

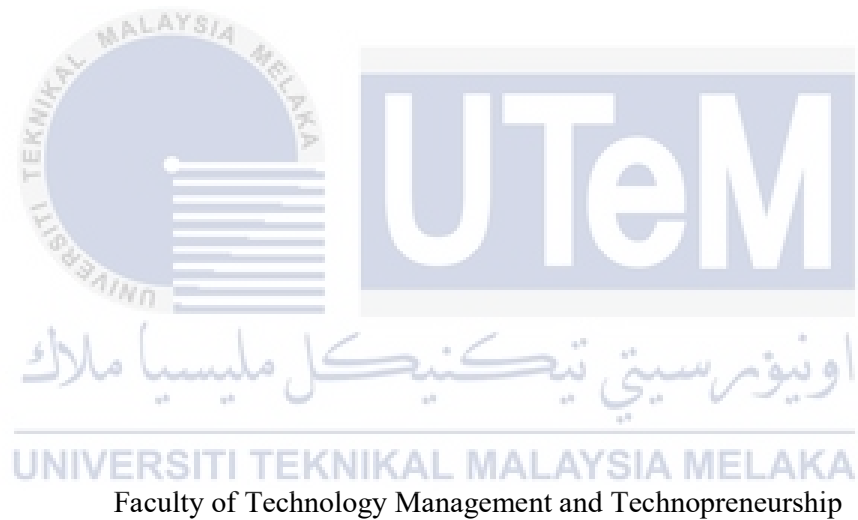
FACTOR INFLUENCING CUSTOMER INTENTION TO USE THE SELF-
CHECKOUT TECHNOLOGY AT WATSON DURING THE ENDEMIC OF
COVID-19

ANISAH JOSPAT



FACTOR INFLUENCING CUSTOMER INTENTION TO USE THE SELF-
CHECKOUT TECHNOLOGY AT WATSON DURING THE ENDEMIC OF
COVID-19

ANISAH JOSPAT


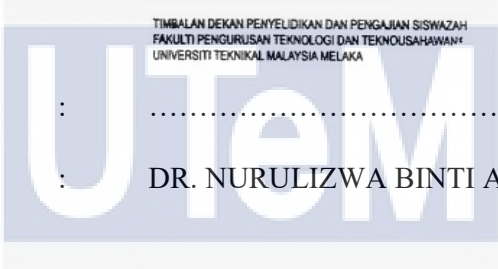



Universiti Teknikal Malaysia Melaka (UTeM)

2023

APPROVAL

‘I hereby declared that this dissertation/report is adequate in terms of scope and quality. This dissertation/report fulfil the requirements for the award of Bachelor of Technology Management (High Technology Marketing) with Honours and will submitted to the Universiti Teknikal Malaysia Melaka.’


 TS DR NURULIZWA BINTI ABDUL RASHID
 TIMBALAN DEKAN PENYELIDIKAN DAN PENGAJIAN SISWAZAH
 FAKULTI PENGURUSAN TEKNOLOGI DAN TEKNOUSAHAWANAN
 UNIVERSITI TEKNIKAL MALAYSIA MELAKA


SIGNATURE :
 NAME OF SUPERVISOR : DR. NURULIZWA BINTI ABDUL RASHID
 RASHID
 DATE : 02 FEBRUARY 2023


UNIVERSITI TEKNIKAL MALAYSIA MELAKA


 NOR RATNA BINTI MASROM
 Pensyarah
 Fakulti Pengurusan Teknologi dan Teknosahawanan
 Universiti Teknikal Malaysia Melaka

SIGNATURE :
 NAME OF PANEL : MRS. NOR RATNA BINTI MASROM
 DATE : 02 FEBRUARY 2023

DECLARATION

‘I hereby declared that the results of this dissertation/report is my own research done except with the explanations or information from other researchers as cited with the references clearly.’

