

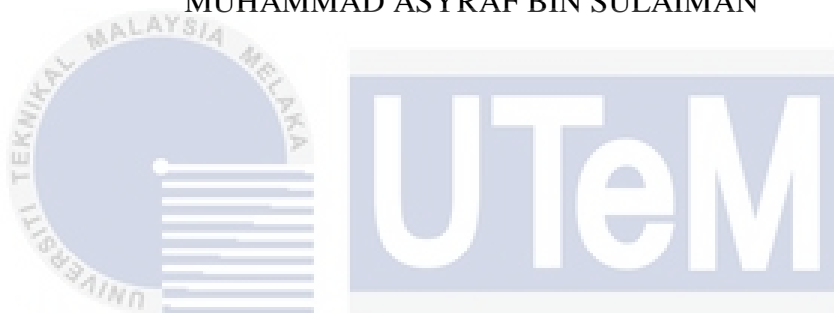
FACTORS OF SELF-CHECKOUT COUNTER TOWARDS CUSTOMER USAGE  
INTENTION IN MALAYSIA DRUGSTORE.



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACTORS OF SELF-CHECKOUT COUNTER TOWARDS CUSTOMER USAGE  
INTENTION IN MALAYSIA DRUGSTORE.

MUHAMMAD ASYRAF BIN SULAIMAN



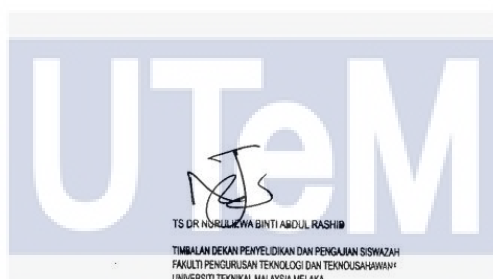
This thesis is submitted in partial fulfilment of the requirements for the award of  
Bachelor of Technology Management (Technology Innovation) with Honors

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Faculty of Technology Management and Technopreneurship  
Universiti Teknikal Malaysia Melaka (UTeM)

## APPROVAL

I/ We hereby declare that I/ we have read this dissertation/report and in my opinion, this dissertation/report is sufficient in terms of scope and quality as a partial fulfilment the requirements for the award of Bachelor of Technology Management (Technology Innovation) with Honors



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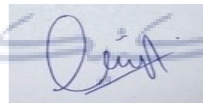
## **DECLARATION**

I hereby declared that this thesis entitled

**“FACTORS OF SELF-CHECKOUT COUNTER TOWARDS CUSTOMER  
USAGE INTENTION IN MALAYSIA DRUGSTORE”**

This is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.

SIGNATURE:



NAME : MUHAMMAD ASYRAF BIN SULAIMAN

DATE : 02 FEBRUARY 2023

## **DEDICATION**

This research paper is wholeheartedly dedicated  
to dear parents

which is my main source of motivation.

They always give us strength when we think of giving up, which continues to provide  
their moral, spiritual, emotional, and financial support.

To supervisors, family and friends who shared words of advice, encouragement, and  
support to complete this research project.

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Finally, I would like to thank my parents and colleagues for their support and encouragement in completing this research.

## **ABSTRACT**

Self-Checkout Counter is implemented to make it easier to make payment transactions. In Malaysia, Self-Checkout Counter technology is beginning to grow and become a concern because it can provide benefits to consumers in many ways, especially when the country is hit by the Covid-19 virus. It is evident from the available literature that research related to Self-Checkout Counter prioritizes technical, organizational and implementation aspects while attention is given to understanding the usage aspects and user satisfaction. Therefore, this study aims to examine the factors and customer usage intention of Self-Checkout Counter by empirically testing the constructs related to the Diffusion of Innovation model. The models developed include constructs such as Compatibility, Ease of Use, Trialability, Perceived Trust and Usage Intention. A survey based on a questionnaire was used to collect data from 150 respondents consisting of students and random people. This research uses simple random sampling as probability sampling in which samples are selected at random. The data obtained were analysed using the Statistical Package from the Social Sciences (SPSS). The results of this study indicate that all relevant constructs have shown a significant relationship to the intention of using Self-Checkout Counter technology. As a result, this research can benefit students, communities and governments to develop better financial systems for consumers.

***Keywords*** – *Self-Checkout Counter, IS Success Model, Compatibility, Ease of Use, Trialability, Perceived Trust, Usage Intention*

## **ABSTRAK**

Kaunter Daftar Keluar Sendiri dilaksanakan bagi memudahkan untuk membuat transaksi pembayaran. Di Malaysia, teknologi Kaunter Daftar Keluar Sendiri mula berkembang dan menjadi perhatian kerana dapat memberi manfaat kepada pengguna dalam pelbagai segi, terutamanya ketika negara dilanda virus Covid-19. Terbukti daripada literatur yang ada bahawa penyelidikan berkaitan Kaunter Daftar Kendiri mengutamakan aspek teknikal, organisasi dan pelaksanaan manakala perhatian diberikan kepada pemahaman aspek penggunaan dan kepuasan pengguna. Oleh itu, kajian ini bertujuan untuk mengkaji faktor dan niat penggunaan pelanggan Kaunter Daftar Kendiri dengan menguji secara empirikal konstruk yang berkaitan model Diffusion of Innovation. Model yang dibangunkan termasuk konstruk seperti Keserasian, Kemudahan Penggunaan, Kebolehcubaan, kepercayaan and Niat Penggunaan. Tinjauan berdasarkan soal selidik telah digunakan untuk mengumpulkan data daripada 150 responden yang terdiri daripada pelajar dan orang rawak. Penyelidikan ini menggunakan persampelan rawak mudah sebagai persampelan kebarangkalian di mana sampel dipilih secara rawak. Data yang diperolehi dianalisis menggunakan Pakej Statistik daripada Sains Sosial (SPSS). Hasil kajian ini menunjukkan bahawa semua konstruk yang berkaitan telah menunjukkan hubungan yang signifikan terhadap niat penggunaan teknologi Kaunter Daftar Keluar Sendiri. Hasilnya, penyelidikan ini boleh memberi manfaat kepada pelajar, komuniti dan kerajaan untuk membangunkan sistem kewangan yang lebih baik untuk pengguna.

***Kata kunci*** – *Kaunter Daftar Keluar Sendiri, Model Kejayaan IS, Keserasian, Kemudahan Penggunaan, Kebolehcubaan, Kepercayaan, Niat Penggunaan*



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## LIST OF ABBREVIATIONS

### ABBREVIATIONS

### MEANING

**SCO**

**Self-Checkout**

**IT**

**Information Technology**

**IoT**

**Internet of Things**

**SST**

**Self Service Technology**

**WHO**

**World Health Organization**

**SDG**

**Sustainable Development Goals**

**MCO**

**Movement Control Order**

**ISSM**

**Information System Success Model**

**SOP**

**Standard Operational Procedures**

**SPSS**

**Statistical Package for Social Science**

## CHAPTER 1

### INTRODUCTION

#### 1.0 Introduction



This research aims to analyzing factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore. This chapter consists of five parts of chapter one which is including research background, research problem, research questions, research objectives, and scope of research. All of this part will describe a clear idea for whole project research.

## 1.1 Background of Study

Economic growth is described as a rise in a country's ability to generate products and services from one period to the next. This expansion is measured in nominal or real terms, which are then adjusted for inflation. Economic growth is generally concerned with the potential for long-term economic productivity. Economic development is a vital factor in developing or less developed countries' quick economic shift to a stable income level. (Shaukat, Zhu & Khan, 2019).

Nowadays, self-checkout is a good technology for customers to make it easier for them to pay or buy goods in certain areas. This self-checkout is better than traditional payment or payment to staff at the counter. Customers use self-checkouts (SCOs) to finish their transactions. Automated checkouts eliminate the need for a human checker. ACOs (assisted checkouts) and self-service checkouts are other terms for self-checkouts. Customers collect the items at self-checkouts and scan the barcodes on them. They do all of their shopping by themselves. Shoppers are increasingly using self-checkout systems in supermarkets. Staff members are on hand to help consumers if they encounter any issues when using Self-checkout locations. Self-service checkout is done in a different way at checkout-free stores. Customers do not have to wait in line to get scanned in this method. Customers' purchases are tracked, and the bill is automatically sent to their phone. Self-service technologies (SSTs) have gained popularity. introduced in the supermarket sector, providing chances for grocery stores to go beyond self-service checkout. The expanded Technology Acceptance Model was used in this study to assess the existing usage of self-checkout systems by comparing different categories of customers, with the goal of determining the causative elements that allow these groups to adopt smart grocery shopping technologies. According to the research, several categories of consumers already have accepted self-checkout, albeit at various degrees. It implies that consumers are generally eager to adopt smart grocery purchasing practises., with behavioural intentions primarily determined by consumers' sentiments toward the form of shopping and convenience. (Thomas-Francois and Somogyi, 2022)

This self-checkout counter can make it easier for the public to make any payment transaction without having to face the staff at the place of purchase. With users only need to use the counter machine that has been provided and follow the guidelines that have been provided but self-counter counter is easy to use. In addition, this self-checkout is more efficient without having to wait a long time compared to using cash registers that have to queue by taking longer.

### **1.1.1 Self-Checkout Counter in Malaysia**

Self-checkout innovation has emerged as a popular choice in general stores all over the world because it offers customers the opportunity to save money, be more helpful, and get their purchases faster while also improving their shopping experience. The current study seeks to ascertain the connection between administration quality, consumer loyalty, and the goal of repurposing among customers who have visited the selected Malaysian general shop. An organized survey with a seven-point Likert scale was planned, based on the quality-based model scale. Customers who used the self-checkout framework in the grocery store provided 394 pieces of information, which was compiled into a report. This investigation investigates the possibility of improving grocery store tasks by redesigning themselves into current day innovation, rather than the traditional way. Self-checkout is becoming increasingly popular among consumers, and retailers can benefit from this plan by making better decisions based on the increasing practicality of this desire.

Self-checkout is a technology-driven system that enables customers to scan and bag their own purchases without the assistance of a cashier. In Malaysia, self-checkout has become increasingly popular in recent years as retailers aim to enhance the shopping experience for customers. Self-checkout machines are equipped with a touch screen, barcode scanner, and weigh scale, which customers use to scan and pay for their purchases. The technology also integrates with the store's inventory system, ensuring that the correct price is charged for each item. This system provides customers with a



convenient and efficient way to complete their shopping transactions, saving them time and effort compared to traditional checkout methods. One of the primary benefits of self-checkout is increased speed. Customers can scan and bag their own items, allowing them to move quickly through the checkout process. This can reduce the wait time in lines and improve the overall shopping experience. Additionally, self-checkout machines are designed to be user-friendly, making it easy for customers to use them even if they are not familiar with technology.

Another advantage of self-checkout is increased convenience. Customers are able to purchase their items at any time, even outside of business hours, as the machines are usually available 24/7. Additionally, the machines provide customers with a greater degree of privacy and control over their shopping transactions. However, there are also some drawbacks to self-checkout. One concern is that customers may not be aware of all the items they are purchasing, leading to incorrect charges or missed items. Additionally, the machines may not be able to recognize certain types of items, such as produce or bulk goods, requiring assistance from a cashier. Finally, the technology may also create job loss for cashiers as more retailers adopt self-checkout.

### **1.1.2 Information Technology (IT)**

One of our country's most important industries right now is information technology (IT). The IT and IT-enabled services business employed 3.5 million people and earned approximately 160 billion dollars in sales during the 2016-2017 fiscal year. Newspapers are filled with job ads for IT pros and other professionals who have a working knowledge of IT, and the number of these ads is growing daily. Students at many colleges and universities are now required to complete an IT course as part of their degree requirements. IT knowledge is crucial in today's world. As a result, students must be well-versed in IT and the apps that run on it. The book's primary goal is to make IT accessible to all undergraduates, regardless of their area of interest. IT is a continuously evolving

field of study. It's critical to emphasize the technology's rock-solid foundational ideas in a university degree programme. Rather than focusing on the day-to-day operations of computers, this book aims to take a more holistic perspective. In this book, you'll learn why and how some aspects of computers work. The book also discusses a number of major computer applications that are widely used, as well as the underlying ideas used in the construction of these programmes. The fundamental focus of information technology is the capture, storage, processing, and management of data. Additionally, it aims to make organized and processed data publicly available to a variety of individuals and groups. Information technology (IT) used to refer to data primarily as numbers and text. This is no longer the case. In addition to numbers and text, computers can also process images, audio, and video data. As a result, we must learn how to collect, organize, store, process, and communicate all of these sorts of data. (V. Rajaraman, 2018) For example, the use of IT in performing payment transactions, i.e. payments using self-checkout counters, is highly relevant to the current situation during the Covid-19 pandemic.

Due to the competitive environment, particularly in developing nations, technology and inventiveness have played a significant role in service businesses. The implementation of forward-thinking technologies like automated check-out lanes in retail establishments is widely regarded as beneficial for retailers in a variety of contexts. However, if customers are unable to utilize these innovations, the deployment of these technologies in retail establishments becomes counterproductive. In spite of the importance of customer acceptance of self-checkout systems to the continued existence of businesses, the available research provides only limited insight into this topic. (Ufuk Cebeci, Abdullah Ertug, Hulya Turkcan, 2022)

### 1.1.3 Malaysia Science and Technology Policy

The goal of Malaysia's Science and Technology Policy is to promote advancement and development in the fields of science, technology, and innovation. As a result of market failures, government intervention is frequently required. There is a strong case for governments to give additional incentives for investments in technology development because of this market failure. Innovation's Malaysia has introduced payment in supermarkets through payment using self-checkout counters in one area to facilitate purchases and see how the effectiveness can be coordinated in other areas.

Given that science and technology in Malaysia are at an all-time high, the government's policy has a significant impact. Spending on research and development as a percentage of GDP has continuously increased over the last two decades, exceeding that of most other high-income countries. To date, the government has contributed the remaining funding for research and development, but domestic businesses are rapidly contributing more and more. This is because of a rise in the country's innovation skills and the promotion of research and development (R & D). The impacts of globalization also include a stronger capacity for research development and infrastructure, as well as a promotion of corporate innovation and entrepreneurialism, as well as an increase in human resources and skills.

Regarding self-checkout counter technology, there are several challenges in developing this technology. This is because, self-checkout counters face a complex regulatory environment designed for a long and slow business model to accept change. The development of self-checkout counter technology globally has led to restrictions on storing and transmitting data with rules designed to protect domestic officials. The use of technology in this sector also cannot escape the growing security threats, from theft and fraud.

If the Self-checkout counter is involved in any business or activity that is regulated or licenced in Malaysia, the regulatory and legal requirements for conducting such business or activities must be met in accordance with Malaysian law.

#### **1.1.4 Sustainable Development Goals (SDGs)**

Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations in 2015. The SDGs aim to end poverty, protect the planet, and ensure peace and prosperity for all people. The following is a detailed explanation of each of the 17 SDGs.

**No Poverty:** The goal is to eradicate extreme poverty and reduce inequality by 2030. This involves improving access to education, healthcare, and economic opportunities, and empowering the most vulnerable groups. **Zero Hunger:** The goal is to end hunger, achieve food security, and improve nutrition by 2030. This requires strengthening food systems, investing in agriculture, and improving access to markets and financial services for small-scale food producers. **Good Health and Well-being:** The goal is to ensure universal access to quality health care and reduce the burden of disease by 2030. This involves strengthening health systems, improving health education, and investing in research and innovation.

