learning and computational thinking indicate that is 5.862. It has moderate impact for Service respond time at McDonald's.

Based on the p-value, there have an independent variable in this study falls lower than 0.05 which is time saving,accuracy and experience with 0.001. The result indicates that the time saving, accuracy and experience affects the preparation for services respond time at McDonald's.

Based on the multiple regression analysis, the equation was developed as below:

$$Y = 0.295 + 0.436X_1 + 0.223X_2 + 0.277X_3$$

The equation explains that, when constant value is 0 unit, the service respond time at McDonald's will be 0.295 units. Therefore, when time saving(X) increase by 1 unit, then the services respond time at McDonald's will increase by 0.436 units. When accuracy (X2) increase by 1 unit, then the service respond time at McDonald's

will increase by 0.233 units. Meanwhile, when experience (X) increase by 1 unit, then the service respond time will increase by 0.277 units.

4.6 Summary

This chapter shows the method, results, and discussion of the data analysis, which were interpreted through the use of reliability, multiple regression, and linear regression analysis on the distributed questionnaire. The research's recommendation, limitations, and conclusion will be covered in the upcoming chapter.

CHAPTER 5

CONCLUSION & RECOMMENDATION

5.1 Introduction

This Chapter will be explained about finding result of the data analysis based on the questionnaire that were distributed to the customers. The conclusion, recommendation and limitation about the study which is related to time saving, accuracy and experience toward Service respond time at McDonald's. Based on that, the recommendation can be made for future study.

5.2 Research Objective

This section will explain more detail about the research objective. There are three objectives that stated in this study which is to analyze the effectiveness of using self-order kiosks at McDonald's affects users. Second objective is relation between a self-order kiosk at McDonald's facilitate users to order. Last objective is to examine the best variable affect on service respond time at McDonald's

5.2.1 Objective 1: To determine effectiveness of using self-ordering kiosk on McDonald's users

The first objective in this study is to analyze the effectiveness of using self-ordering kiosk at McDonald's This objective is about to know the effectiveness of time saving toward service respond time at McDonald's. Based on the results, hypothesis between time saving and service respond time at McDonald's is supported.

Time saving has strong relationship with service respond time at McDonald's. The R Suare result show that the value is very high positive which is 0.918 . Meanwhile, the F value is 854.124 where the correlation is significance at the 0.01 level. This results indicates that time saving has significance relationship with service respond time at McDonald's. So, based on the results, time saving has strong relationship with service respond time at McDonald's.

Next, this analysis in table 4.7 that conducted using SPSS version 27, it shows that the effect between time saving and service respond time at McDonald's. Through this result, this study can conclude that Self- ordering kiosk on service respond time at McDonald's agree that time saving can influence service respond time at McDonald's.

5.2.2 Objective 2: To examine correlation of the on McDonald's users

The second objective in this study is relation between a self -ordering kiosk at McDonald's with independent variables.The variables that involved is time saving, accuracy and experience. According to the Pearson Correlation, the variables of time saving, accuracy and experience can be concluded to have a moderate positive correlation toward each other variable because the r-value is greater than 0.5 which r-value for each variable is 0.940, 0.934, and 0.890.In short, based on Table 4.7, all variables have been correctly selected because greater than 0.7 with an r-value is 0.918 which respectively a strong positive significant relationship towards service respond time at McDonalds.

Next, this analysis in table 4.7 that conducted using SPSS version 27, it shows

that the effect between time saving, accuracy and experience for service respond time at McDonald's. Through this result, this study can conclude that Self- ordering kiosk on service respond time at McDonald's agree that time saving can influence service respond time at McDonald's compared to accuracy and experience.

5.2.3 Objective 3: To investigate the most effective self ordering kiosk response time variables that contribute to McDonald's users.

The third objective is to examine the best variable affect on service respond time at McDonald's. This objective is about to know the effectiveness of time saving, accuracy and experience toward service respond time at McDonald's. Based on the value of B for time saving is 0.436. This shows that time saving is the highest b value compared to accuracy and experience which are 0.223 and 0.277. Based on the results,hypothesis between time saving and service respond time at McDonald's is supported.Time saving has strong relationship with service respond time at McDonald's.This results indicates that time saving has significance at the 0.01 level it relationship with service respond time at McDonald's.

Next, based on multiple regression analysis in table 4.7 that conducted using SPSS version 27, it shows that the time saving effect between experience and service respond time at McDonald's. Through this result, this study can conclude that Self- ordering kiosk on service respond time at McDonald's agree that time saving can influence service respond time at McDonald's.