SIGNATURE :



NAME : ANISAH JOSPAT

DATE : 02 FEBRUARY 2023



اونيورسيتي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

DEDICATION

Firstly, i want to say thank you for my family for gives me support to do this research. Thank you for supporting me financially and mentally. I also want to say thank you to my supervisor, Dr. Nurulizwa for guiding me from the beginning until the end of this research.



ACKNOWLEDGEMENT

I want to say thank you for my family for gives me support to do this research. Thank you for supporting me financially and mentally. I also want to say thank you to my supervisor, Dr. Nurulizwa for guiding me from the beginning until the end of this research. To my friends, thank you for supporting me.



ABSTRACT

In Malaysia, the Watson firm recently released their new self-checkout technology. Customers of Watson no longer need to engage with the cashier or employees at the Watson shop, unless they have a question about the self-checkout kiosks, which they can accomplish by asking the Watson personnel. The Watson company's recent introduction of a self-checkout system has proven to be extremely beneficial, particularly during the Covid-19 outbreak. During the Covid-19 endemic, this study looked into the characteristics that influenced customer intentions to utilise self-checkout. The findings of this study will be able to demonstrate why customers at Watson use self-checkout technology. Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and habit are the six independent variables used in this study to assess the relationship between customer intention to use self-checkout technology at Watson during the Covid-19 endemic. Secondary data was used to complete the literature evaluation, and the proposed study framework was the product of other researchers' contributions after a thorough review of the literature. In this investigation, the UTAUT2 model was used. The basic data was acquired using the probability sampling methodology – stratified random sample method via questionnaire-based survey – on 200 respondents. The Statistical Package for the Social Sciences (SPSS) version 26 is used to analyse the collected data. The results show that the six independent variables have a strong link with the dependent variable.

Keywords – *self-checkout technology adoption, Covid-19 Endemic, UTAUT2*

ABSTRAK

Syarikat Watson baru-baru ini telah menghasilkan teknologi daftar keluar sendiri baharu mereka di Malaysia. Teknologi ini membuatkan pelanggan Watson tidak perlu berinteraksi dengan juruwang atau kakitangan di kedai Watson kecuali pengguna perlu bertanya sesuatu kepada kakitangan di Watson tentang kiosk daftar keluar sendiri. Mesin daftar keluar sendiri yang diperkenalkan oleh syarikat Watson baru-baru ini memberi banyak manfaat terutamanya semasa endemik Covid-19. Kajian ini bertujuan untuk menyiasat faktor-faktor yang mempengaruhi niat pelanggan untuk menggunakan daftar keluar sendiri semasa endemik Covid-19. Hasil kajian ini juga akan dapat menunjukkan sebab mengapa pengguna menggunakan teknologi daftar keluar sendiri di Watson. Dalam kajian ini, terdapat enam pembolehubah tidak bersandar iaitu jangkaan prestasi, jangkaan usaha, pengaruh sosial, keadaan memudahkan, motivasi hedonik, dan tabiat untuk mengukur hubungan terhadap niat pelanggan untuk menggunakan teknologi daftar keluar sendiri di Watson semasa endemik Covid-19. Data sekunder digunakan untuk melengkapkan kajian literatur, manakala rangka kerja kajian yang dicadangkan adalah hasil yang disumbangkan oleh penyelidik lain selepas meneliti tinjauan literatur terperinci. Model UTAUT2 telah diterima pakai dalam kajian ini. Data primer dikumpul sebanyak 200 responden dengan menggunakan teknik persampelan kebarangkalian – kaedah persampelan rawak berstrata melalui tinjauan berasaskan soal selidik. Data yang dikumpul dianalisis menggunakan Pakej Statistik daripada Sains Sosial (SPSS) versi 26. Dapatan kajian menunjukkan enam pembolehubah tidak bersandar mempunyai hubungan yang signifikan terhadap pembolehubah bersandar.