**Quality Education:** The goal is to provide inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. This requires expanding access to quality education, especially for girls and marginalized communities. **Gender Equality:** The goal is to eliminate all forms of discrimination and violence against women and girls by 2030. This requires addressing gender inequalities in areas such as education, employment, and political representation. **Clean Water and Sanitation:** The goal is to ensure availability and sustainable management of water and sanitation for all by 2030. This involves improving access to safe drinking water and basic sanitation, and reducing water-related diseases. **Affordable and Clean Energy:** The goal is to ensure access to

affordable, reliable, and modern energy for all by 2030. This requires increasing the use of renewable energy, improving energy efficiency, and expanding energy access in rural areas. Decent Work and Economic Growth: The goal is to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all by 2030. This requires creating good jobs, improving workers' rights, and fostering entrepreneurship and innovation. Industry, Innovation, and Infrastructure: The goal is to build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation by 2030. This involves improving transportation systems, upgrading infrastructure, and increasing access to finance and technology.

Reduced Inequalities: The goal is to reduce income inequality and improve social, economic, and political inclusion by 2030. This requires addressing the root causes of poverty and inequality, such as discrimination, and promoting equal opportunities for all. Sustainable Cities and Communities: The goal is to make cities and human settlements inclusive, safe, resilient, and sustainable by 2030. This involves improving urban planning, reducing air pollution, and increasing access to housing and basic services. Responsible Consumption and Production: The goal is to ensure sustainable consumption and production patterns by 2030. This involves reducing waste, improving resource efficiency, and promoting sustainable consumption and production. Climate Action: The goal is to take urgent action to combat climate change and its impacts by 2030. This requires reducing greenhouse gas emissions, improving climate resilience, and supporting sustainable development. Life Below Water: The goal is to conserve and sustainably use the oceans, seas, and marine resources for sustainable development by 2030. This involves reducing marine pollution, protecting biodiversity, and ensuring sustainable fishing practices. Life on Land: The goal is to protect, restore, and promote the sustainable use of terrestrial ecosystems, forests, and biodiversity by 2030. This requires reducing deforestation, conserving wildlife habitats, and promoting sustainable agriculture. Peace, Justice, and Strong Institutions: The goal is to promote.

A coordinated effort from all sectors of society, including governments, civil society, the private sector, and individuals, is required to achieve the SDGs. The SDGs

cannot be accomplished just by governments; they require the participation and commitment of all players in society. Through their business practises, investment strategies, and supply chain management, private sector enterprises, for example, may play a vital role in advancing progress toward the SDGs. Furthermore, the SDGs are interconnected and interdependent, which means that achievement in one area might have a positive impact on progress in others. Investing in clean energy, for example (Goal 7) can help reduce greenhouse gas emissions and battle climate change (Goal 13), but improving access to quality education (Goal 4) can boost economic growth and alleviate poverty.

Finally, the SDGs provide a comprehensive framework for addressing the world's most pressing development concerns and supporting sustainable development. To achieve the SDGs, all actors in society, including governments, civil society, the commercial sector, and individuals, must work together. The SDGs serve as a road map for governments to work toward a more sustainable future, as well as a call to action for all players to collaborate in order to achieve a better and more sustainable world for all.



**Source: Malaysia Sustainable Financial Initiative (2020)**



## 1.2 Problem Statement

In Malaysia, many businesses had been compelled to shut due of the COVID-19 outbreak, causing an unusual interruption in commerce across multiple industry sectors. Short-term issues challenge retailers and brands, including those pertaining to supplier chain, health and safety, labour, consumer demand, sales, marketing, and cash flow. However, overcoming these challenges will not guarantee a prosperous or even a future. This is because when we emerge from this pandemic, the world will be very different from what it was before the outbreak. Numerous marketplaces have vanished, particularly in the tourist as well as the hospitality industry. Every organisational function is intended to prioritise and optimise expenses, or to defer activities that will not add value in the current context. Businesses, particularly start-ups, have adopted a permanent hiring freeze (J Bus Res,2020) Businesses in Malaysia experienced a high decline due to the occurrence of Covid-19, so businesses had to close due to the Covid-19 outbreak that spread, so companies like Watson also experienced this because strict standard operating procedures (SOP) could not afford sales and premises closed temporarily. There have lack of study regarding of Self-Checkout Counter implementation at Drugstore especially at developing country such as Malaysia. There have lot of study discuss about the e-wallet application. RFID, BINGO BOX, TOUCH N GO but there have limited research discuss about what is the factor that will improve Self-Checkout Counter as mainly for the customer usage intention in Malaysia. In the practical field, it is related to the current Covid-19 epidemic situation which caused various obstacles and problems regarding payment at the Drugstore such as obstacles regarding social imprisonment when queuing at the counter. Therefore, counter payments are reduced. However, this study examines why people need and use the Self-Checkout Counter service. This is due to the fact that many individuals prefer counter payments to Self-Check Out Counters since they are less aware of the benefits of this technology, while Self Check Out Counters are speedier and save time. That is why this study must provide or should provide information on what elements may improve client purchasing intentions, particularly in Malaysian drug stores.

Therefore, based on the information problem and gaps in the literature and also the practical is crucial to research the factors of Self-Checkout Counter especially in the Drugstore because we know that store is very heavy and a lot of customer and in order to mitigate the Covid-19 spreading is important to know what is the factors that will affect their usage on intention to use.

### 1.3 Research Questions

This research consists of the three main of research questions:

- 1) What is the self-checkout counter factors influencing usage intention among customer during pandemic COVID-19?
- 2) What is the relationship between self-checkout counter factor and usage intention behaviour among customer during pandemic COVID-19?
- 3) What is the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19?

### 1.4 Research Objectives

The research objectives consist of three mains based on research questions:

- 1) To investigate the self-checkout counter factors influencing usage intention among customer during pandemic COVID-19.
- 2) To measure the relationship between self-checkout counter factor and usage intention behaviour among customer during pandemic COVID-19.
- 3) To determine the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19.



### **1.5 Scope of Study**

This investigation aims to factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore. This study covers five dimensions in theoretical model, namely compatibility, ease of use, trialability, perceived trust as an independent variable, while usage intention as a dependent variable. The scope of this study will be focused consumer in Malaysia. Questionnaires were randomly distributed through an online survey to consumer in Melaka who intended use or utilize the self-checkout counter to achieve the desired objectives.

This study is based on the Information System Success Model and secondary materials (i.e., books, e-journals, and articles) connected to the checkout counter's own determinants on client usage intents, which are utilised as references. Specifically, the findings of this study will identify the most important elements influencing user satisfaction with self-checkout counters.

### **1.6 Significant of Study**

This study is important to explain the relationship in the five dimensions of compatibility, ease of uses, trialability and perceived trust as well as usage intention of self-checkout counter technology. This study adds to the scholarly literature in this subject because there are few studies that identify the use of self-checkout counters and customer usage intentions toward self-checkout counter technology.

### 1.7 Limitation of Study

It is possible for research limitations to occur when the author has limited capabilities and is unable to conduct comprehensive research. The Covid-19 epidemic has caused virus infecting Malaysians, the number of people visiting Melaka has decreased significantly. The study's limitation is that the sample size coverage is limited to only consumers in the Melaka metropolitan area. Because the authors only collected 150 samples from all self-checkout counter users, the findings may not be representative of the ideal level of user satisfaction for the self-checkout counter in Malaysia, which is a concern. Future studies should consider using larger sample sizes to determine whether or not respondents are satisfied with the use of self-checkout counter technology in their stores.

### 1.8 Summary

The study's context and the problem statements encountered in this research will be explored briefly in this first chapter. Following that, this chapter will outline the study issue and research purpose that the researcher will investigate. This chapter explains the study's objective and parameters, as well as its significance and the researcher's goals. This information was covered and developed in the following chapter.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Introduction



In this chapter, a discussion is conducted related to the review of secondary data on Self-checkout counter and the factors of self-checkout counter towards customer usage intention in Malaysia Drugstore. It begins with a brief introduction on Self-checkout counter technology which covers the definition, procedure, benefit, and the types of Self-Checkout. Next, the theory of Information System Success Model (ISSM), the factors influencing the usage and user satisfaction of Self-Checkout Counter is also discussed which involves discussion of past studies and the proposed conceptual framework.

#### 2.1 Pandemic Covid-19 in Malaysia

The COVID-19 pandemic has greatly affected Malaysia, causing widespread panic and disruption to daily life. The virus was first reported in the country in January 2020, and since then, the government has implemented various measures to contain its

spread. In March 2020, Malaysia announced its first Movement Control Order (MCO), which restricted travel and gatherings, and shut down non-essential businesses. This was followed by a partial lockdown and several extensions of the MCO until June 2020, when it was lifted with restrictions on some activities remaining in place.

As the situation continued to evolve, Malaysia reimpose the MCO in October 2020 in response to a resurgence of cases. This was followed by the implementation of a Conditional Movement Control Order (CMCO) in several states, which allowed for a partial reopening of the economy with strict health protocols in place. The pandemic has had a major impact on Malaysia's economy, with industries such as tourism, hospitality, and retail being among the hardest hit. Many businesses were forced to close temporarily or permanently, leading to job losses and a rise in unemployment. The government introduced various stimulus packages to support the economy and affected individuals, including cash aid, loan moratoriums, and wage subsidies.

Despite these efforts, the spread of the virus has continued, and Malaysia has reported over 380,000 cases and over 1,400 deaths as of February 1, 2023. The government has been criticized for its handling of the pandemic, including its initial slow response and inadequate healthcare system.

The economic impact of the pandemic in Malaysia has been severe, with the country experiencing its worst economic contraction since the Asian Financial Crisis in the late 1990s. The pandemic has led to a decline in consumer spending, a decrease in investment, and a decrease in exports, causing a sharp contraction in the country's gross domestic product (GDP). The pandemic has also affected various industries, with the tourism industry being particularly hard-hit. The decline in tourism has had a ripple effect on other industries, such as retail and hospitality, resulting in job losses and reduced hours for many workers. In response to the economic impact of the pandemic, the government has implemented various measures to support businesses and workers, including financial aid and tax relief. The government has also implemented a large stimulus package, which includes measures aimed at boosting the economy and creating jobs.

The COVID-19 pandemic has also had a significant impact on Malaysian society. The lockdown measures implemented to curb the spread of the virus have resulted in increased stress and anxiety levels, as well as social isolation for many people. The pandemic has also highlighted the importance of access to quality healthcare and has underlined the need for better systems for addressing public health crises.

The pandemic has also had a significant impact on Malaysian politics. The government's response to the pandemic has been a major focus, with some questioning its handling of the crisis and its measures to support the economy. The pandemic has also resulted in increased political polarization, with some criticizing the government for its handling of the crisis, while others support its efforts. The COVID-19 pandemic has had a profound impact on Malaysia, affecting the country's economy, society, and politics. The government's response to the crisis has been a major focus, and the pandemic has highlighted the importance of access to quality healthcare and the need for better systems for addressing public health crises.

In conclusion, the COVID-19 pandemic has had a significant impact on Malaysia, affecting its economy and causing widespread disruption to daily life. The government has implemented various measures to contain the spread of the virus, but it remains a challenge, and the situation continues to evolve. It is imperative that the government, healthcare system, and society work together to overcome this crisis.

## **2.2 Definition of Self-Checkout Counter**

Self-checkouts (SCOs), machines that allow customers to conduct their own transactions without the need for a standard staffed checkout, often known as ACOs or self-service checkouts. Customers who use before paying for their complete transaction, SCOs scan item barcodes. without the assistance of employees. Self-service checkouts are

the most popular commonly found at grocery stores, although they not uncommon in convenience and department stores. Most self-service checkouts are supervised by at least one staff, who frequently aids customers who execute transactions, corrects prices, or performs other services. Approximately 90% of supermarkets globally are currently equipped with self-checkout stations. However, there is no method to give customers with product information as they shop or to monitor theft, which has led to loss in supermarkets and unhappiness among customers, respectively. Customers must wait in lengthy lines to get their products' barcodes scanned, which makes billing a tiresome operation (Karunakara, 2019).

Self-checkout technologies are characterized as technology platforms that enable customers to independently generate a service provided without the involvement of direct service personnel. The usage of self-checkout counters has garnered the most interest from businesses, particularly supermarket chains. In 2007, the British supermarket Tesco used self-checkout stations in its stores to American operation Fresh and Easy (Smith and Sparks 2009). According to Smith and Spark (2009), self-checkout counters have become increasingly popular in recent years as a way to reduce labor costs and increase customer convenience. They note that self-checkout counters offer several advantages over traditional checkout counters, including faster checkout times, reduced wait times, and improved customer satisfaction. Self-checkout counters also allow customers to be more in control of the checkout process and to complete their purchases in a more efficient and timely manner. Smith and Spark (2009) also highlight that while self-checkout counters can offer many benefits, they are not without their challenges. For example, the technology used in self-checkout counters can be complex and may require significant training for customers and employees. Additionally, self-checkout counters can be vulnerable to theft and other forms of misuse, and may require increased security measures to protect against these risks.

Self-checkout has gained popularity over the past several years, and with the advent of COVID, it has become many customers' preferred form of payment. It lowers waiting time and customer contact with personnel and other customers.



**Figure 2.1: Self-Checkout Counter of Watson**

### **2.2.1 Self-checkout technology at Checkout Counter**

The use of highly integrated technologies is required for an automatic self-checkout system. Knowledge, materials, machinery, equipment, and working procedures are all components of technology, which enables an organization to convert inputs into outputs. The creation of new technologies would be impossible without the influence of external factors such as demographic, social, lifestyle, and economic trends. Investing in cutting-edge technology can boost productivity. The Malaysian manufacturing industry, for example, has seen a large increase in productivity as a result of investments in flexible manufacturing technology. Changes in check-out technology continue to occur. Electric scanners at the checkout station, for example, will undoubtedly improve current checkout procedures. Reliability and advantages are the two criteria that have helped self-service technology succeed, according to an investigation of the literature. Personal capability, perceived danger, relative advantage, and preference for personal contact are all elements that affect how self-service technology is adopted and used.



Retailers have used price scanning for more than two decades. The use of scanners at the checkout counter necessitates a lower level of expertise. Cashiers' jobs have become more standardized because to checkout scanners, which allow hypermarkets to hire unskilled personnel who can be trained in a brief amount of time. Because of this, it's possible to teach customers to check out on their own instead of relying on the service provider. Customers will be more likely to shop independently if they have access to this self-service check out. In order to set up and maintain self-service technology, you will need a substantial amount of capital. As a result, the hypermarket retailer can only be profitable if it reduces labor expenses while still gaining market share. If a hypermarket is able to provide a speedy checkout process for customers, there is no need to upgrade the checkout system. (Hasliza Hasan, 2019)

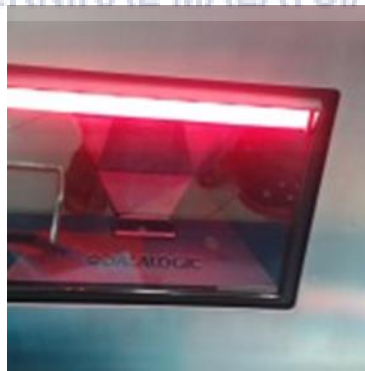
### **2.2.2 Self-checkout procedure**

Clearly, a self-checkout kiosk's capability is constrained by its architecture and programming. Similarly, the kiosk restricts what its users may and cannot do. So, the characterized the functions of the machine as greeting, scanning, bagging, paying, and exiting for the purposes of this analysis. Each of these acts ranges in complexity from simple to very sophisticated. Self-checkout equipment's initial action entails greet the potential consumer. This is typically presented as a result of the individual with a touchscreen button. Modern self-checkout machines are bilingual, allowing non-English speakers to select their preferred language. A friendly (typically female) voice will instruct the consumer to scan the first item upon pushing the button.



## Scanning

Concurrently, the most complex activities completed by the self-checkout are completed. After scanning the first item, the customer is asked to place it in a bag. The information received by scanning each item's UPC is linked to the self-checkout system. In order to bill, the code obtains information regarding the item's price the buyer accordingly, as well as a rough measurement of use for bagging. A human cashier was accountable for visual validating that a customer had paid for all of their groceries prior to the introduction of the self-checkout line. This requirement is avoided by comparing the product's weight data that was previously stored to a scale underneath the bagging area. If a customer scans an item but does not put it in a bag, the system will prompt them to do so. If an item is placed in the bag that has a different weight than the item scanned, the customer will be warned that an illegal item has been placed in the bagging area. The visual message, together with the auditory indications, alerts the client and any nearby workers that the customer may not be using the system as intended. The message is sent without directly accusing the customer of wrongdoing.