5.3 Research Hypothesis

5.3.1 There is a significant relationship between time saving and the service respond time at McDonald's

In table 4.8 it has been shown that the t value for time saving is 9.347. This shows that time saving is the one of the effectiveness of self ordering kiosk can be affected service respond time at McDonald's. Perceived waiting time is the amountof time spent waiting for a service (McGuire,2016). Based on this, Customer delight is impacted because they believe that their "expected reasonable waiting time" was longer than their "perceived waiting time." (Lee,2000). The hypothesis of this study is supported because time saving can influence service respond time at McDonald's throught the approximate how service respond time at McDonald's applied time saving. This can help customers to saving their time when use a self-ordering kiosk.

5.3.2 There is a significant relationship between accuracy and the service respond time at McDonald's

Table 4.8 also shows that the t value for accuracy is 3.521. This shows that accuracy also give an impact for service respond time atMcDonald's.According to Jeon et al,(2020) is determined critical factors that influence consumer purchasing decisions is crucial, particularly when introducing new technologies.From the point of view of the food service industry, customer opinions of the self-ordering kiosk operation are reflected in performance standards (Cobanoglu et al., 2015). This accuracy gives significant impact throught self- ordering kiosk which is can attract customers use a technology. So the hypothesis of relationship between accuracy and service respond time at McDonald's has significant value.

5.3.3 There is a significant relationship between experience and the service respond time at McDonald's

Generally, refer to table 4.8 it has show that t value for experience is 5.862. Experience also give an impact to service respond time (Lee et al. 2019) .Understanding customer needs is an ongoing process.Customers are anticipated to repeatedly use these applications as long as they are happy with their experience using a service technology(Amoroso and Lim, 2017). The hypothesis of this study is supported because experience can influence service respond time at McDonald's throught the approximate how service respond time at McDonald's applied experience.

5.4 Contribution of Study

First, the study is the use of self-ordering kiosks, especially among residents in Jasin, Malacca. Therefore, this the study can be a reference point for future scholars who may want to working on organizational performance in this sector.
Second, the research framework can be used by future researchers to predict organizational performance in general using the organization rarely used learning theory. This study has been simultaneous a combination of time saving, accuracy and experience to predict the performance of the organization in previous studies narrowly considered. Therefore, the framework can be used in the future researchers when intending to create an effective strategy in building and strengthen short, medium and long term relationships between buyers and sellers. This research provides sufficient evidence where time saving, accuracy and experience have some affect the performance of service response time at McDonald's. The evidence obtained is supportive relationship, thus confirming the importance of the model in exploring organizational performance.
The results of this study provide a positive contribution to self ordering kiosks to owners and government in terms of developing policies and strategies to improve organizational performance. Based on the results of this study, it is proven that experiences such as the use ofself-ordering kiosks provide a continuous positive culture (for example, staff treat customers well when using the kiosks) it will enable customers to always use these kiosks better and even further stimulate

employees to exchange knowledge and innovation in serving customers to increase the competitiveness of the organization in real terms business world Last but not least, given the results of this study, it is important that employees and owners should focus more on the effectiveness of self-ordering organization kiosk ie time saving, accuracy, and experience. It is important because this can prevent future usage difficulties that may lead to experienced employees in the future executives and management service categories leave the organization thus greatly improving organizational performance

5.5 Limitation

The results of this study, make a significant contribution to practitioners and academics, it has several limitations. This research just exploring the effectiveness of self-ordering kiosk on the performance of service response time at McDonald's Jasin, Malacca by studying time saving, accuracy and experience on organizational performance. however, there are other factors that can be examined by other future researchers.

Although this study contributes to the existing, there are still some limitations, and some opportunities for future research. First, the participants were asked to recall their use of the kiosk in the past six months, which could challenge their long-term memory. Future studies should investigate the use of more recent kiosks to reduce recall limitations. Second, the data was collected from an online panel and the majority of respondents (26.2%) were under the age of 34-41. Therefore, this study may have limited applicability to old customers (aged 45 and over) and to customers who have skills in the use of self-ordering kiosks. Third, the sample of this study is limited to McDonald's customers in Jasin, Malacca. Therefore, caution must be exercised when generalizing the results of the study. Fourth, at least one previous study (Liang et al., 2018b) has suggested that trust should be measured from two different perspectives, while this study measured it from only one perspective. Therefore, future studies may consider measuring trust in platforms (kiosks) and users (skills). Finally, considering the importance of perceived enjoyment, future research is needed to investigate the concepts of enjoyment and pleasure through open-ended questions to better understand aspects of enjoyment that influence customers'