Kata kunci – penggunaan teknologi pembayaran sendiri, Endemik Covid-19, UTAUT2

TABLE OF CONTENT

CHAPTER	TITLE	PAGES
	APPROVAL	i
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENT	vii
– x		
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF ABBREVIATIONS	xiii – xiv
	LIST OF APPENDICES	xv
CHAPTER 1	INTRODUCTION	
	1.0 Introduction	1
4	1.1 Background of Study	1 -
5	1.2 Problem Statement	4 -
	1.3 Research Question	5
6	1.4 Research Objectives	5 -
	1.5 Scope of Study	7
	1.6 Limitation of Study	7
	1.7 Significance of Study	7
8	1.8 Summary	7 -
CHAPTER 2	LITERATURE REVIEW	
	2.0 Introduction	9

10	2.1 Introduction of Self Service Technology	9 -
- 11	2.2 Watson in Malaysia	10
	2.3 Definition of Self-checkout	11
- 12	2.3.1 Types of Self-checkout	11
- 17	2.4 Watson Self-checkout in Malaysia	13
- 23	2.5 Unified Theory of Acceptance and Use of Technology	18
	2.6 Factor Influencing Customer Intention to Use Self-checkout	23
- 27	CHAPTER 3 RESEARCH METHODOLOGY	
	3.0 Introduction	28
	3.1 Theoretical Framework	29
- 31	3.1.1 Hypothesis Testing	30
- 40	3.2 Research Design	32
	3.2.1 Research Approach	
	3.2.2 Questionnaire Development	
	3.2.3 Operationalizations of Constructs	
	3.2.3.1 Variables	
	3.2.4 Pilot Test	
- 44	3.3 Data Collection	41
	3.3.1 Sampling Technique	
	3.3.2 Sampling Size	
	3.3.3 Key Informants	
- 49	3.4 Data Analysis	44

3.4.1 Descriptive Analysis	
3.4.2 Reliability and Validity Analysis	
3.4.3 Pearson Correlation Analysis	
3.4.4 Multiple Regression Analysis	
3.5 Summary	49
CHAPTER 4 DATA ANALYSIS	
4.0 Introduction	50
4.1 Descriptive Analysis	50
– 51	
4.1.1 Background of Respondents	50
– 52	
4.1.2 Mean Score Analysis for Variables	52
– 60	
4.2 Reliability Analysis and Validity Test	60
4.3 Pearson Correlation Analysis	61
– 65	
4.4 Inferential Statistics	65
– 68	
4.5 Hypothesis Test	68
– 71	
CHAPTER 5 DISCUSSION, CONCLUSION AND RECOMMENDATION	
5.0 Introduction	72
5.1 Discussion of Findings	72
– 75	
5.2 Significant Implications of Research	75
– 77	
5.3 Limitation of Study	77
5.4 Recommendation	77
– 78	
5.5 Conclusion	78

LIST OF TABLES

NO	TITLE	PAGE
2.1	Types of Relation Found and Related Studies	20 – 23
3.1	Sections in Questionnaire	36
3.2	Operationalize of Constructs	36 – 40
3.4	Mean Score	45
3.5	Cronbach Alpha	46
3.6	Validity Analysis	47 – 48
3.7	Pearson Correlation Coefficient Range	48
3.8	Summary of Research Question, Research Objectives, Research Hypothesis and Data Analysis	49 - 52



اونيورسيتي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

LIST OF FIGURES

NO	TITLE	PAGE
2.4	UTAUT2	20
3.1	Theoretical Framework	29
3.2	Likert Scale	36



LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
UTAUT 2 Technology 2	Unified Theory of Acceptance and Use of
IV	Independent Variable
DV	Dependent Variable
SPSS	Statistical Package For Social Science



LIST OF APPENDICES

APPENDIX	TITLE	PAGE
APPENDIX 1	Gantt Chart For Final Year Project 1	45 - 46
APPENDIX 2	Questionnaire	47 - 52