**Figure 2.2: Scanning**

## Paying

After scanning each item, the system prompts the user to choose between paying or looking at something else. The system will prompt the user if the consumer wishes to pay. to scan coupons using their UPCs and then choose a means of exchange. If the customer chooses the device accepts notes and coins and gives out change for payments made in cash. A credit card transaction is considerably more quicker because the system only requires one swipe. Any attempt to remove bags from the scales prior to payment will generate an additional error message.



**Figure 2.3: Exiting**

The voice tells the customer to pack their items and leave when the receipt has printed. The voice will typically end by thanking the client and extending an invitation to do business again. The device will also alert the user of any unclaimed change at this time.

### 2.2.3 Types of Self-Checkout

Self-checkout counters have become increasingly popular in recent years, providing customers with the convenience of self-service and reducing lines at traditional checkout counters. There are several types of self-checkout counters, each with its own advantages and disadvantages.

#### **Type 1: Standalone Self-Checkout Counters**

Standalone self-checkout counters are independent units that are not connected to a central system. They are typically smaller in size and can be placed in areas where traditional checkout counters are not feasible. Customers use a touch screen to scan and bag their own items, and the machine calculates the total amount due. Standalone self-checkout counters are ideal for small businesses and are less expensive than other types of self-checkout counters.

#### **Type 2: Wall-Mounted Self-Checkout Counters**

Wall-mounted self-checkout counters are similar to standalone counters, but they are mounted on a wall and are connected to a central system. This type of self-checkout counter is more expensive than standalone counters, but they are ideal for larger retail stores where there is a need for more than one self-checkout counter. Wall-mounted counters provide customers with more space to bag their items and are more secure because they are connected to a central system.

#### **Type 3: Conveyor Belt Self-Checkout Counters**

Conveyor belt self-checkout counters are similar to wall-mounted self-checkout counters, but they have a built-in conveyor belt. Customers scan their items and place them on the conveyor belt, which then moves the items to a bagging area. Conveyor belt self-checkout counters are ideal for large retail stores because they provide customers with more space to bag their items and are more efficient than other types of self-checkout counters.

#### **Type 4: Mobile Self-Checkout Counters**

Mobile self-checkout counters are compact and portable, making them ideal for small retail stores and pop-up shops. Customers use a touch screen to scan and bag their own items, and the machine calculates the total amount due. Mobile self-checkout counters are less expensive than other types of self-checkout counters and are ideal for retailers who want to provide customers with the convenience of self-service checkout.

In conclusion, there are several types of self-checkout counters, each with its own advantages and disadvantages. Retailers should consider their specific needs and the type of customers they serve when selecting a self-checkout counter. Standalone, wall-mounted, conveyor belt, and mobile self-checkout counters are all available options, and each type offers unique benefits and features.

### **2.3 Benefit of Self-Checkout Adaption**

#### **1. Quicker checkout**

Self-checkout counters have revolutionized the checkout process by providing customers with the convenience of self-service and reducing wait times. The speed of the checkout process is one of the key benefits of self-checkout counters, making them an attractive option for customers who are in a hurry or who simply want to get in and out of the store as quickly as possible. One of the main reasons self-checkout counters are faster than traditional checkout counters is that customers can scan and bag their own items. This eliminates the need for customers to wait in line, freeing up traditional checkout counters for other customers. In addition, self-checkout counters are typically less crowded than traditional checkout counters, which helps to reduce wait times even further. Another factor that contributes to the faster checkout times of self-checkout counters is the technology used. Self-checkout counters are equipped with high-speed scanning technology that quickly and accurately scans items, reducing the time it takes to complete

a transaction. In addition, the touch screen interface of self-checkout counters is user-friendly and intuitive, making it easy for customers to quickly complete their transactions.

## 2. Labor cost reduction

One of the main benefits of self-checkout counters is that they reduce the need for additional staff. By allowing customers to check out their own items, self-checkout counters reduce the need for additional cashiers, freeing up staff to assist with other tasks such as restocking shelves, helping customers find items, and performing other customer service functions. This not only reduces labor costs but also helps to improve the overall shopping experience for customers. Self-checkout counters also help to reduce the need for additional training and support staff. Unlike traditional checkout counters, self-checkout counters are easy to use and require minimal training, making them a cost-effective option for retailers. This can reduce the need for additional training and support staff, helping to further reduce labor costs and increase profitability. In addition to reducing the need for additional staff, self-checkout counters also help to improve the efficiency of the checkout process. By reducing the chance of errors and increasing the speed of transactions, self-checkout counters can help to reduce the need for additional staff to assist with the checkout process. This can result in even greater cost savings for retailers, making self-checkout counters an attractive option for those looking to reduce labour costs.

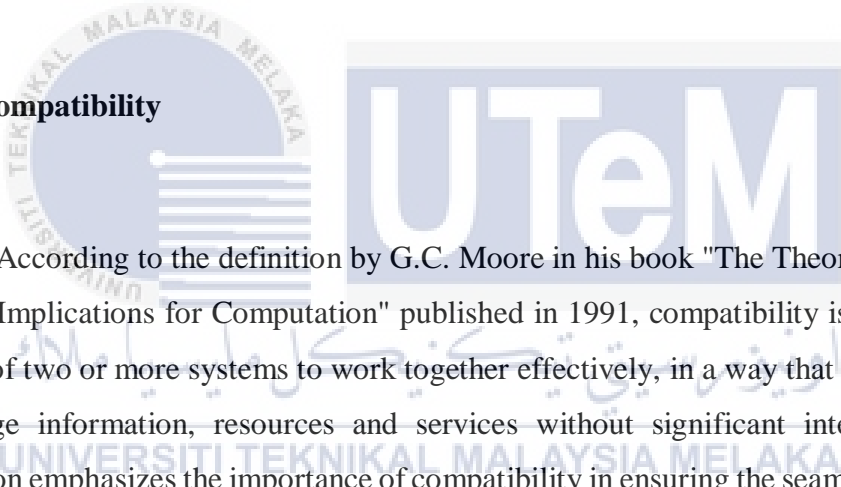
## 3. More social distance.

One of the main benefits of self-checkout counters is that they reduce the need for close contact between customers and employees. Customers can scan and bag their own items, reducing the need for cashiers to handle items, accept payments, and make change. This helps to reduce the risk of transmitting infections and provides customers with greater peace of mind when shopping. In addition, self-checkout counters help to reduce the number of customers waiting in line at traditional checkout counters. By providing customers with an alternative checkout option, self-checkout counters can help to reduce crowding at checkout areas, making it easier for customers to maintain a safe distance

from one another. This not only promotes social distancing but also helps to reduce the risk of transmitting infections. Another benefit of self-checkout counters is that they can be easily cleaned and disinfected. Unlike traditional checkout counters, which are often used by many customers throughout the day, self-checkout counters can be easily sanitized between transactions, reducing the risk of transmitting infections. This is especially important in the wake of the COVID-19 pandemic, where maintaining a clean and safe shopping environment has become a top priority for retailers.

## **2.4 Factors of Self-Checkout counter Towards customer usage intention**

### **2.4.1 Compatibility**



According to the definition by G.C. Moore in his book "The Theory of Reduction and Its Implications for Computation" published in 1991, compatibility is defined as the ability of two or more systems to work together effectively, in a way that they are able to exchange information, resources and services without significant interference. This definition emphasizes the importance of compatibility in ensuring the seamless interaction between different systems, and the ability of these systems to operate together in a way that supports the intended purposes and functions. Moore states that compatibility is a key factor in the design and development of complex systems, such as computer networks, software systems and digital devices. He explains that compatibility is essential for ensuring that different systems can communicate effectively, exchange information and resources, and perform tasks in an efficient and effective manner. Compatibility is an important consideration for both designers and users of technology systems. For designers, compatibility is essential for ensuring that different systems can work together seamlessly, and for users, compatibility is essential for ensuring that the systems they use are able to perform the tasks they need them to perform. (Moore,G.C.,1991) In conclusion, the definition of compatibility by G.C. Moore highlights the importance of compatibility

in ensuring the effective operation of complex systems, and the importance of compatibility in ensuring seamless interaction between different systems. Whether you are a designer or a user of technology systems, it is important to consider compatibility in order to ensure that systems are able to perform effectively and efficiently.

#### **2.4.2 Ease of Use**

The degree to which an individual view a technology or innovation to be relatively free of mental and physical effort is characterized as ease of use. (Davis, P.D.,1989). A variety of studies have used ease of use to investigate technology adoption. (Lopez,2008) Ozturk et al discovered that simplicity of use, compatibility, and convenience were strong predictors of customer loyalty to mobile hotel booking applications, while (Alalwan ,2016) According to Alalwan in his paper "Ease of Use: A Theoretical Review" published in 2016, easy to use is characterized as "the degree to which a technology or system is easy to learn, understand and operate for its intended users." This definition highlights the importance of ease of use in ensuring that users can quickly and easily learn how to use a technology or system, and perform tasks effectively. Alalwan explains that ease of use is a critical factor in determining the success of technology products and services, as it affects how well users are able to interact with and utilize the system. He notes that ease of use is influenced by a number of factors, including the design of the user interface, the clarity and consistency of information, and the availability of helpful tools and resources. According to Alalwan, ease of use is not only important for ensuring user satisfaction and adoption of technology products and services, but it is also critical for ensuring the success of technology-based businesses. He explains that technology companies must consider ease of use in order to ensure that their products and services are accessible and usable by the intended audience, and to increase the likelihood of customer retention and repeat business.



### 2.4.3 Trialability

Trialability is defined as the degree to which a new technology or product can be tested by potential customers prior to adoption. This definition emphasizes the importance of trialability in determining the likelihood of adoption of new technology products and services. (Moore, G.C.,1991). trialability is a critical factor in the adoption of new technology, as it allows potential customers to experience the product or service before committing to a full adoption. This enables potential customers to determine if the product or service meets their needs and expectations, and if they are comfortable using it. According to Johnson, trialability can be increased by providing potential customers with opportunities to test and evaluate new products and services, such as through product demos, free trials, or limited-time offers. He also notes that trialability can be affected by a number of factors, including the complexity of the technology, the availability of support and resources, and the level of user-friendliness of the technology. (Johnson, 2018). (Sugarhood,2014) Trialability can be increased by providing potential customers with opportunities to test and evaluate new products and services, such as through product demos, free trials, or limited-time offers. He also notes that trialability can be affected by a number of factors, including the complexity of the technology, the availability of support and resources, and the level of user-friendliness of the technology.

### 2.4.4 Perceived Trust

This study responds to the landmark review's request for "greater, and particularly more systematic, research focus for the antecedents of trust in electronic services" (Beldad, De Jong, and Steehouder, 2010). Have faith in businesses as Internet transactions involving second parties are considered as a promoter of user participation in an online transaction, but lack of trust leads to transaction aversion, particularly in online economic exchanges (Ha & Stoel, 2009). Recent advances in recognizing the user behavior in



contexts for business and research have heightened interest in trust and its determinants in the digital environment. Because online credence is seen as a vital success element for digital or internet businesses, services, or activities (Beldad et al., 2010). Furthermore, emphasize the importance of trust in communication interactions. (Bryce and Fraser, 2014). According to other studies, perceived risks and trust connected includes internet transactions and relationships based on trust to the online environment has an impact on decision making and, ultimately, behaviour intentions. (Benson,2015).

## 2.5 Conceptual Framework

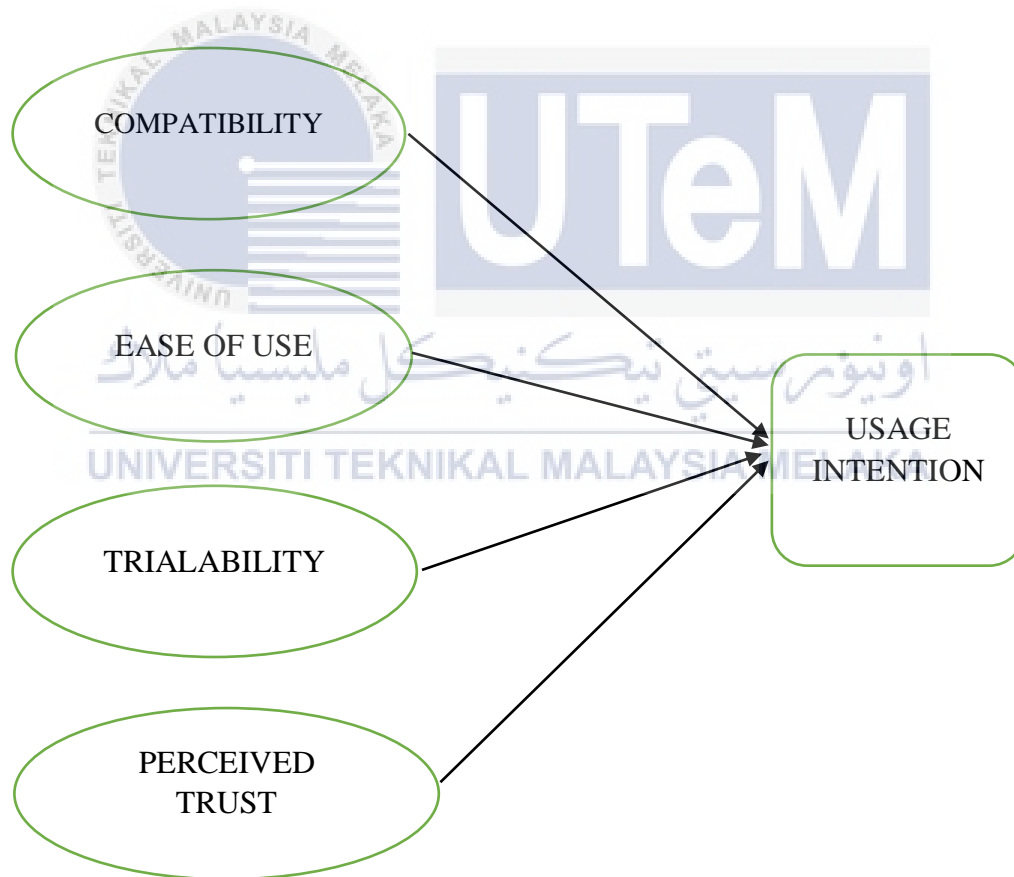
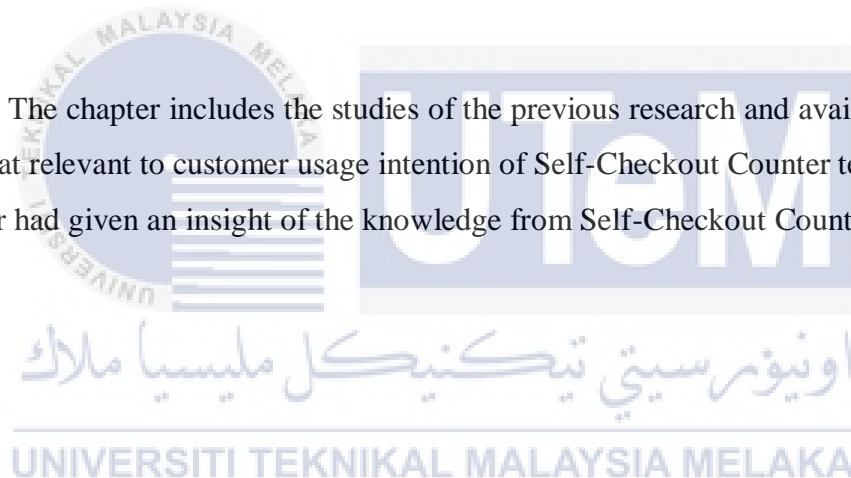


FIGURE 2.5: Conceptual Framework of Research

The conceptual model is developed based on Diffusion of Innovation Model. The figure above shows the independent variables (IV) of compatibility, ease of use, trialability, perceived trust as mediating variable and usage intention as dependent variable (DV). All predictors (except net benefits) of the model were used to evaluate the factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore. Since the study focused on the user satisfaction element, the net benefit construct has been excluded.