5.6 Recommendation

Based on this study, there are several recommendations for future researchers to make improvements to the limitations of this study. So as to more effectively satisfy the needs and preferences of customers, research may focus on enhancing the functionality and design of self-service kiosks. Examining attributes like ease of use, personalization possibilities, and user interface can help improve customer satisfaction and boost adoption rates. Third, analyzing the perceptions and usage of self-service kiosks by various demographic groups can reveal possible differences in attitudes and behaviors. Customers' acceptance and use of self-service kiosks can be influenced by a variety of factors, including age, income, and education level. By recognizing these variations, targeted strategies and interventions can be implemented. Additionally, Longitudinal studies that monitor shifts in customer opinions and usage habits over time may put terms on how self-service kiosk deployment will affect things in the long run. This method can be used to spot changes, trends, and possible problems that may occur when self-service kiosks proliferate in the fast-food sector.

Several recommendations are made based on this research for future researchers to improve the limitations of this study. The initial constraint of this study was that the investigator just concentrated on the respondent's usage of the McDonald's self-ordering kiosk located in Jasin, Melaka. To put it another way, it is advised that future researchers look at a bigger sample size of the participants. Additionally, it is advised to conduct surveys in a few Malaysian cities with rapidly evolving economies, like Brickfields. Therefore, when future research topics are connected to or familiar with the technological devices, the results will be more accurate

5.7 Summary

The results of research objective as 5.2 was mention that all of the objectives is significants with service respond time at McDonald's. Time saving , accuracy and experience has strong relationship with service respond time at McDonald's.

REFERENCES

Adisaputro & Gunawan. (2010). Manajemen Pemasaran (Analisis Untuk Perancangan Strategi Pemasaran). Sekolah Tinggi Ilmu Manajemen YKPN.Yogyakarta

Apruebo, X. (2010). "Operational Efficiency and Customer Satisfaction in SelectedFast FoodIndustry", (Unpublished Master"s Thesis, LPU,Batangas)

Abdullah, F., Hamali J. and Abduraman, A. (2013)."The Dimension of Customer Preference in the Food Service Industry", Business: Theory andPractice , 14(1).

Aboelmaged, M.G. & Gebba, T.R. (2013), Mobile Banking Adoption: An Examination of Technology Acceptance Model and Theory of Planned Behavior, International Journal of Business Research and Development, Vol. 2 (1), 35Ğ50.

Afroz, N. (2013). Effect of Advertisement on Buying Responses of Couples ThroughBrand Survey Technique. Social Science International, 29(1), 129-140

Al- Tit, A. A. (2015). The effect of service and food quality on customer satisfaction and hence customer retention. Asian Social Science, 11(23), 129-139

Alam, S. S., Junaid, F. S., & Shabbir, M. S. (2019). The impact of brand equity onbrand loyalty with mediating role of customer satisfaction: A study of fast food chains in Pakistan. International Journal of Marketing Studies, 11(3), 108–119.

Barrish, D. (2013). The Menu: Development,Strategy & Applications, First   Edition, Singapore:Pearson Education South Asia Pte Ltd

Bhagat, S. (2016). An empirical analysis on customer satisfaction level in fast foodindustry among the major competitor's [Delhi- NCR]. International Journal of Advanced Scientific Research and Management,1(10), 23-29

Barlan-Espino, A. G. (2017). Operational efficiency and customer satisfaction of restaurants: Basis for business operation enhancement. Asia Pacific Journal of Multidisciplinary Research, 5(1), 122-132

Baba, N., Shahril, M. A., & Hanafiah, M. H. (2020). Self-Ordering Kiosk Usage andPost-Purchase Behaviour in Quick Service Restaurants. Journal of Tourism, Hospitality & Culinary Arts, 10(2), 359-380.

Curran, J.M., and Meuter, M.L. (2005), "Self-service technology adoption: comparing three technologies". Journal of Services Marketing, Vol. 19 No 2, pp.103-113

Eleni. (2019, April 11). Self Service Kiosk | Benefits of Self Service Kiosks | Ergonomic Solutions. https://www.ergonomic.solutions/blog/2019/04/11/the-ri se-and-rise-of-self-service-kiosks/

E. Newton, (2021) "What Technologies are Changing Foodservice in 2021? | QSR magazine,".

Füller, J., Mühlbacher, H., Matzler, K., and Jawecki, G. (2009), "Consumer empowerment through internet-based co-creation". Journal of Management Information Systems, Vol. 26 No 3, pp. 71-102

Firdausy, C., & Idawati, R. (2017). Effects of Service Quality, Price and Promotionon Customers' Purchase Decision of Traveloka Online Airline Tickets in Jakarta, Indonesia. International Journal of Management Science and Business Administration, 3, 42–49. https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.32.1004