اونيورسيتي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACTOR INFLUENCING CUSTOMER INTENTION TO USE THE SELF-CHECKOUT AT WATSON DURING THE ENDEMIC OF COVID-19

CHAPTER 1: INTRODUCTION

1.1 Research Background

In 1977, the University of Illinois in Urbana-Champaign created the first self-service kiosk. It was created by Murray Lappe, a medical student there. The Plato Hotline was a device he created that helped students at that university and visitors to the campus locate movies, directories, maps, classes, bus schedules, and extracurricular events. Because they have sophisticated robotics and high-tech connectivity, kiosks today are more advanced. The kiosk today also having an advanced mechanical internals. Today, there is a lot of retail business that use this kind of technology and one of the retail business or company that have applied this technology on their business is Watson. Watson recently has produce their self-checkout out. In 2016, self-checkout kiosk was used at the Watson in China. The self-checkout kiosks was entered in Watson in China which help them to achieve their goals that is 'transcending the boundary of electronic service and realizing new shopping experience'.

Just like the other technology, the self-checkout at Watson in Malaysia also having the pros and cons. The kiosk of self-checkout that has been recently developed at Malaysia is a fast machine and help its company to reduce the staffing cost. People don't have to wait for the long line to pay for their goods especially during the peak sales time. This kind of technology also help the company of Watson to reduce their staffing cost as this kiosk do not need staff to operate. Customers can check out their goods by themselves. This technology also help people to having their own privacy. Sometimes, people are need a privacy for certain goods that they are buying like a condom or pads. It must be awkward if people see them to buy that things that will make people around judge them. With the help of this technology, it was helping them to keep their privacy. Another benefit of using this kind of technology is that it is

round-the-clock convenience where consumers are no longer limited to the traditional business hour because the self-checkout of Watson are providing a 24/7 service. However this kiosk of Watson self-checkout are also having bad side which it has a potential to have a theft and it makes people not having an interaction between human. Even though this technology has a shoplifting technology but there are still a risk for a theft. This machine of self-checkout are makes people does not have an interaction between human, it just between them and the machine. The kiosks machine of self-checkout at Watson have some procedure that a customers need to follow. The first one is to scan. In this stage, users or customers are need to scan the items that they want to buy one-by-one using the barcode reader that has been provided in that kiosk. Users then bag their goods after they scan it and lastly, they make a payment for the goods. In this phase, the shopper are guided with the images on the touch screen and also the voice prompt through the process.

A lot of people doing shopping at the store of Watson. A lot of them are facing a challenges to do their shopping on that store for some reason. Some people who need to buy something that is very privacy are facing the challenges to pay it at the traditional counter. Not all the things that we buy from the Watson we want people to see it. For an example, if someone want to buy pad or condom, it is hard for them to pay it at the counter as there is so many people there in the line. A family planning is a part of a married life. But some people will always judge somebody else for what they are buying from a store. As a woman, a pads is a part of their life. A woman and a pads cannot be separate (Hannah Chia, 2019). It is very important for their menstruation phase. Sometimes some women ask their husband or boyfriend to buy pads for them. Some of the boys are hard to do that because of the people around stares at them and judge. Not only that, some people who need a product for their hair loss or other also need a privacy. Sometimes they want to solve something problem on their self. They do not want people around to know it. There is a lot of things or goods that someone do not want people to see it. Another example of goods or things that some women do not want people to see it is like the care product for their intimate area.

A lot of people are facing this challenges while they are doing a shopping at the store of Watson. The development of the machine of self-checkout at Watson recently was helping a lot of consumer. By using the machine kiosk of self-checkout

at Watson, people no need to make an interaction with other human or people around. This avoid them to turn their face red for holding or buying products from Watson store that should be privacy. They just need to scan their things at the kiosk machine of self-checkout and pay it and after that they can go back to their home without the concern of people judgement about what they are buying from the Watson store. Other than that, some people are need to save their time because they are still need to do a lot of work other than shopping at the Watson. Some people are need to be hurry to pay for their things that they want to buy from the Watson because they have a lot of work to do at their Workplace. The Watson store is not always having a less customer. There will be a time where there are so many people in it especially during the peak of promotion. A people with a busy life like they need to hurry up to do their work at office or home facing a challenges when there is a lot of people in that store. They need to wait for the long line and it consume too much time. The development of the self-checkout at the Watson in Malaysia was helping a lot of people who having a busy life.