## 2.6 Summary

The chapter includes the studies of the previous research and available secondary data that relevant to customer usage intention of Self-Checkout Counter technology. This chapter had given an insight of the knowledge from Self-Checkout Counter technology.



## CHAPTER 3

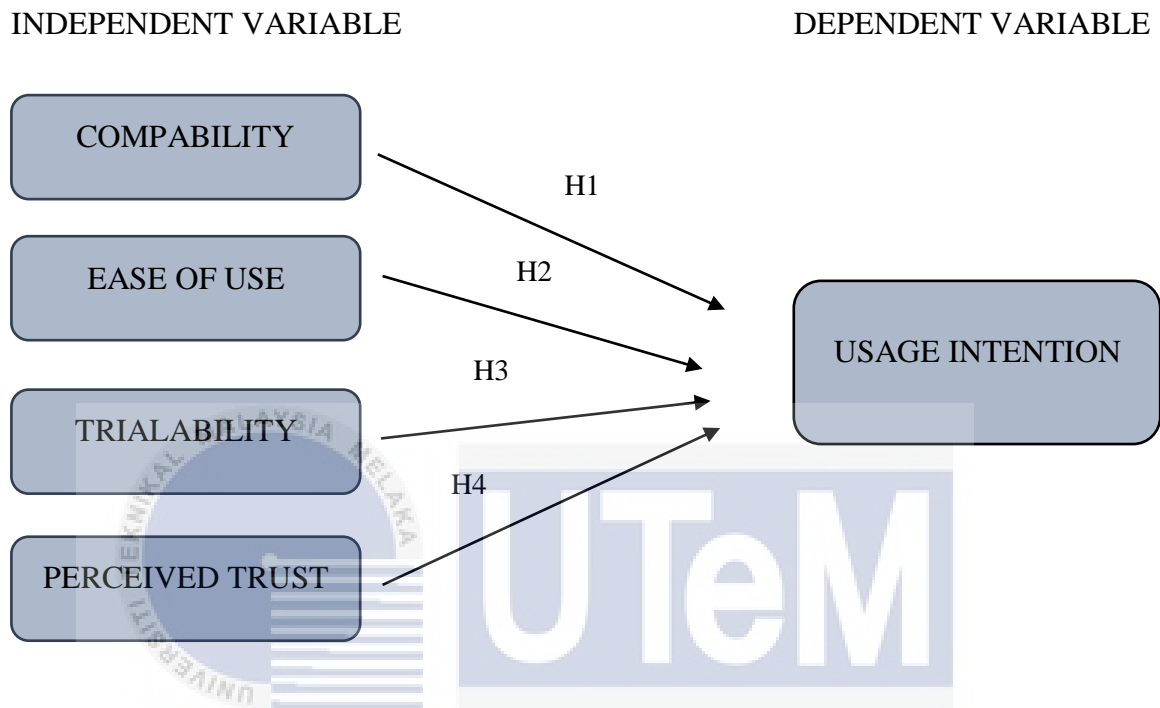
### RESEARCH METHODOLOGY

#### 3.0 Introduction



This chapter is an overview of all the methods used by the researcher in implementing this study. The method uses aims to help the researcher to get an accurate and precise result. The suitable method selected leads to the data collection analyzed phase. The researcher used the quantitative method in conducting this study. This chapter will describe the detail of research design, quantitative data, primary and secondary data, data collection, data analysis, reliability, and validity of the research. The purpose of this chapter is to obtain clear information regarding the topic of this study in which to know the factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore.

### 3.1 Theoretical Framework



**Figure 3.1: Theoretical Framework of The Research**

The figure above shows the proposed framework for each of the factors, compatibility, ease of use, trialability, and perceived trust on the use of Self-checkout counter. Also, the relationship between the use of Self-checkout counter and usage intention as well as the use of Self-checkout counter on the compatibility, ease of use, trialability and perceived trust.

### 3.1.1 Hypothesis Testing

There are three (4) hypotheses from the previously discussed research framework which are described as below.

#### Hypothesis 1

##### **Compatibility**

H<sub>1</sub>: There is a positive relationship between compatibility and usage intention with Self-checkout counter.

H<sub>2</sub>: There is no relationship between compatibility and usage intention with Self-checkout counter.

#### Hypothesis 2

##### **Ease of use**

H<sub>1</sub>: There is a positive relationship between ease of use and usage intention with Self-checkout counter.

H<sub>2</sub>: There is no relationship between ease of use and usage intention with Self-checkout counter.

#### Hypothesis 3

##### **Triability**

H<sub>1</sub>: There is a positive relationship between triability and usage intention with Self-checkout counter.

H<sub>2</sub>: There is no relationship between triability and usage intention with Self-checkout counter.

#### Hypothesis 4

##### **Perceived Trust**

H<sub>11</sub>: There is a positive relationship between perceived trust and usage intention with Self-checkout counter.

H<sub>20</sub>: There is no relationship between perceived trust and usage intention with Self-checkout counter.

### **3.2 Research Design**

In general, research design is a technique or framework that is suitable for use by researchers for the purpose of their study. According to Clarence C. Gravlee, 2022, In research design, the goal is to ask pertinent questions and gather evidence to support the answers. A better beginning point for thinking about research design is to recognize a continuum of study aims, ranging from exploratory to confirmatory inquiries. There are three basic kinds of medical anthropology data gathering methods: participant observation, systematic observation, and interviewing approaches. When discussing medical anthropology, it is common to talk about "qualitative" and "quantitative" approaches of social study. Therefore, researchers need to have a well-structured framework for the collecting of data for analysis. Explanatory, exploratory, and descriptive research designs are all subcategories of the larger category of design study.

In the philosophy of descriptive study design, methods of observation and measurement are used to create a study without any kind of variable being controlled or manipulated. Using data collected through the use of descriptive research, researchers can provide a better explanation of current problems or concerns than those who do not use this strategy. Defining, explaining, or identifying what it is descriptive research can be categorized as analytical research, which focuses on finding why this or how it occurs.

Accordingly, the purpose of this method used in this study is to analyzing factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore. Therefore, a descriptive study design was also used in this study with a structured questionnaire form to collect all relevant data. The approach of this descriptive method is to describe and validate the attributes and data that can affect usage intention with the use of Self-checkout counter.

### **3.2.1 Research Approach**

In this study, a deductive approach was also used. There are two main types of deductive approaches: those that focus on the development of a hypothesis (or hypotheses) from existing theories and those that focus on testing those hypotheses through research. To reason deductively means to start with the specific and work your way up to the general. If a theory or case example suggests a causal relationship or correlation, it may be true in many circumstances.

A deductive design could be used to examine if this relationship or link holds in more broad contexts. It is possible to describe the deductive approach using hypotheses drawn from the theory's statements. To put it another way, the deductive approach is concerned with determining a conclusion from a hypothesis or a set of statements. In this study, a deductive approach is used to analyzing factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore by developing hypotheses during the research process.

### 3.2.2 Questionnaire Development

The development of the questionnaire is depended on the type of method used in conducting this study. The researcher chooses the survey as a strategy for answering the research question. This selection is due to the method used in this study is quantitative. The survey strategy allows the use of descriptive statistics to gather quantitative data. The survey strategy is linked to the deductive approach to research and is used to answer the question of what, who, where and how. The survey strategy uses questionnaires as it allows for a highly economical collection of uniform data from a large population and makes it possible to compare.

The questionnaire is developed by utilizing the independent. In this research, the questionnaire is built based on four independent variables which are compatibility, ease of use, trialability, and perceived trust. Each of the independent variables is divide into four sections of the questionnaire. All of the independent variables will affect the dependent variable which is usage intention. The questionnaire is designed by using the Google form that provides the different option to measure and the response are updated in the excel spreadsheet automatically. The questionnaire was distributed by using the form of link or Uniform Resource Locator (URL) and spread the link via social media such as WhatsApp's, Instagram, and others. This helps in reducing the time and cost in data collection for distributing the questionnaire to the respondent.

The questionnaire was structured in sections A, B, and C. There several questions ask about personal information in section A. In section B is the question asked about the respondent's view on each of the variables of the research. In section C the question asks the respondent about the dependent variable which is the customer usage intention in Malaysia Drugstore. The role of this questionnaire development is important to answer all the research questions and research objectives of this research. The development of this questionnaire of this research also refers to the previous study.



SECTION A	Respondent's personal information
SECTION B	Factors of Self-Checkout Counter
SECTION C	Level of Usage Intention

Table 3.1: Sections in Questionnaire

The respondent to answer the questionnaire of this study has selected usage intention among customer in Malaysia. The contents of the questionnaire were specifically structured to list the typical understanding of analyzing factors of Self-Checkout Counter towards customer usage intention in Malaysia Drugstore. The response format in the form of the Likert scale was explicitly designed to make it easier for respondents to choose the most suitable response scale for and particular barrier. The scales used by researchers to have a 5-point scale such as Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The scales will be used for respondents to gain their answers and interpretation.

### 3.2.3 Operationalization of Constructs

Constructs	No. of Items	Scale of measurement
Compatibility	5	Likert Scale (1-5)
Ease of use	5	Likert Scale (1-5)
Trialability	5	Likert Scale (1-5)
Perceived Trust	5	Likert Scale (1-5)
Usage Intention	5	Likert Scale (1-5)

Table 3.1: Operationalization of Constructs

### 3.2.4 Pilot Test

The pilot test can be characterized as testing undertaken in preparation for the entire study, or as a specialized pre-test of research instruments, such as questionnaires or interview schedules. The goal of the pilot test is to ensure that this study's respondents not only answer and comprehend the questions in the same manner. In addition, the researcher can determine if any questions make respondents feel uneasy and how long it takes to complete the survey in real time. Implementing the pilot test reduces the amount of time, effort, and money that can be lost if a large-scale research study fails due to unknown factors. On the other hand, it appears that supplying the exact knowledge that leads to success in doing the research can reduce the probability of failure.

The pilot test serves as the initial step in completing the study by conducting experiments on a small scale to eliminate all potential issues that could result in the failure of the analytical approach. The pilot test will be conducted only once the study's research topic, research question, research objective, and research techniques or methodology have been properly specified. In a pilot study, there are two components, the first of which is to identify as many practical arrangements as possible that could hinder the effectiveness of the research process. The second step involved sorting out all procedures associated with measuring instruments and determining the applicability of these instruments to the probable outcomes of the study.

In this study, 30 persons have volunteered to participate in a questionnaire pilot. Before distributing the questionnaire to the actual sample, this pilot testing is issued at random to any professional career in order to collect the input of the respondents and enhance the questionnaire. Through this pilot test, the researcher is able to modify the questionnaire if necessary. This is to ensure that the questionnaire will be relevant and effective for the research. Validity and dependability can be attained as a result of this research.

### 3.3 Data Collection

This study uses a quantitative approach to collect data. The data collection process includes primary and secondary data. Primary data were used to gather direct information for the purpose of determining this study by exploring variables of interest. Questionnaires were used as an instrument to collect primary data to examine customer usage intention in Malaysia Drugstore.

This survey will focus on users who intend to use or use the Self-checkout counter technology. Secondary data is also used in this research to gather information from available sources. The data obtained includes the collection of information through document analysis, reading tools such as books, journals, newspapers, and other internet sites such as Google Scholar, Scopus and ScienceDirect.

#### 3.3.1 Sampling Technique

Sampling is the method of selecting appropriate components such as population, target population and sample to achieve the purpose of research. Sampling is the method of selecting appropriate components such as population, target population and sample to achieve the purpose of research. Sampling methods reduce the amount of data that researchers will obtain by selecting them from subgroups rather than all possible cases or components.

There are two types of sampling methods: probability sampling, which involves a random selection, and non-probability sampling, which involves a non-random selection based on facilities or other factors and facilitates data collection. Typically, simple random sampling is employed when a thorough and conveniently accessible sample framework containing a list of the target population is available, preferably in electronic format.

While these are often obtained from employees in the organization or members of clubs or organizations, appropriate lists tend not to be available for organizations. If the population covers a wide geographical region, random sampling ensures that the selected cases tend to be distributed nationwide. Therefore, random sampling is easily used to select the sample in this research because Self-checkout counter users as it is spread throughout Peninsular Malaysia.

### 3.3.2 Sampling Size

In this research, probability sampling is chosen for which simple random sampling is used. The probability of both arranging which sampling unit is sampled and the probability of each sample will be determined in the probability sample. Based on this study, the population cannot be clearly identified, but can be answered through (Hinkin, 1995). Hinkin, (1995) stated that for each set of scales to be a variable, the optimal sample size should have an item -to -response ratio between 1: 4 to 1:10. Since this research covers a total of 23 items, the optimal sampling size ranges from 92 to 230.

However, Hinkin advised that a sample size of at least 150 participants was optimal for obtaining valid results. This informs that the sample size of this study will be determined by a sample of 150 respondents. Therefore, the conclusions of Hinkin (1995) concur that 150 copies of the questionnaire needed to be distributed to Self-checkout counter users for this study.

### 3.3.3 Key Information

This study was conducted to obtain data that illustrate the experience of self-checkout counter factors on consumption intent among customers in Malaysia during the COVID-19 Pandemic. Study respondents included office workers, adolescents and so on.

### 3.4 Data Analysis

In this study, the data were analyzed using the Statistical Package for the Social Sciences (SPSS). SPSS facilitates the evaluation of data collecting and tabulation processes in quantitative research by managing enormous amounts of data. Standard multiple regression analysis in SPSS will aid in achieving the reliability, correctness, and validity of the study's data. The analysis will also aid in analyzing the variables in this study to enhance their validity.

Researchers analyzed the obtained research questionnaires using SPSS version 25.0. This method allowed the authors to undertake an analysis of two variables, one of which will serve as the focus of descriptive statistics. The data will next be described and evaluated using statistical methods. The outcomes will demonstrate descriptive statistical approaches, analyses of reliability and validity, Pearson correlation, and multiple linear regression.

In addition, mediator tests were conducted to establish the mediation effect of the system's mediating factors. The mediator phase in psychology determines how external physical events influence the significance of internal psychology. Consequently, Baron and Kenny (1986) have presented implementation procedures for the mediation theory. In circumstances where other factors control the link between the dependent variable and the independent variable significantly, the other variable is referred to as the mediating variable. In this research, mediator test was used to examine the mediation influence of

Self-checkout counter technology between system compatibility, ease of use, trialability and perceived trust with Self-checkout counter usage intention.

### 3.4.1 Descriptive Analysis

The researcher chose to use frequency distribution to analyses usage intention of Self-checkout counter. The results are interpreted based on the mean standard deviation obtained. Besides, the frequency distribution can be explained in term of percentage. Next, researcher also decides to choose mean and standard deviation. The level of mean score can be categorized into low, medium, and high level as shown below.

Range of Mean	Level
0.0-1.67	Low
1.68-3.33	Medium
3.34-5.0	High

**Table 3.4: Mean Score**

### 3.4.2 Reliability and Validity Analysis

Reliability is the evaluation of measurement consistency (Heale & Twycross, 2015). Each time an evaluation is conducted, the researcher who has completed a motivation measurement instrument should receive the same response. However, reliability cannot provide precise estimations, although estimates of dependability can be obtained through several steps. Internal consistency, stability, and equivalence are the three characteristics of reliability analysis. Using correlation, split-half reliability, the Kuder-Richardson coefficient, and Cronbach's, internal consistency is evaluated. Tests for split-half dependability involve dividing an experiment or instrument in half. The

correlation between two sections is found by comparing them. Weak correlations may indicate that the instrument is not accurate, whereas strong correlations indicate that it is reliable. The Kuder-Richardson test is an advanced form of the split-half test. This procedure determines the average of all conceivable split-half combinations and generates a correlation between 0 and 1. Cronbach's is the most popular approach for determining an instrument's internal correctness. In this test, the sum of all correlations in each split-half combination is determined. In this experiment, instruments with questions that allow for more than two responses may be employed. The Cronbach component has a value between 0 and 1. A suitable dependability score is at least 0.7.