Ghimire, A.J. (2012). Service Quality and CustomerSatisfaction in the RestaurantBusiness

Greasley, A. (2013). Operations Management, ThirdEdition, Canada: Wiley & Sons Publication

Hackfurth, A. (2014). A Study on Responses to FoodWaste and Related Energy &Water Consumption inthe Food Service Sector

Lee, J., & Jun, M. (2017). Dynamic service capacity assignment in a queueing network
with self-service stations. Computers & Industrial Engineering, 111, 332-343

Lee, H. J. (2017), "Personality determinants of need for interaction with a retail
employee and its impact on self-service technology (SST) usage intentions". Journalof
Research in Interactive Marketing, Vol. 11 No 3, pp. 214-231

Maguire, M., Peace, S.,Nicolle, C., Marshall, R.,Sims R., Percival, J., and Lawton, C.(2014).
KitchenLiving in Later Life: Exploring Ergonomic ProblemsCoping Strategies and
Design Solutions

Mukaromah, A. L., Kusuma, I. G. N. A. E. T., & Anggraini, N. P. N. (2019). The effect of
green marketing, brand awareness and price perception on purchase decision.
International Journal of Applied Business and International Management,4(3), 75-83.
doi:10.32535/ijabim.v4i3.685

N. Aziati et al.,(2021) "The User Experience (UX) Analysis of Self-Service Kiosk(SSK)
in Waiting Time at Fast Food Restaurant Using User Experience (UX) Model," vol.
2, pp. 85–98, 2021.

N. Rosyidah and A. L. Andjarwati, (2021) "Pengaruh self-service technology quality
terhadap loyalitas dengan kepuasan sebagai variabel mediasi (studi pada pelanggan
mcdonald 's di surabaya)," vol. 10, no. 1, pp. 14–27, 2021.

Perdigon, G.P. (2009). Food Service Management inthe Philippines, C & E
Publishing, Inc., Quezon City

Parsa, H., Self, J., Gregory, A., and Dutta, K. (2013).Consumer Behavior in
Restaurants: Assessing theImportance of Restaurant Attributes in
ConsumerPatronage and Willingness to Pay, Journal ofServices Research, 12(2)

Peetawan, W., (2019) Using AHP to Quantify Decision Factors for Selecting a FoodDelivery
Service Provider.

Pan, X., Li, M., & Law, R. Y. Y. (2019). A simulation-based approach for self- service
queue management in fast-food restaurants. European Journal of OperationalResearch,

274(3), 805-817.

Park, C.-H., & Shin, J.-K. (2017). An exploratory study on the determinantsof performance in regional industry technology development programs. Asia Pacific Journal of Innovation and Entrepreneurship, 11(2), 125-143. https://doi.org/10.1108/apjie-08-2017-027

Park, H., Yang, H., & Nam, G. (2023). The impact of contactless payment usage onservice satisfaction and behavioral intentions: A moderated mediation model of perceived risk and perceived benefit. International Journal of Hospitality Management, 93, 104802.

R. N. Bolton et al., 2018) "Customer experience challenges: bringing together digital,physical and social realms," J. Serv. Manag., vol. 29, no. 5, pp. 776–808, 2018, doi: 10.1108/JOSM-04-2018-0113.

Rajput, A., & Gahfoor, R.Z. (2020) Satisfaction and revisit intentions at fast food restaurants. Future Business Journal, 6(13), 1-12

Schiffman, Leon, & Kanuk, Leslie Lazar. (2007). Consumer Behaviour 7 th. Edition. (Perilaku Konsumen). Jakarta: PT. Indeks.

Sabir Ghafoor, H. A. & R. (2014). Factors Affecting Customers Satisfactionin Restaurants Industry in Pakistan OSAMA GHAFOOR MS scholar Comsats institute of information technology Sahiwal. IQRA HAFEEZ.

S. Park, X. Lehto, and M. Lehto, (2020) "Self-service technology kiosk design for restaurants: An QFD application," Int. J. Hosp. Manag., vol. 92, no. June(2020), p. 102757, 2021, doi: 10.1016/j.ijhm.2020.102757.

S. A. Yaacob et al., (2021) "A Concept of Consumer Acceptance on the usage of Self-Ordering Kiosks at McDonald's," Int. J. Acad. Res. Bus. Soc.Sci., vol. 11, no.13, pp. 11–20, 2021, doi: 10.6007/ijarbss/v11-i13/8498.

Stanley, B., Pratama, Y., & Subakti, A. G. (2023). The Impact of Self-OrderKiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta.E3S Web of Conferences, 251, 02007.