The researcher has a few objectives or things in mind. The researcher wants to discover exactly what criteria persuade customers to use the self-checkout system at Watson because the title of this study is the factors influencing customer intentions to use it. There may be so many reason that influencing people to use the machine that the researcher did not know. There was a research done by the student from the University of The Hong Kong Polytechnic University. He was doing a research about the factors that influencing people to use the checkout-free stores. There is also the external factors of why people are using the checkout-free at the store which is perceived enjoyment, anxiety, and traditional consumption habit. These influencing elements can be related to the study that the researcher is now working on. The purpose of this study is to determine precisely what motivates shoppers at Malaysia's Watson to utilise the self-checkout kiosk. Knowing the goal is crucial because more and more individuals today are using self-checkout kiosks on a daily basis.

This research paper are focusing on the factor that influencing customer intentions to use the self-checkout kiosk at the Watson. There must be a lot of reason of why people are tend to use the self-service machine at the Watson. People are having their own reason for doing something, so in this research, the researcher are want to know the exact reason of why people nowadays are want to use the self-

checkout at the Watson store. There is a counter where customer can pay their things there but some of them are still want to use the self-checkout kiosk at the Watson. So this research is about knowing the real reason of why people want to use that kiosk because they must have their own reason.



Figure 1.1 Watson Self-checkout

1.2 Problem Statement

Coronavirus illness 2019 (COVID-19), which was brought on by the SARS-CoV-2 virus, occurred in 2019. In December 2019, Wuhan is where it was found. The illness was highly contagious and spread fast around the globe. The first instances of Covid-19 were discovered in Malaysia on January 25, 2020. In Singapore, the afflicted person had previously had close contact with three Chinese nationals. On January 24, 2020, the three people left for Malaysia through Singapore. Following that, the number of Malaysians who had contracted the sickness increased. So that, on 18 March 2020 the first MCO 1.0 was announced by the government in order to avoid the disease to be spread to a more people in Malaysia. The MCO was start at 18 March until 3 Mei 2020. But it is all not end like that. As the government see that the total cases of the Covid-19 are increase, they has announced the MCO 2.0 and 3.0. The MCO was done for a long time and gives a lot of impact to the Malaysian people.

During the post-pandemic of Covid-19, there are a lot of people who using the machine of self-checkout kiosks. There are a lot of reason of why people are using the self-checkout machine but the real intention or reason of why people are using that machine kiosks is still not be answered. There is no yet a study about the intention of why people are using the self-checkout kiosks at Watson. So that, this study is about know the real intention of using the self-checkout kiosks at Watson.

Malaysia has launched the self-checkout at Watson which gives a lot of benefits. With this kiosks, the percent of the infection of the Covid-19 may decrease. This is because people are no need to interact with the cashier or other people as the kiosks of self-checkout can be done by their own. Other than that, customer are no need to stand near with the other customer while waiting for the line to pay.

1.3 Research Question

This research aims to explore the following question:-

RQ1: What is the factor that influencing customer intentions to use the self-checkout kiosk?

RQ2: What is the relationship between the performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, and habit with the factors influencing customer intention to use self-checkout?

RQ3: What is the most significant factors that influencing customer intention to use the self-checkout kiosks?

1.4 Research Objectives

This research objectives are made according to the research question:-

- i) To identify the factors that influencing customer intention to use the self-checkout kiosks.
- ii) To identify the relationship between the performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, and habit with the factors influencing customer intention to use self-checkout kiosks.

- iii) To measure the most significant factors that influencing customer intention to use the self-checkout kiosks.