### 3.4.3 Correlation Analysis

Correlation analysis is the link or relationship between two or more quantitative variables used to represent a phenomenon (Gogtay & Thatte, 2017). The purpose of this correlation analysis is to determine which variables are independent or intercorrelated. In this study, the Pearson correlation can be utilized to assess the linear bivariate significance between the independent variable and the dependent variable. This test analysis will assess the strength of the association between the two variables. Where its square term is registered, it will range from 0 (random outcome) to 1 (perfect linear relationship) or -1 (perfect negative relationship). The Pearson correlation analysis with coefficient range is shown in Table 3.5.

<b>Coefficient Range</b>	<b>Strength</b>
$\pm 0.91$ to $\pm 1.00$	Very strong
$\pm 0.71$ to $\pm 0.90$	High
$\pm 0.41$ to $\pm 0.70$	Moderate
$\pm 0.21$ to $\pm 0.40$	Small but definite relationship
$\pm 0.00$ to $\pm 0.20$	Slight, almost negligible

**Table 3.5: Pearson Correlation Coefficient**

#### 3.4.4 Multiple Linear Regression Analysis

The relationship between two or more independent variables and one dependent variable is characterized by multiple linear regression. The dependent variable is the outcome variable, while the independent factors are the predictor variables. Multiple linear regression is utilized to assess the significance and degree of the association between the dependent and independent variables. In addition, it is used to determine the direction or effect of the association, as well as the significance of the test. The outcome will be employed to forecast the performance of the set of independent variables.

#### 3.5 Summary

<b>Research Question</b>	<b>Research Objective</b>	<b>Research Hypothesis</b>	<b>Data Analysis</b>
What is the self-checkout counter factors influencing	To investigate the self-checkout counter factors		Descriptive analysis, Mean, standard deviation,



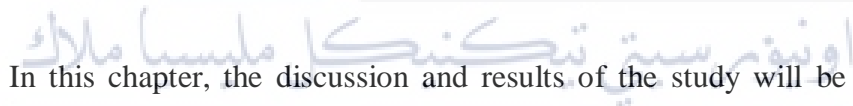
usage intention among customer during pandemic COVID-19?	influencing usage intention among customer during pandemic COVID-19.		crosstab, Cronbach alpha
What is the relationship between self-checkout counter factor and usage intention behavior among customer during pandemic COVID-19?	To measure the relationship between self-checkout counter factor and usage intention behavior among customer during pandemic COVID-19.		Correlation Coefficient
What is the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19?	To determine the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19.	1. There is a positive relationship between compatibility and usage intention with Self-checkout counter.  2. There is a positive relationship between ease of use and usage	Multiple Regression

		<p>intention with Self-checkout counter.</p> <p>3. There is a positive relationship between trialability and usage intention with Self-checkout counter.</p> <p>4. There is a positive relationship between perceived of trust and usage intention with Self-checkout counter.</p>	
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## CHAPTER 4

### DATA ANALYSIS

#### 4.0 Introduction



In this chapter, the discussion and results of the study will be presented. The findings of the study were analysed according to the objectives of the study, which are to explain the implementation of compatibility, ease of use, trialability, and perceived trust, and usage satisfaction; and to study the effect of mediation between the four independent variables with usage intention of self-checkout counter towards customer in Malaysia drugstore.

As discussed earlier, findings data were collected using quantitative methods by distributing online questionnaires to 200 respondents at. SPSS 25.0 will be used to analyse the data collected from the respondents. In this chapter will be discussed descriptive analysis, reliability analysis and validity testing, Pearson correlation analysis, and hypothesis testing.

#### 4.1 PILOT TEST

The questionnaire was pre-tested by the researcher to ensure that it was understandable and error-free. To assist the researcher in finding flaws in the questionnaire preparation process, such as sentence structure, typography, and spelling, the questionnaire was examined by a lecturer and a specialist in a relevant field. The purpose of this pre-test is to reduce respondents' confusion when filling out the survey, which could lead to incorrect analytical results. Aside from that, the pilot test was delivered to 30 participants.

The Cronbach's Alpha of pilot test showed in the Table 4.1 below:

Case Processing Summary			
		N	%
Cases	Valid	30	100.0
	Excluded <sup>a</sup>	0	.0
	Total	30	100.0
a. Listwise deletion based on all variables in the procedure.			

Table 4.1: Case Processing Summary

(Source: SPSS Output)

Reliability Statistics	
Cronbach's Alpha	N of Items
.857	20

Table 4.2: Reliability Statistic

(Source: SPSS Output)

The pilot test's show in terms of Cronbach's Alpha is 0.857. Based on this test, compatibility, ease of use, trialability and perceived trust is a relevant variable to achieve the objective. So, based on the reliability by Cronbach's alpha, 0.8 is acceptable level.

Reliability Statistic (Source: SPSS Output)

Variables	N of Item	Cronbach's Alpha	Result
Compatibility	4	.521	Excellent
Ease of Use	4	.662	Excellent
Trialability	4	.642	Excellent
Perceived Trust	4	.673	Excellent
Usage Intention	4	.670	Excellent

Table 4.3: Summarized Reliability Statistics Result

## 4.2 Descriptive Analysis

### 4.2.1 Background of the Respondents

The demographic profile of the respondents included information on gender, age, race, education level, occupation, and frequency of using the Self-Checkout counter. This demographic sample profile was collected from 150 respondents who intended to use or use the Self-Checkout counter.

#### 4.2.1.1 Profiling of Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	94	62.7	62.7	62.7
	FEMALE	56	37.3	37.3	100.0
	Total	150	100.0	100.0	

Table 4.4: Frequency and Percentage of Gender

(Source: SPSS Output)

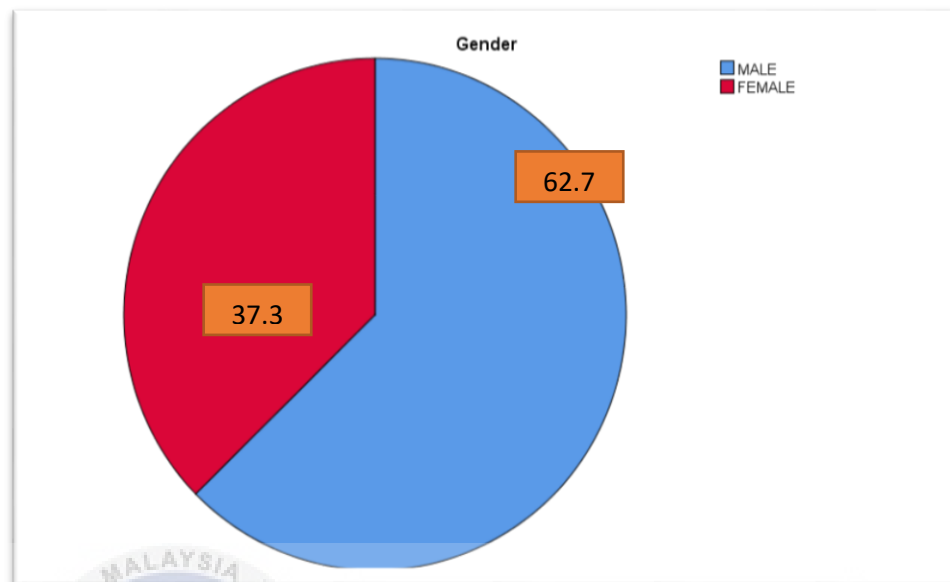


Figure 4.1: Graph of Gender

Based on Table 4.4 and Figure 4.1 showed the total number of 150 respondents. The dominant respondent was male which consists of 62.7% (94 respondents) while the rest were female respondents with 37.3% (56 respondents).

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#### 4.2.1.2 AGE

##### Age

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 years old and below	11	7.3	7.3	7.3
	21-25 years old	86	57.3	57.3	64.7
	26-30 years old	38	25.3	25.3	90.0
	31-35 years old	9	6.0	6.0	96.0
	36-40 years old	6	4.0	4.0	100.0
	Total	150	100.0	100.0	

Table 4.5: Frequency and Percentage of Age

(Source: SPSS Output)

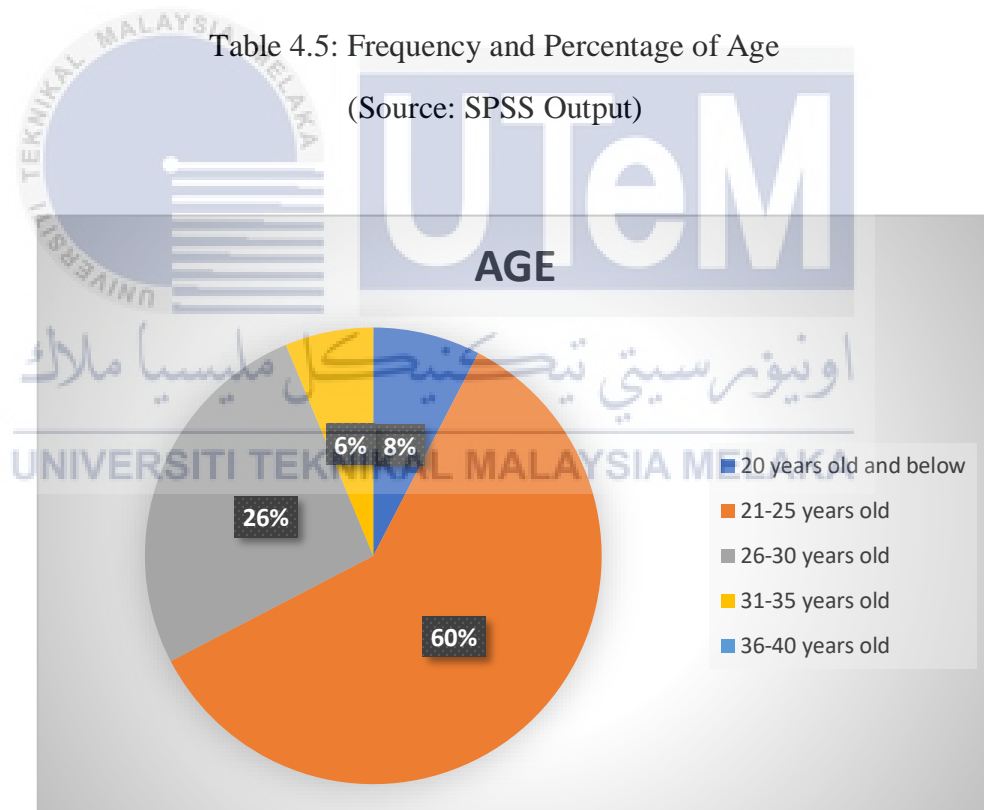


Figure 4.2: Graph of Age

Table 4.5 and Figure 4.2 shows the frequency and percentage of respondents' age. From 150 respondents, the dominant respondents were in age within 21-25 years old consists of 57.3% (86 respondents). The second highest



number of respondents who had participated in this survey were aged within 26-30 years old consists of 25.3% (38 respondents). There were 7.3% (11 respondents) were aged between 20 years old and below. Next, 31-35 years old consists 6% (9 respondents) The minority respondents were in aged group of 36-40 years old consists 4% (6 respondents).

#### 4.2.1.3 Profiling of Races

##### RACES

		Race			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	102	68.0	68.0	68.0
	Chinese	30	20.0	20.0	88.0
	Indian	12	8.0	8.0	96.0
	Other	6	4.0	4.0	100.0
	Total	150	100.0	100.0	

Table 4.6: Frequency and Percentage of Races

(Source: SPSS Output)

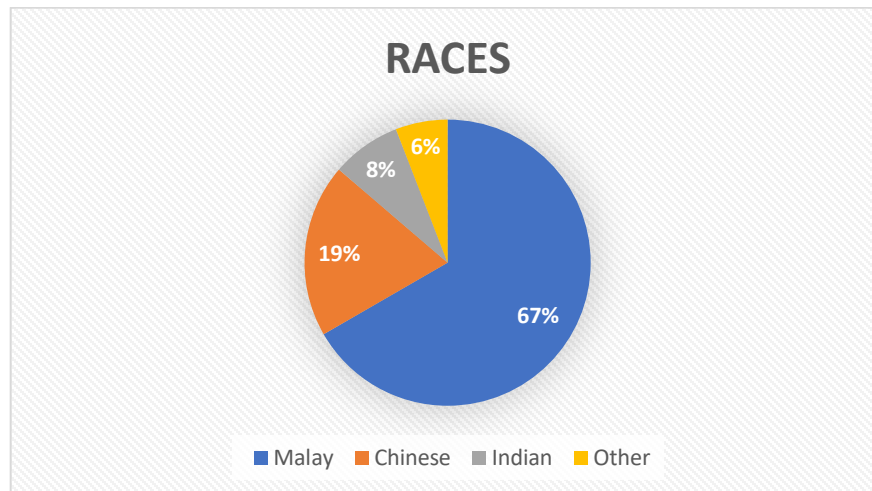


Figure 4.3: Profiling of Races

Figure 4.3 shows the races of respondents who participated in this survey. Based on the pie chart above, respondents among the Malays were 67% ( $n = 102$ ), while respondents among the Chinese were 20.0% ( $n = 30$ ). For Indians, the respondents involved were 8% ( $n = 12$ ), and only 4.0% ( $n = 6$ ) were others.

#### 4.2.1.4 Profiling of Education Level

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary school	10	6.7	6.7	6.7
	STPM/Matriculation/Diploma	26	17.3	17.3	24.0
	Bachelor Degree	114	76.0	76.0	100.0
	Total	150	100.0	100.0	

Table 4.7: Frequency and Percentage of Education Level

(Source: SPSS Output)

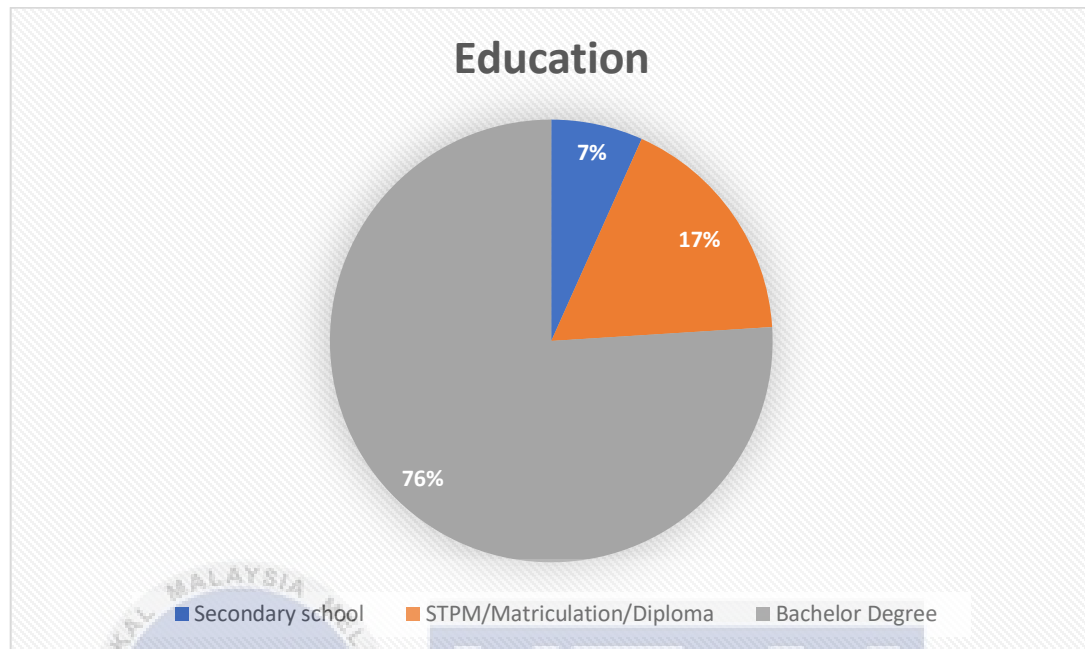


Figure 4.4: Profiling of Education Level

Figure 4.4 show the education level of respondent who participated in this survey. Based on the pie chart above, respondent with a bachelor degree education level got the highest percentage with 76% (114 Respondent), followed by respondent with education level in STPM/Matriculation/Diploma with 17% (26 Respondent). For education level at the secondary school level got the lowest percentage with 7% (10 Respondent).