Yildiz, E., & Yildiz, S., (2015) Service Quality Evaluation of Restaurant Using theAHP and Topsis Method. Journal of Social and Administrative, vol. 20, no.

APPENDIX 1

A) Gantt Chart 1

WEEK/ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Seminar Final Year Project 2	■													
Supervisor Confirmation From Coordinator		■												
First meeting With Supervisor		■												
Title Discussion		■												
Title Confirmation			■											
Find References Materials such as Journals and Articles			■	■										
Submission Chapter 1					■	■	■							
Submission Chapter 2								■	■					
Submission Chapter 3										■	■			
Submission of Final Year Project 1												■		
Submission Video Presentation												■		
Proposal Defense													■	

B) Gantt Chart 2

WEEK/ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Research Framework and Research Question Confirmation	■													
Data Collection		■	■	■										
Data Analysis					■	■								
SPSS Training							■							
Submission Chapter 4								■	■	■				
Submission Chapter 5											■	■		
Submission Draf Final Thesis												■		
Correction Draft Final Thesis													■	
Submission Video Presentation													■	
Final Year Project Viva 2														■

THE EFFECTIVENESS OF SELF-ORDERING KIOSK ON SERVICE RESPOND TIME AT McDONALD'S

This study aims to investigate the effectiveness of Self-Ordering Kiosk on service respond time at McDonald's.You were carefully considered and chosen to take part on the respondent's behalf for this study. Your response is important because it will influence the effectiveness of Self-Ordering Kiosk on service respond time at McDonald's

SECTION A: GENERAL INFORMATION

This section lists some questions about your personal information. Mark only one.

Gender

| | Male |
| | Female |

Age

	Below 18 years old
	18-25 years old
	26-33 years old
	34-41 years old
	42 years old and above

Race

	Malay
	Chinese
	Indian
	Other

Occupation

| | Public Sector |
| | Private Sector |

	Self-employed
	Retired/unemployed

SECTION B: THE EFFECTIVENESS OF USING SELF-ORDERING KIOSK AT McDONALD's

Here are the statements that reflect your experience about using Self-Ordering Kiosk in organizations. Please rank your statement by using the appropriate scale.

1. STRONGLY DISAGREE
2. DISAGREE
3. SOMEWHAT AGREE
4. AGREE
5. STRONGLY AGREE

Time Saving

Self-ordering kiosk is easy to use.

1	2	3	4	5
☐	☐	☐	☐	☐

Using self-ordering kiosk is fun.

1	2	3	4	5
☐	☐	☐	☐	☐

I prefer to use self-ordering kiosk.

1	2	3	4	5
☐	☐	☐	☐	☐

The self-ordering kiosk is well maintained.

1	2	3	4	5
☐	☐	☐	☐	☐

ACCURACY

Use of self-ordering kiosk gives me satisfaction.

1	2	3	4	5
☐	☐	☐	☐	☐

The self-ordering kiosk reflects my order correctly.

1	2	3	4	5
☐	☐	☐	☐	☐

The costs incur at the self-ordering kiosk is worth it

1	2	3	4	5
☐	☐	☐	☐	☐

 I will choose to use self-ordering kiosk.

1	2	3	4	5
☐	☐	☐	☐	☐

Experience

All product items are exhibited by the self-ordering kiosk.

1	2	3	4	5
☐	☐	☐	☐	☐

The kiosk makes self-ordering process convenience.

1	2	3	4	5
☐	☐	☐	☐	☐

It is also easy to mix-and-match my order on the self-ordering kiosk.

1	2	3	4	5
☐	☐	☐	☐	☐

The screen of the self-ordering kiosk is readable.

1	2	3	4	5
☐	☐	☐	☐	☐

SECTION C: SERVICE RESPOND TIME AT McDONALD'S

Here are the statements that reflect your experience about using Self-Ordering Kiosk in organizations. Please rank your statement by using the appropriate scale.

1. STRONGLY DISAGREE
2. DISAGREE
3. SOMEWHAT AGREE
4. AGREE
5. STRONGLY AGREE

The self-ordering kiosk software works accurately.

1	2	3	4	5
☐	☐	☐	☐	☐

The speed of kiosk service is fast.

1	2	3	4	5
☐	☐	☐	☐	☐

The kiosk gives clear self-ordering instructions.

1	2	3	4	5
☐	☐	☐	☐	☐

The restaurant staff will apology for any delay in service.

1	2	3	4	5
☐	☐	☐	☐	☐

Overall, using the self-ordering kiosk makes me satisfied

1	2	3	4	5
☐	☐	☐	☐	☐