1.5 Scope of Study

This study examines the factors that affect Watson customers' propensity to use self-checkout technology. All respondents who have ever made a purchase at a Watson store in Malaysia will be the study's target respondents. The questionnaire for this study will be disseminated randomly to the target respondents via an internet survey, such as Google Form, in order to satisfy the study's objectives because it will be carried out using a quantitative method. Watson's self-checkout during the Covid-19 endemic: Factors Affecting Customer Intent to Use It is a study that draws on secondary materials including journals, books, and articles. For this study, all of these sources will be used as references. Finally, the findings of this study will reveal the most important element impacting customer intention to use self-checkout during the Covid-19 endemic.

1.6 Limitation of Study

The researcher never used the self-checkout machine kiosks at Watson, which is a disadvantage of this study. This is due to the fact that the Watson self-checkout machine can only be found in a specific location in Malaysia. Aside from that, the researcher may encounter challenges in obtaining 200 respondents for this study.

1.7 Significance of Study

Through this study, the researchers are learning more about the variables that affect consumers' intentions to adopt self-checkout kiosk technology during the Covid-19 crisis. The purpose of this study is to identify the most important variables affecting the utilisation of self-checkout technology at Watson during the Covid-19 outbreak. The results of this study will enable consumers to use the self-checkout technology, which is a new innovation.

1.8 Summary

Self-checkout technology is summarised in the first chapter. The background information for the study is focused on self-checkout technologies in this chapter. The issue statement, research questions and objectives, scope, restrictions, and significance of the study are all covered in this chapter. The next chapter will discuss the literature review.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

A literature review discusses published information on a certain subject and, on occasion, information from a specific time period in that subject. A literature review's objective is to give readers background information on the subject of the study. At the beginning of this chapter, a summary of Watson Malaysia and the Covid-19 patterns that occurred there will be provided. The researcher will also discuss self-checkout technology in this chapter, including its description, benefits, and drawbacks. The Unified Theory of Acceptance and Use of Technology 2, which will contribute to a conceptual framework related to the study and the discussion of the prior study, will be used to determine the factors impacting customer intentions to use the self-checkout at Watson during the Covid-19 pandemic (UTAUT 2).

2.1 Introduction of Self Service Technology (SST)

Self Service Technology (SST) can be defined as the technology that enabled consumer or customer to enjoy a service without having a direct interaction with an employee or any service provider. According to Andreas (2021), Self Service Technology is the same of what they are sounds like which is the technology that allow a customer to complete or manage their transaction or gathering information activity without the involvement or assistance from the employee.

Self Service Technology can be divided into four types which is telephone or interactive devices, online or internet, interactive kiosks, and PIS innovative system. In telephone or interactive devices, there is a phone banking, flight information, order status which is for the customer service. There is also a phone banking and prescription refills which is for the transaction activity and information phones for the self-help purpose. For the online or internet, there is a packaging tracking and account information which is for the customer service and the online purchases and paying

bills for the transactions activity. There is also an information searches and distance learning for the self-help activity. In the interactive Kiosks, there is an

ATMs and hotel checkout for the customer service and pay at the pump and car rental for the transaction activity. Other than that, there is also a blood pressure, feedback, and tourist information for the self-help. For the PIS innovative system, there is a loyalty schemes which is for the customer service and the PDA self-scanner that is for the transactions activity. Not only that, there is also information kiosk which has the purpose of self-help.

According to Andreas (2021), an omnichannel capabilities is one of the thing that makes a good self-service tool. Omnichannel can be defined as the sales approach that is used to streamline a customer's ecommerce shopping experience whether it is on the mobile devices, computer, or even in the actual store. The State of Commerce Experience (2021) has stated that almost 44 percent of the B2C buyers and 58 percent of the B2B buyers has said that they are often and always doing an online research about the product they want to buy whether before or after going to the store.