#### 4.2.1.5 Profiling of Occupation

Occupation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	91	60.7	60.7	60.7
	Private sector worker	29	19.3	19.3	80.0
	Government employment	18	12.0	12.0	92.0
	Self-employed	12	8.0	8.0	100.0
	Total	150	100.0	100.0	

(Source: SPSS Output)

Table 4.8: Frequency and Percentage of Occupation

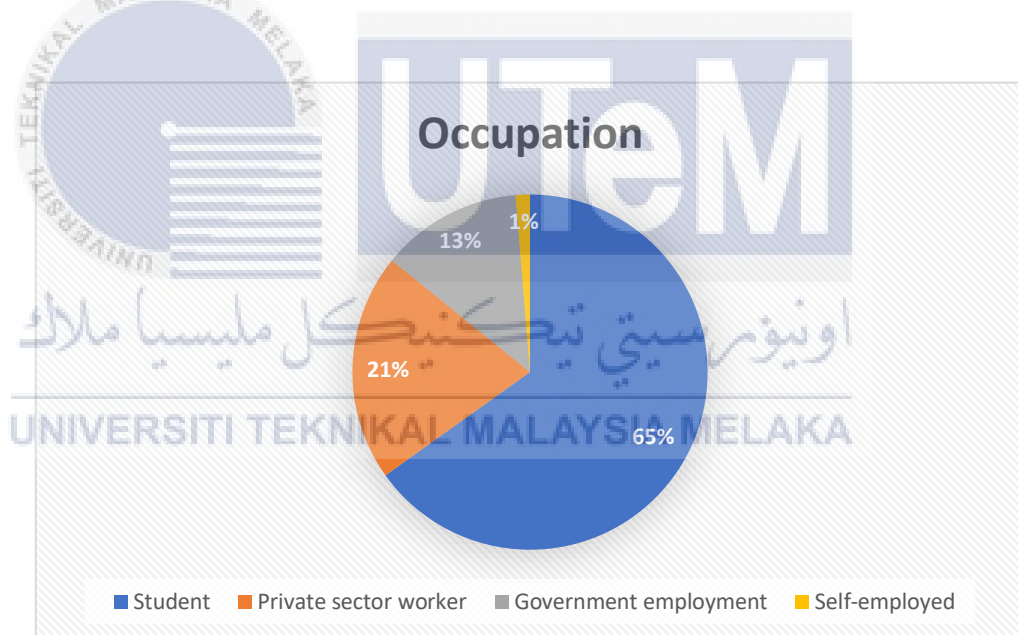


Figure 4.5: Profiling of Occupation

The Table 4.8 and Figure 4.5 indicate the frequency and percentage of respondents' occupation. The majority respondents were employed in student which consists of 60.7% (91 respondents), followed by private sector worker consists of 19.3% (29 respondents). The third is government employment with 12% (18 respondent). Lastly are self-employment respondents consisting of 8% (12 respondents).

#### 4.2.1.6 Frequency of Using Self-Checkout Counter

On average, how often did you use self-checkout counter at Drugstore during pandemic?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Several times a week	5	3.3	3.3	3.3
	Once a week	12	8.0	8.0	11.3
	Once every 2 weeks	64	42.7	42.7	54.0
	Once a month	69	46.0	46.0	100.0
	Total	150	100.0	100.0	

(Source: SPSS Output)

Table 4.9: Frequency of Using Self-Checkout Counter

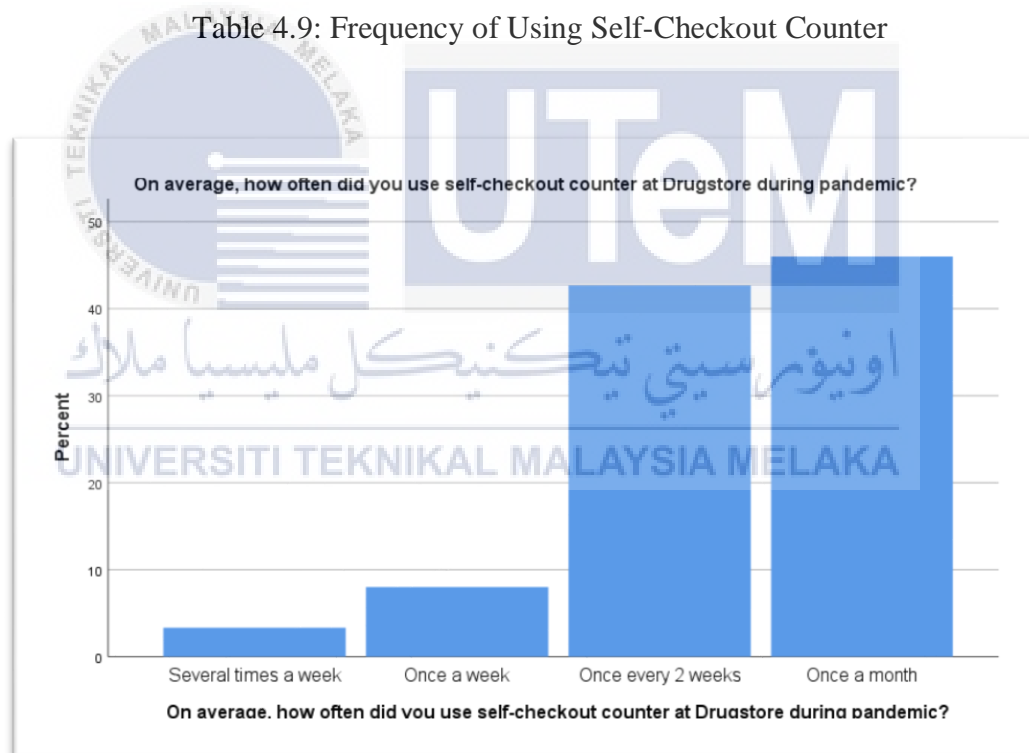


Figure 4.6: Frequency of Using Self-Checkout Counter

Based on the figure above, there are 69 (46%) out of 150 respondents using the Self-checkout counter once a month, 64 (42.7%) out of the total respondents using the Self-checkout counter once every 2 weeks. In addition, there are 12 respondents (8.0%) use Self-checkout counter once a week while 5 respondents (3.3%) do use this several times a week.

### 4.3 Mean Score Analysis for Variables

#### 4.3.1 Compatibility

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Self-checkout counters provide user-friendly technology.	150	1.00	5.00	4.2333	.93706
Save time by using self-checkout counter technology.	150	1.00	5.00	3.9067	.90744
Self-checkout counters can save time with faster technology.	150	1.00	5.00	4.0133	.91949
Frequent use can reduce confusion among users about the self-checkout counter.	150	1.00	5.00	3.8800	.89683
Valid N (listwise)	150				

Table 4.10: Descriptive analysis for Compatibility

Table 4.10 illustrates that the minimum evaluation scale for each item is 1 while the maximum evaluation scale is 5. The above results also show that the highest mean value for the “Compatibility” factor is 4.42 with the item “User friendly technology” and its standard deviation value is 0.93. This shows that the Self-checkout counter is easy and understandable to use. The item " Self-checkout counters can save time with faster technology." showed a mean value of 4.01 and the standard deviation was 0.91. In addition, the item on " Save time by using self-checkout counter technology." has a mean value of 3.90 and a standard deviation of 0.90. Items on "reduce confusion among users" had the lowest mean value of 3.88, with the standard deviation of 0.89.

### 4.3.2 Ease of Use

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The instructions on the kiosk are clear and understandable.	150	1.00	5.00	3.9400	.90658
Self-checkout counter in Drugstore easy to use.	150	1.00	5.00	3.9733	.96201
Self-checkout counter is flexible to interact with.	150	1.00	5.00	3.9400	.93572
It is easy to become skillful at using self-checkout counter at drugstore.	150	1.00	5.00	3.9133	.86650
Valid N (listwise)	150				

Table 4.11: Descriptive analysis for Ease of Use

Table 4.11 shows that the minimum rating scale for each item is 1 while the maximum rating scale is 5. The results from table 4.11 show that the item on "Self-checkout counter in Drugstore easy to use." has the highest mean value of 3.97 and standard deviation is 0.96, followed by the second highest mean for the items on "Self-checkout counter is flexible to interact with" the mean values are 3.94 with the standard deviation of 0.93. In addition, the item on "The instructions on the kiosk are clear and understandable." has a mean value of 3.94 with a standard deviation of 0.90. The smallest mean value of the item "It is easy to become skillful at using self-checkout counter at drugstore." with a mean value of 3.91 and a standard deviation of 0.86.

### 4.3.3 Trialability

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Be able to use self-checkout counter on trial basis to see what it can do.	150	1.00	5.00	4.0133	.88981
Be able to try self-checkout counter for one month.	150	1.00	5.00	3.9133	.93361
Before deciding whether to use any self-checkout counter, I was able to properly try them out.	150	1.00	5.00	3.8800	.94776
I can go to satisfactorily try out various uses of self-checkout counter.	150	1.00	5.00	3.8600	.84369
Valid N (listwise)	150				

Table 4.12: Descriptive analysis for Trialability

Based on table 4.12, the minimum rating scale for this factor is 1 while the maximum rating scale is 5. The results above show that there are two highest mean (4.01) which is the item on "Be able to use self-checkout counter on trial basis to see what it can do. However, the standard deviations for the items were at 0.88. This proves that the trialability of the technology is high and trusted by most respondents. Next, the item on "Be able to try self-checkout counter for one month." has a mean value of 3.91 with a standard deviation of 0.93. The item on "Before deciding whether to use any self-checkout counter, I was able to properly try them out." shows a mean value of 3.88 and a standard deviation of 0.94. Finally, the item on "I can go to satisfactorily try out various uses of self-checkout counter." has the lowest mean of 3.86 with a standard deviation of 0.84.



#### 4.3.4 Perceived of Trust

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Transaction system self-checkout counter is secure.	150	1.00	5.00	4.0533	.87306
Self-checkout counter keeps its promises.	150	1.00	5.00	3.8800	.97568
Self-checkout counter is trustworthy.	150	1.00	5.00	3.9067	.90001
Overall, I trust self-checkout counter at drugstore.	150	1.00	5.00	3.9133	.85087
Valid N (listwise)	150				

Table 4.13: Descriptive analysis for Perceived of Trust

Table 4.13 shows that the minimum rating scale for each item is 1 while the maximum rating scale is 5. The results from table 4.13 show that the item on "Transaction system self-checkout counter is secure." has the highest mean value of 4.05 and standard deviation is 0.87, followed by the second highest mean for the items on "Self-checkout counter is trustworthy" which is 3.90 with the standard deviation of 0.90 and "Overall, I trust self-checkout counter at drugstore." mean is 3.91 with the standard deviation of 0.85. The smallest mean value of the item "Self-checkout counter keeps its promises." with a mean value of 3.88 and a standard deviation of 0.97.

### 4.3.5 Usage Intention

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Re-use self-checkout counter.	150	1.00	5.00	4.0467	.86184
To use self-checkout counter compared to face-to-face payment at the counter.	150	1.00	5.00	4.0067	.95886
Suggest using a self-checkout counter to others.	150	1.00	5.00	3.9467	.90329
Very likely to make orders again using self-checkout counter in future	150	1.00	5.00	3.9267	.82817
Valid N (listwise)	150				

Table 4.14: Descriptive Statistics for Usage Intention

Table 4.14 shows the descriptive statistical results for the usage intention factor. The table above shows that the minimum rating scale is 1 while the maximum rating scale is 5. The results above show that there are two highest means of 4.04 on the item "Re-use self-checkout counter", with a standard deviation of 0.86. In the item "To use self-checkout counter compared to face-to-face payment at the counter." the mean recorded is 4.00 with a standard deviation value of 0.95. From the above results, it shows that most respondents are satisfied with the Self-checkout counter system and agree that it helps. Next, there is also the item "Suggest using a self-checkout counter to others." the mean recorded is 3.94, with a standard deviation of 0.90. The lowest mean recorded was on the item "Very likely to make orders again using self-checkout counter in future" which is 3.92, with a standard deviation of 0.82.

#### 4.4 Reliability Analysis and Validity Test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.976	.976	20

Table 4.15: Reliability Analysis of All Items

Table 4.15 shows the reliability analysis of the data collected through the online survey. The table above shows the reliability values based on 20 items in a questionnaire with 150 samples. The results in the table show the value of Cronbach's Alpha is 0.976 which is much higher than 0.70. According to Malhotra (2012), the reliability measurement in this research will use Cronbach Alpha where a value of  $\leq 0.60$  is considered unreliable. If the value is more than  $\geq 0.70$ , the data is considered highly acceptable. Therefore, the results of this survey are very acceptable.

Variables	Number of Items	Cronbach's Alpha
Compatibility	4	0.874
Perceived Ease of Use	4	0.893
Trialability	4	0.890
Perceived of Trust	4	0.899
Usage Intention	4	0.906

Table 4.16: Reliability Analysis of Each Variable

The table above shows that the alpha value of each variable is more than 0.80 which indicates that the results are considered reliable. The range of all variables ranged from 0.874 to 0.906. This proves that the overall alpha coefficient for each subscale is very excellent. As indicated in the table, the alpha values for compatibility ( $\alpha = 0.874$ ), perceived ease of use ( $\alpha = 0.893$ ), trialability ( $\alpha = 0.890$ ), perceived of trust ( $\alpha = 0.899$ ) and usage intention ( $\alpha = 0.906$ ).

## 4.5 INFERENCE ANALYSIS

### 4.5.1 PEARSON'S CORRELATION ANALYSIS

The Pearson Correlation Coefficient is a measure of how well two variables are related. The correlation coefficient's strength is indicated in the table below.

Coefficient Range	Description of Strength
$\pm 0.81$ to $\pm 1.00$	Very Strong
$\pm 0.61$ to $\pm 0.80$	Strong
$\pm 0.41$ to $\pm 0.60$	Moderate
$\pm 0.21$ to $\pm 0.40$	Weak
$\pm 0.00$ to $\pm 0.20$	Weak to no relationship

Table 4.17: Strength of The Correlation Coefficient (Hair et al.,2010)

The independent and dependent variable use in this study are as follow:

- a) Independent Variables: Compatibility, perceived of ease of use, trialability, perceived of trust
- b) Dependent Variable: Usage Intention

Correlations						
		COMPATIBILI TY	EASE OF USE	TRIALABI LITY	PERCEIVE D OF TRUST	USAGE INTENTIO N
COMPATIBILITY	Pearson	1	.867**	.870**	.839**	.851**
	Correlation					
	Sig. (2-tailed)		.000	.000	.000	.000
	N	150	150	150	150	150
EASE_OF_USE	Pearson	.867**	1	.894**	.866**	.879**
	Correlation					
	Sig. (2-tailed)	.000		.000	.000	.000
	N	150	150	150	150	150
TRIALABILITY	Pearson	.870**	.894**	1	.911**	.896**
	Correlation					
	Sig. (2-tailed)	.000	.000		.000	.000
	N	150	150	150	150	150
PERCEIVED OF TRUST	Pearson	.839**	.866**	.911**	1	.913**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
	N	150	150	150	150	150
USAGE INTENTION	Pearson	.851**	.879**	.896**	.913**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	150	150	150	150	150

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

Table 4.18: Result of Correlation Analysis for All Variable

(Source: SPSS Output)

The Pearson Correlation Coefficient Analysis of independent variables and dependent variables is shown in Table 4.17. Every independent variable, such as compatibility, perceived ease of use, trialability, and perceived of trust, has a significant two-tailed connection with usage intention at 0.01 levels. First, compatibility is having correlation with usage intention with value 0.851. So, it shown the result is Perfect Positive. Second is ease of use. Ease of use has a correlation with usage intention with value 0.879 which is it have strong positive. Third is trialability. Trialability has a correlation with usage intention with value 0.896 which is it have a perfect positive. Last but not least is perceived of trust. Perceived of trust have a correlation with usage intention with value 0.913 which is perceived of trust have a perfect positive. All of this independent variables and dependent variable are needed to achieves the objectives. According to the correlations research, the most significant association between independent factors and usage intention is perceived of trust (0.913), followed by trialability (0.896). Ease of use is third with (0.879) and compatibility have the lowest link between independent factors and usage intention, at 0.851.

#### 4.5.1.1 RELATIONSHIP BETWEEN COMPATIBILITY AND PERCEIVED EASE OF USE

Correlations			
		COMPATIBILITY	EASE OF USE
COMPATIBILITY	Pearson Correlation	1	.867**
	Sig. (2-tailed)		.000
	N	150	150
EASE OF USE	Pearson Correlation	.867**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.19: Correlation between Compatibility and Perceived of Ease of Use

This table shows the relationship between the independent variables of compatibility and ease of use. The correlation value in the table above is 0.867, which is a positive correlation coefficient value. Ease of use is substantially connected with compatibility, and it is positively correlated with compatibility.

#### 4.5.1.2 RELATIONSHIP BETWEEN COMPATIBILITY AND TRIALABILITY

Correlations			
		COMPATIBILITY	TRIALABILITY
COMPATIBILITY	Pearson Correlation	1	.870**
	Sig. (2-tailed)		.000
	N	150	150
TRIALABILITY	Pearson Correlation	.870**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.20: Correlation between Compatibility and Trialability

This graph shows the relationship between the independent variables of compatibility and trialability. The correlation value in the table above is 0.870, which is a positive correlation coefficient value. Compatibility has a significant and positive relationship with Trialability.

#### 4.5.1.3 RELATIONSHIP BETWEEN COMPATIBILITY AND PERCEIVED OF TRUST

Correlations			
		COMPATIBILITY	PERCEIVED OF TRUST
COMPATIBILITY	Pearson Correlation	1	.839**
	Sig. (2-tailed)		.000
	N	150	150
PERCEIVED OF TRUST	Pearson Correlation	.839**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.21: Correlation between Compatibility and Perceived of Trust

This table shows the relationship between the independent variables of compatibility and perceived of trust. The correlation value in the table above is 0.839, which is a positive correlation coefficient value. Compatibility has a large and positive relationship with Perceived of Trust.

#### 4.5.1.4 RELATIONSHIP BETWEEN PERCEIVED OF USE AND TRIALABILITY

Correlations			
		EASE OF USE	TRIALABILITY
EASE OF USE	Pearson Correlation	1	.894**
	Sig. (2-tailed)		.000
	N	150	150
TRIALABILITY	Pearson Correlation	.894**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.22: Correlation between Ease of Use and Trialability



This graph shows the relationship between two independent variables: perceived of ease of use and trialability. The correlation value in the table above is 0.894, which is a positive correlation coefficient value. Trialability is substantially connected with Perceived of Ease of Use, and the two are favorably correlated.

#### 4.5.1.5 RELATIONSHIP BETWEEN PERCEIVED EASE OF USE AND PERCEIVED OF TRUST

Correlations			
		EASE OF USE	PERCEIVED OF TRUST
EASE OF USE	Pearson Correlation	1	.866**
	Sig. (2-tailed)		.000
	N	150	150
PERCEIVED OF TRUST	Pearson Correlation	.866**	1
	Sig. (2-tailed)	.000	
	N	150	150

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

Table 4.23: Correlation between Ease of Use

This is the relationship between ease of use and perceived of trust which are independent factors. The correlation value in the table above is 0.866, which is a positive correlation coefficient value. Perceived of Trust are highly connected with Ease of Use, and the two are favorably correlated.

#### 4.5.1.6 RELATIONSHIP BETWEEN TRIALABILITY AND PERCEIVED OF TRUST

Correlations			
		TRIALABILITY	PERCEIVED OF TRUST
TRIALABILITY	Pearson Correlation	1	.911**
	Sig. (2-tailed)		.000
	N	150	150
PERCEIVED OF TRUST	Pearson Correlation	.911**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.24: Correlation between Trialability and Perceived of Trust

This is the correlation between independent variables which is trialability and perceived of trust. Table above showcase the correlation value is 0.911, which is a value for positive correlation coefficient. Trialability is correlated significantly to Perceived of Trust and its positively correlated.

#### 4.6 INFERENCE STATISTICS

Inferential statistics is a method that uses a random sample of data collected from the population to identify and analyse them. Results in inferential statistics are important and helpful to the analysis, particularly when the assessment of each member of the population is not optimal. Besides, inferential statistics are also used to allow interpretations of whether the variations between samples are dependable or are likely to occur by chance. Inferential statistics thus help to draw inferences regarding the more general state of the data collection.

#### 4.6.1 MULTIPLE REGRESSION ANALYSIS

Multiple regression analysis is a tool that used to forecast the value of a variable based on the value of two or more variables. This technique used to establish correlation between the independent and dependent variables. Multiple Regression Analysis helps to explain the relationship between independent variables (compatibility, perceived of ease of use, trialability, perceived of trust), and dependent variable (usage intention). The outcomes of the regression analysis will be represented by an equation.

##### 4.6.1.1 THE EFFECT OF COMPATIBILITY, PERCEIVED OF EASE OF USE, TRIALABILITY AND PERCEIVED OF TRUST ON USAGE INTENTION

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.870	.28307
a. Predictors: (Constant), Compatibility, Ease of Use, Trialability, Perceived of Trust				

Table 4.25: Model Summary of Multiple Regression Analysis

Table 4.25 reveals the results where the value of R is a positive number. Based on the table, the multiple regression coefficient, the value of R in this model summary is 0.935. This means that the level of correlation between the independent and dependent variables is high. Thus, there is a strong and positive relationship because the R value is more than 0.70. The square value of R in this model is 0.874 which means the dependent variable (usage intention) is influenced 87.4% by the independent variable (compatibility, ease of use, trialability, perceived of trust), while the rest ( $100\% - 87.4\% = 12.6\%$ ) is influenced by factors -other factors not discussed in this study.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80.393	4	20.098	250.825	.000 <sup>b</sup>
	Residual	11.619	145	.080		
	Total	92.012	149			
a. Dependent Variable: USAGE INTENTION						
b. Predictors: (Constant), PERCEIVED OF TRUST, COMPATIBILITY, EASE OF USE, TRIALABILITY						

Table 4.26: Regression Analysis on ANOVA

Refer to Table 4.26, F-Test was used to determine the data from the survey had a good fit in the model. The value of F is 250.825 and the significant value, p is 0.000 which is less than the significance level of 0.01. These results prove that all independent variables (perceived of trust, compatibility, ease of use and trialability) significantly influence the dependent variables (usage intention).

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.148	.125		1.183	.239
	COMPATIBILITY	.125	.067	.124	1.884	.062
	EASE OF USE	.208	.072	.212	2.877	.005
	TRIALABILITY	.172	.087	.171	1.976	.050
	PERCEIVED OF TRUST	.466	.075	.469	6.221	.000
a. Dependent Variable: USAGE INTENTION						

Table 4.27: Regression Analysis on Coefficients

Table 4.27 illustrates that the degree of beta value of the coefficient for each independent variable affects the dependent variable. The results in the table above show that B1 = 0.124, B2 = 0.212, B3 = 0.171, B4 = 0.469 respectively to all independent variables. Based on the table, perceived of trust had the highest beta coefficient value (B = 0.469, t = 6.221, p < 0.05) among other variables and the largest effect on usage intention. Next, ease of use (B = 0.212, t = 2.877, p < 0.05) was the second largest predictor of self-

checkout counter. Then, trialability ( $B = 0.171$ ,  $t = 1.976$ ,  $p < 0.05$ ). Finally, compatibility had the lowest impact on system utilization ( $B = 0.124$ ,  $t = 1.884$ ,  $p > 0.05$ ). Thus, the results indicate that the independent variables namely ease of use, trialability and perceived of trust act as important inputs for the predictive model.

The relationship revealed as the below mathematically analysis equation based on the Table 4.27 above:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

**Where:**

$Y$  = Usage Intention

$b_0$  = Regression Constant

$X_1$  = Compatibility

$X_2$  = Ease of Use

$X_3$  = Trialability

$X_4$  = Perceived of Trust

$b_1 b_2 b_3 b_4$  = Regression Coefficient

$Y \text{ (Usage Intention)} = 0.148 + 0.124 \text{ (Compatibility)} + 0.212 \text{ (Ease of Use)} + 0.171 \text{ (Trialability)} + 0.469 \text{ (Perceived of Trust)}$
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#### 4.7 HYPOTHESIS TEST

The hypothesis mentioned in Chapter 3 that the researcher used significant value to analyse hypothesis testing. To evaluate the two different hypotheses, which are null hypothesis and alternative hypothesis, researchers can use a random population sample. In this test, the statistical sample will be tested to indicate whether the null hypothesis is accepted or rejected. The hypothesis test is the use of statistics to evaluate the probability that given a hypothesis is true. The verification of the hypothesis was carried out to test all dependent variables using the data generated by regression analysis. The outcome give in Table 4.27 will be examined by measuring the significant value is less than 0.05 or greater than 0.05.

##### **The Hypothesis for Compatibility Factor**

H<sub>11</sub>: There is a positive relationship between compatibility and usage intention with Self-checkout counter.

H<sub>10</sub>: There is a no relationship between compatibility and usage intention with Self-checkout counter.

##### **Accept H<sub>10</sub>**

Table 4.27 reveals the relationship between compatibility and usage intention with self-checkout counter. The results showed a significant value for the compatibility factor,  $p = 0.062$  which is higher than 0.05. This indicates that compatibility has a significant relationship with usage intention. Therefore, H<sub>10</sub> was rejected in this study.

##### **The Hypothesis for Ease of Use Factor**

H<sub>21</sub>: There is a positive relationship between ease of use and usage intention with Self-checkout counter.

H2<sub>0</sub>: There is a no relationship between ease of use and usage intention with Self-checkout counter.

### **Accept H2<sub>1</sub>**

Table 4.27 reveals the relationship between ease of use factors and usage intention with self-checkout counter. The results show significant value for the ease of use factor,  $p = 0.005$  which is lower than 0.05. This indicates that ease of use has a significant relationship with usage intention. Therefore, H2<sub>1</sub> was accepted in this research.

### **The Hypothesis for Trialability Factor**

H3<sub>1</sub>: There is a positive relationship between trialability and usage intention with Self-checkout counter.

H3<sub>0</sub>: There is a no relationship between trialability and usage intention with Self-checkout counter.

### **Accept H3<sub>1</sub>**

Table 4.27 reveals the relationship between trialability factors and usage intention with self-checkout counter. The results show a significant value for the trialability factor,  $p = 0.05$  which is lower than 0.05. This indicates that trialability has a significant relationship with usage intention. Therefore, H3<sub>1</sub> was accepted in this study.

### **The Hypothesis for Perceived of Trust Factor**

H4<sub>1</sub>: There is a positive relationship between perceived of trust and usage intention with Self-checkout counter.

H4<sub>0</sub>: There is a no relationship between perceived of trust and usage intention with Self-checkout counter.

### Accept H<sub>41</sub>

Table 4.27 reveals the relationship between perceived of trust factors and usage intention with self-checkout counter. The results show a significant value for the trialability factor,  $p = 0.00$  which is lower than 0.05. This indicates that perceived of trust has a significant relationship with usage intention. Therefore, H<sub>41</sub> was accepted in this study.

INDEPENDENT VARIABLES	SIGNIFICANT VALUE	RESULT
Compatibility	0.062	Rejected
Ease of Use	0.005	Accepted
Trialability	0.050	Accepted
Perceived of Trust	0.000	Accepted

Table 4.28: Hypothesis Testing Analysis

## 4.8 SUMMARY

This chapter has addressed about the findings and data gathered in this study. Statistical Package for Social Science (SPSS Version 25.0) has been used to interpret the collected data through online questionnaire from 150 respondents. The analysis method that applied to analyse the collected data are descriptive analysis, correlation analysis, reliability test and regression analysis. The presented outcomes for the hypotheses which have discussed in Chapter 3 also included in this chapter. As a result, the four-hypothesis provided in this study were explained. In the next chapter, we'll go over more facts and have a conversation.



No.	Research Question	Research Objective	Research Hypothesis	Result
1.	What is the self-checkout counter factors influencing usage intention among customer during pandemic COVID-19?	To investigate the self-checkout counter factors influencing usage intention among customer during pandemic COVID-19.		Reliability Test
2.	What is the relationship between self-checkout counter factor and usage intention behavior among customer during pandemic COVID-19?	To measure the relationship between self-checkout counter factor and usage intention behavior among customer during pandemic COVID-19.		Person Correlation Analysis
3.	What is the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19?	To determine the most significant self-checkout counter factor that influence usage intention among customer during pandemic COVID-19.	<p>H1<sub>0</sub>: There is a no relationship between compatibility and usage intention with Self-checkout counter.</p> <p>H2<sub>1</sub>: There is a positive relationship between ease of use and usage intention</p>	Significant

			<p>with Self-checkout counter.</p> <p>H3<sub>1</sub>: There is a positive relationship between trialability and usage intention with Self-checkout counter.</p> <p>H4<sub>1</sub>: There is a positive relationship between perceived of trust and usage intention with Self-checkout counter.</p>	<p>Significant</p> <p>Significant</p>
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## CHAPTER 5

### DISCUSSION, CONCLUSION AND RECOMMENDATION



#### 5.0 INTRODUCTION

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This chapter has addressed about the findings and data gathered in this study. Statistical Package for Social Science (SPSS Version 25.0) has been used to interpret the collected data through online questionnaire from 150 respondents. The analysis method that applied to analyse the collected data are descriptive analysis, correlation analysis, reliability test and regression analysis. The presented outcomes for the hypotheses which have discussed in Chapter 3 also included in this chapter. As a result, the four-hypothesis provided in this study were explained. In the next chapter, we'll go over more facts and have a conversation.

## 5.1 Discussion of Findings

### 5.1.1 Relationship between Compatibility and Usage Intention with Self-Checkout Counter in Malaysia Drugstore

Based on the findings obtained in Chapter 4 (Data Analysis), the authors found that there was a significant value ( $p > 0.05$ ) of compatibility factor with usage intention of Self-checkout Counter system. This revealed that there was a significant negative relationship between the two variables ( $\beta = 0.124$ ,  $p = 0.062$ ). As a result, a hypothetical relationship between compatibility and usage intention was rejected.

The finding is linked to a previous study (Tojib and Tsarenko, 2012) the capacity of mobile devices to allow consumers to access services and apps anywhere, wherever, and whenever they need it is referred to as compatibility. (Meuter ML, 2005) Compatibility has been used and found to be an important factor in a wide range of studies ranging from Internet banking to mobile messaging. A study conducted by Kang et al that explored factors impacting download and usage intention of location-based retail apps found that compatibility was a significant predictor of both affective and cognitive involvement and indirectly impacted downloading and usage intention. This clearly proves that compatibility predictors less influence usage intention of Self-checkout counter system especially among customer usage intention in Malaysia Drugstore. Thus, the items on 'User friendly' have the highest mean among all items in the compatibility. This suggests that the level of usage intention is influenced by the user experience of the system.