2.2 Watson in Malaysia

In 1841, Watson was established in Hong Kong. Watson is the largest in health and beauty retailer in Asia and Europe. Watson's company are having more than 15,200 stores in 25 markets. Every year, Watson are having more than three billion customer and member shop with a twelve retail brands both in stores and also online. In Hongkong, the Watson group are operate more than 600 stores under their four retail brands which is Watsons, PARKnSHOP, FORTRESS, and Watson's Wine. Not only that, Watson has also manufacture and distribute their high quality drinking water that is brand Watsons Water and also the juice drinks, Mr.Juicy and Sunkist.

In Malaysia, Watson Malaysia now operates over 500 Watson stores throughout the country. Every month, Watson Malaysia serves over 400 million customers. Watson Malaysia has maintained its high standards in the areas of health, wellness, and beauty, as well as providing tailored health advice and counselling. Watson Malaysia also offers beauty and personal care products in addition to their

market-leading product lines, ensuring that their customer look and feel their best at all times.

2.3 Definition of self-checkout

Self-checkout can be defined as the machines that a customer used to complete their purchases which removed the traditional staffed checkout.

2.3.1 Types of Self-checkout

2.3.1.1 Fixed Self-scan Robots or Machines

With this technology, the customer brings the item they wish to purchase to a specific location inside the store and scans it using the barcodes that are present on the merchandise or by selecting the item type from a list of available items that is displayed on the kiosks' screens. The customer can then pay for their groceries or other things with cash or another form of payment.

2.3.1.2 System of Scan and Go

The shop provides a scanning device to the customer or consumer under the "Scan and Go" system (Paul Boyle, 2020). During their shopping, they will use the given scan equipment. While shopping, the consumer can scan the barcode of the item they want to buy. The customer must travel to the designated location after finishing their purchasing in order to dock their scanning device there. The transaction is then completed, and the buyer or shopper pays for their purchase.

2.3.1.3 System for Mobile Scan and Go

The self-checkout method known as the Mobile Scan and Go System follows the same steps as the Scan and Go System (Asaf Cohen, 2020). The consumer or client does not, however, have to use the scan tool that the store has provided for this kind of technology. In this scenario, the consumer can scan and note the item they want to purchase using their own mobile device. With this particular self-checkout, customers

can use their mobile device to pay for their purchases anywhere in the store (Rob Borsch, 2020).



2.4 Watson Self-checkout in Malaysia

2.4.1 Procedure of the Machine Kiosks

The Watson self-checkout has three main stages procedure:

a) Scan

Customer are need to scan the items that they want to buy one-by-one using the barcode reader at the machine kiosks.



Figure 2.1 Scan

b) Bag

In this stages, the customer are need to bag their items after they scan it.



Figure 2.2 Bag

c) Pay

The customer or consumer pays for the item they purchase after scanning the item and bagging it. The customer will be directed through the payment process via recorded voice prompts and visuals on the touchscreen monitor while making the purchase.



Figure 2.3 Pay

2.4.2 Advantages

2.4.2.1 Fast

Fast can be defined as happening, moving, or doing something at the great speed. Fast is the thing that describes something that happen or go at the high speed (Hasa, 2017). The self-checkout at Watson is gives benefit to people that need to save their time. According to Thorbjorn (2021), the self-checkout machine are able to reduce the waiting time if it is compared to the traditional way which is using the cash register or customer need to wait for the long line to pay for their items at the store. Using a self-checkout technology just need the customer to walk in the store, grab the item and pay without needing to wait for the long line (Thorbjorn, 2021). According to Kathy (2018), the self-checkout technology are makes a customer happy as it faster where even in the peak periods, the customer are no need to waiting for a long line because they can just scan their items and pay which help them to save their time. The speed at which customers may check out and pay for their items with Watson self-checkout technology is its major benefit, and this is especially useful when sales are at their height (Manju, 2022). This is show that the self-checkout at Watson are really works fast and help people who doing their shopping and need to save their time. Not all of the shopper are having an enough time all the time. Some of the customer are need to fast as they have so many other works to do such as office works, meeting, home work and other. So this kind of technology is very suitable for a customer who come from a different situation.