### **5.1.2 Relationship between Ease of Use and Usage Intention with Self-Checkout Counter in Malaysia Drugstore**

Based on the findings of the study, the relationship between ease of use and intention to use is significant. The p value for the ease of use factor is 0.005 which is less than the significant value of 0.05. Therefore, the alternative hypothesis has been accepted in this research. This is because ease of use involves user interaction and the self-checkout counter will directly affect the way of use for users.

In addition, the item on 'Self-Checkout Counter in Drugstore easy to use' in the descriptive statistics had the highest mean among all items of 3.97. This is supported by (Tsarenko, 2012) The ease with which a certain technology (e.g., new market technology) is regarded to be advantageous is reflected in perceived ease of use, whereas perceived ease of use relates to the effortlessness and/or convenience of using a given technology. Previous research has focused on two lines of thinking when conceptualising antecedents of perceived utility and perceived ease of use (Porter and Donthu, 2006). First, studies look at psychological or personal characteristics as direct predictors (or moderators) of perceived usefulness. Gao et al. (2013), for example, examine innovativeness and personal attachment as factors of perceived usefulness and attitude toward mobile marketing. Second, other studies look at technological features like ubiquity (Lee, 2005; Tojib and Tsarenko, 2012) as predictors of usefulness and ease of use.

### **5.1.3 Relationship between Trialability and Usage Intention with Self-Checkout Counter in Malaysia Drugstore**

In this study, trialability and usage intention have a hypothetical relationship where 'There is a positive relationship between trialability and usage intention towards Self-Checkout Counter system'. The results showed that there was a significant positive

relationship between the two variables ( $\beta = 0.171$ ,  $p = 0.050$ ). These values prove that the hypothesis is accepted, and the trialability has a significant effect on usage intention.

Moreover, the descriptive statistical results showed that the item on 'Be able to use self-checkout counter on trial basis to see what it can do' had high mean values among item with is 4.013. This reveals that this self-checkout counter can be used for customers on a trial basis to see how far this technology can help them in making payments faster and safer. Trialability has been shown to positively impact usage intention by allowing the individual to become more comfortable with the technology prior to committing to long-term usage. Trialability can also ease any concerns that the individual might have with respect to complexity (Zhang, 2015). As a result, trialability factors have a significant influence on usage intention of Self-Checkout Counter.

#### **5.1.4 Relationship between Perceived of Trust and Usage Intention with Self-Checkout Counter in Malaysia Drugstore**

Based on the findings of the study, the relationship between perceived of trust factors and usage intention is significant. The p value for the service quality factor is 0.000 which is less than the significant value of 0.05. Therefore, alternative hypotheses have been accepted in this research. This is because technology like this requires high trust from customers who use this service so that they are safer to use this Self-Checkout Counter.

In addition, the item on 'Transaction system self-checkout counter is secure' in the descriptive statistics had the highest mean among all items of 4.05. This is supported by (Fang, Qureshi, Sun, McCole, Ramsey, Lim, & Echanisms, 2014) commercial trust in a system, as a general notion, refers to the consumer's expectation that the system will work as planned. This can include factors such as shared information trust, confidentiality trust, and integrity trust. Trust is seen as a crucial component in desire to engage in E-commerce and m-payment adoption.

## **5.2 Significant Implication of the Research**

In the implication of the study, the implication of theoretical, implication of managerial and implication of government are discussed according to the research findings from previous chapter.

### **5.2.1 Implication of Theoretical**

The findings of this study have successfully examined the dimensions in the Diffusion of Innovation Model. The constructs discussed in this study are compatibility, ease of use, trialability and perceived trust. Based on the result, only one independent show a negative relationship and the rest shown a significant positive relationship with usage intention. Therefore, three of the four proposed alternative hypotheses are accepted in this study. The discussion and results of this study are based on a study conducted by (Rogers, 2003) in which the author uses the Diffusion of Innovation Model to evaluate the usage intention of Self-Checkout Counter in other goods payment counter. This study has contributed to increase the knowledge of the literature on Self-Checkout Counter in Malaysia because the system is still in an emerging phase and lacks research.

### **5.2.2 Implication of Managerial**

The useful information obtained from this study can help companies like Watson who want to develop and improve the quality of Self-Checkout Counter technology in improving the payment system through existing Self-Checkout Counter technology to increase user satisfaction especially during the endemic covid-19. In addition, this discovery offers benefits to institutions that use the Self-Checkout Counter service, especially Watson, to provide satisfaction to users assisting in keeping average wait times

low. This is especially critical considering the social distance limits that will be required during the endemic COVID-19, as well as future cold and flu seasons, to ensure consumers are not forced to wait indoors for extended periods of time. The faster checkout process made possible by self-service kiosks is also beneficial since it allows customers to acquire their goods with fewer close, personal interactions, which helps to protect everyone's safety.

In addition, this study also aims to change the face -to -face payment system in Malaysia to be more dependent on Self-Checkout Counter. This is to ensure that our country continues to develop as a developed country to advance in the field of technology. In addition, Self-Checkout Counters can prevent the spread of disease, especially when the world is hit by the covid-19 pandemic, but it is also very beneficial during endemic covid-19 because this can be prevented earlier in the event of the spread of infectious diseases in the future. Other benefits include faster checkouts, greater privacy, greater control over their purchase, and the elimination of the need to converse with their cashier. Checking out their own products is ideal for many buyers. According to the same study, this is especially true if they merely have a few goods or are in a rush. Based on the results obtained, Self-Checkout Counter has successfully met usage intention because all predictors of compatibility, ease of use, trialability and perceived trust show a significant influence.

### **5.2.3 Implication of Government**

In Malaysia, there is still a lack of awareness about the use of electronic transactions such as Self-Checkout Counter. Thus, the purpose of this study is to examine the usage intention of Self-Checkout Counter using the Diffusion of Innovation. The purpose of this study is to assess the extent of knowledge of Malaysians in using Self-Checkout Counter. As a result, the findings of the study show that the most important factor that is perceived trust is the main factor in the success of the implementation of



Self-Checkout Counter. At the same time, successful findings in this research can help the government in developing technology that can benefit society.

### **5.3 Limitation of the Study**

The limitation of the study is that the authors assume that the respondents have sufficient knowledge about Self-Checkout Counter to answer the questionnaire. This is because the author will not know whether the respondents have knowledge or not and assume, they answered the question honestly. Therefore, it may slightly affect the accuracy and reliability of the data collected. In addition, the authors have chosen an online survey to distribute the questionnaire form to the respondents. Given that online respondents were randomly isolated, the findings of this study may not be comprehensive enough to represent overall user satisfaction of the Self-Checkout Counter.

Next, the respondents are come from diverse background and some of them are not proficient in English. They may not understand the vocabulary and sentence constructs by the researcher. Thus, this insufficient could make the information collected not accurate and run away from what the researcher ambitious to achieve. The other limitation of this study is the researcher believes that the respondent knows the research conducted. The respondent also might simply fill up the questionnaire and some might answer the question without fully understanding. This also happens due to the respondents are forced to answer of questionnaire or not in a suitable time. Indirectly this will affect the wrong data to insert into the SPSS. This will cause the survey was repeated distributed to get sufficient and correct data to process in SPSS.

#### 5.4 Recommendation for the Future Research

Recommendations for future research are based on the limitations of the study in the previous section. First, this study uses dimensions in Diffusion of Innovation Model namely compatibility, ease of use, trialability and perceived trust. Each dimension consists of only four items. Therefore, more items (questions) need to be added into each dimension to strengthen the reliability and validity of the questionnaire. Next, the authors would like to extend the current research study to study the acceptance behaviour of Self-Checkout Counter users. Such a study is necessary to explore why consumers prefer to use the Self-Checkout Counter rather than dealing face to face in counter with employee. As the government is still working to expand the use of the Self-Checkout Counter system, more studies need to be done to assess usage intention of the Self-Checkout from a customer perspective.

Other than quantitative, the future research need extended by using the qualitative method which includes the face to face interview sessions from the focus group or the expert in the organization. This also can get more valuable and reliable findings from the respondent in the organization. Besides, it also can provide the other most relevant effect on usage intention toward customer with Self-Checkout Counter.

Furthermore, future researcher should be more eager to seek for additional information through articles, journals, books relating with this study and conduct an in-depth interview with potential parties whom able to contribute to the research. Subsequently, the future researcher can have a greater understanding on this research and assist with latest research updates on people's trend and attitudes.

## 5.5 Conclusion

In a nutshell, this study has discussed the findings on usage intention with Self-Checkout Counter using Diffusion of Innovation. The findings of this study conclude that the constructs in the model namely compatibility, ease of use, trialability and perceived trust are significant with Self-Checkout Counter usage intention. The method used in this study is to address the research questions and meet the objectives of the study by conducting analyses such as descriptive analysis, Pearson correlation analysis, reliability analysis, inferential analysis, and hypothesis testing.

The discussion revealed that perceived trust constructs have shown a large significant relationship to usage intention of Self-Checkout Counter. Most respondents agreed that they use Self-Checkout Counter to perform payment transactions. They are very happy with Self-Checkout Counter system as it provides seamless transactions to them. However, quality and improvement must be done consistently to improve the service in order to make it a technology capable of providing benefits to the community and the country.

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## APPENDIX 1: GANTT CHART FOR PSM 1

Activities	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
FYP Talk																
Search FYP topic																
Meeting with FYP supervisor																
Modification research topic																
Identify research questions and research objectives																
Identify problem statement and background of study																
Search information for literature review																
Completed for Chapter 1																
Completed for Chapter 2																
Completed for Chapter 3																
Revised report before presentation																
Presentation FYP 1																
Correction of FYP 1																
Submission of FYP 1																



## APPENDIX 2: GANTT CHART FOR PSM 2

Activities	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Questionnaire Development	■	■														
FYP Talk			■													
Collect Data		■	■	■	■	■	■	■								
Analyse Data								■	■							
Completed Chapter 4									■	■						
Completed Chapter 5									■	■	■	■				
Revised report before presentation												■	■	■		
Presentation FYP 2																■
Correction of FYP 2																■
Submission of FYP 2																■

### APPENDIX 3: QUESTIONNAIRE



#### FACTORS OF SELF-CHECKOUT COUNTER TOWARDS CUSTOMER USAGE INTENTION IN MALAYSIA DRUGSTORE.

##### INSTRUCTIONS:

##### Purpose of Survey:

The main purpose of this study is to examine the factors of Self-Checkout Counter towards customer usage intention in Malaysia drugstore. The results of this study will be used to increase confidence in the community to use self-checkout counters at drugstores

##### Notes:

You had been carefully considered and selected to represent on behalf of respondent for this study. Your response is vital as it will contribute towards the improvement in self-checkout counter in drugstore.

##### For further clarification

##### And/ or instruction,

##### Please contact:

Muhammad Asyraf Bin Sulaiman

**E-mail:**

**Tel:**

**Supervisor:** Dr. Nurulizwa binti Abdul Rashid

**E-mail:**

**Address:**

Faculty of Technology Management and  
Technopreneurship, Universiti Teknikal Malaysia  
Melaka, Jalan TU 62, 75350 Ayer Keroh, Melaka

**Fax:**

### STATEMENT OF CONFIDENTIALITY

The information you provide will be held strictly confidential. We will neither publish, release, nor disclosure any information on or identifiable with, individual persons, organizations, or companies.

### FACTORS OF SELF-CHECKOUT COUNTER TOWARDS CUSTOMER USAGE INTENTION IN MALAYSIA DRUGSTORE.

#### SECTION A: DEMOGRAPHIC PROFILE

- Self-checkouts (SCOs), also known as assisted checkouts (ACOs) or self-service checkouts, are machines that allow customers to complete their own transactions without the requirement for a standard staffed checkout.
- This survey will examine the factors of self-checkout counter towards customer usage intention in Malaysia drugstore.

This section lists some questions about your personal information. Please tick (/) on the space given.

1. Gender:

<input type="checkbox"/>	Male
<input type="checkbox"/>	Females

2. Age:

<input type="checkbox"/>	20 years old and below
<input type="checkbox"/>	21 – 25 years old
<input type="checkbox"/>	26 – 30 years old
<input type="checkbox"/>	31 – 35 years old

<input type="checkbox"/>	36 – 40 years old
<input type="checkbox"/>	41 and above

## 3. Race:

<input type="checkbox"/>	Malay
<input type="checkbox"/>	Chinese
<input type="checkbox"/>	Indian
<input type="checkbox"/>	Other: _____

## 4. Education

<input type="checkbox"/>	Secondary school
<input type="checkbox"/>	STPM/Matriculation/Diploma
<input type="checkbox"/>	Bachelor Degree
<input type="checkbox"/>	Master Degree
<input type="checkbox"/>	Ph.D. Degree

## 5. Occupation:

<input type="checkbox"/>	Student
<input type="checkbox"/>	Private sector worker
<input type="checkbox"/>	Government employment
<input type="checkbox"/>	Self-employed
<input type="checkbox"/>	Retired

## 6. Did you ever use self-checkout counter at Drugstore?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

7. On average, how often did you use self-checkout counter at Drugstore during pandemic?

<input type="checkbox"/>	Several times a week
<input type="checkbox"/>	Once a week
<input type="checkbox"/>	Once every 2 weeks
<input type="checkbox"/>	Once a month



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**SECTION B: FACTORS OF SELF-CHECKOUT COUNTER TOWARDS  
CUSTOMER USAGE INTENTION IN MALAYSIA DRUGSTORE.**


Here are the statements that best describe your experience using self-checkout counter technologies at Drugstore during the pandemic. Please use the proper scale to rank your statement. Please mark (/) your response.

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

C	Compatibility					
LABEL	I prefer to use self-checkout counter at Watson because:	1	2	3	4	5
C 1	Self-checkout counters provide user-friendly technology.					
C 2	Save time by using self-checkout counter technology.					
C 3	Self-checkout counters can save time with faster technology.					
C 4	Frequent use can reduce confusion among users about the self-checkout counter.					

PEU	Perceived Ease of Use					
LABEL	I choose to use self-checkout counter at Watson because:	1	2	3	4	5

PEU 1	The instructions on the kiosk are clear and understandable.					
PEU 2	Self-checkout counter in Drugstore easy to use.					
PEU 3	Self-checkout counter is flexible to interact with.					
PEU 4	It is easy to become skilful at using self-checkout counter at drugstore.					



TR	Trialability					
LABEL	I prefer to use self-checkout counter at Watson because:	1	2	3	4	5
TR 1	Be able to use self-checkout counter on trial basis to see what it can do.					
TR 2	Be able to try self-checkout counter for one month.					
TR 3	Before deciding whether to use any self-checkout counter, I was able to properly try them out.					
TR 4	I can go to satisfactorily try out various uses of self-checkout counter.					

PT	Perceived of Trust					
LABEL	I choose to use self-checkout counter at Watson because:	1	2	3	4	5
PT 1	Transaction system self-checkout counter is secure.					
PT 2	Self-checkout counter keeps its promises.					
PT 3	Self-checkout counter is trustworthy.					
PT 4	Overall, I trust self-checkout counter at drugstore.					



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<b>SECTION C: CUSTOMER USAGE INTENTION IN MALAYSIA DRUGSTORE</b>
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- Here are the statements that best describe you reflect using self-checkout counter at Drugstore during the pandemic. Please use the proper scale to rank your statement. Please mark (/) your response

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

UI	Usage Intention					
LABEL	After using the self-checkout counter in Watson, it made me:	1	2	3	4	5
UI 1	Re-use self-checkout counter.					
UI 2	To use self-checkout counter compared to face-to-face payment at the counter.					
UI 3	Suggest using a self-checkout counter to others.					
UI 4	Very likely to make orders again using self-checkout counter in future					

**We sincerely thank you for your precious time and participation in this survey. We can assure you that your information will be kept strictly confidential.**

**- END OF QUESTION –**