2.4.2.2 Privacy

The right to privacy is a fundamental human right that supports the freedoms of association, thought, and expression as well as the right to equality. The right of an individual to control how their personal data or information is gathered, preserved, shared, and processed is referred to as their "privacy" (Donaldr, 2022). The customer will be able to protect their privacy and sensitive information by using Watson self-checkout. Watson customers can peruse the product catalogue on digital kiosks in a more private atmosphere, thanks to the use of digital kiosks. Customers who use Watson's self-checkout machines can complete their transaction without having to deal with another human. They don't need to engage with the Watson store's cashier or staff, or with other customers, because they can complete their transaction on their own. This demonstrates that the risk of their sensitive information being stolen by others is low.

2.4.2.3 Round-the-clock Convenience

The Watson self-checkout kiosks are providing the consumer with a 24 hours per week service. With the usage of this technology, people are no need to worry about the store to be closed when it is ten o'clock in the night. This is because the Watson self-checkout kiosks are no longer limited to the traditional business hour but provide a 24 hours per week for the customer.

2.4.3 Disadvantages of the Watson Self-checkout

2.4.3.1 Customer Confusion

According to Angela Barlow (2020), the self-checkout kiosks technology may come with a bit of learning curve for the consumer. Not all of the consumer are having a high knowledge about a technology. For the Watson in Malaysia, the self-checkout technology that they has been provide may cause a confusion to the customer. The customer may sometimes confuse about the language that has been used on the screen of the kiosks or the symbol that is used in that machine. A self-checkout technology

may also sometimes experience a bug (Angela, 2020). This will cause the consumer does not want to use the self-checkout technology.



2.5 Unified Theory of Acceptance and Use of Technology (UTAUT2)

Venkatesh et al. (2012) created the Unified Theory of Acceptance and Use of Technology (UTAUT2) as an expansion of the original concept, Unified Theory of Acceptance and Use of Technology (UTAUT). This type of model incorporates elements pertinent to the consumer market that affect behavioural intentions to adopt new technology. This UTAUT2 model was developed by Venkatesh et al. to assess the market adoption of a new technology; it is not intended to assess the adoption of technology within an enterprise. In order to better predict behavioural intention and use behaviour, Venkatesh et al. (2012) separated the components from the original UTAUT model for the consumer context and added three additional factors.

There are three criticisms of the UTAUT2, including the fact that the model is complex and the number of components and moderators increases explanatory power. Additionally, it is frequently used without moderators. This UTAUT is providing benefits that, as a result of a variety of circumstances, give the highest explanatory power for all models of accepted standards. As a result, it supports the process of developing new technologies. The UTAUT2 are using a variety of consumer market technology for the field of application. The original UTAUT framework, which preceded the UTAUT2, was created in order to describe and forecast how a technology will be received in an organisational environment (Venkatesh et al., 2003). Later, it was tested in settings other than organisations (Venkatesh, Thong & Xu, 2012). After many years, the UTAUT has demonstrated a broad application that improved the theory's generalizability (Venkatesh, Thong & Xu, 2012). The four main approaches that reflect the modification of the model to a different context, the alterations of the endogenous variables, the auditions of the attitudinal antecedents, and the last one is the examination of the various moderating variables, were the foundation for the adaptation of the UTAUT model (Marikyan, D., & Papagiannidis, S.) (2021).

Three constructs from the UTAUT2's original UTAUT are hedonic motivation, price value, and habit formation (Andreas Chang, 2021). Name, age, gender, and experience are only a few examples of personal distinctions. It was predicted that these distinctions would diminish the influence of the ideas on technological purpose and behaviour. When compared to the UTAUT, the extensions proposed in the UTAUT2 significantly increase the variation explained in behavioural intentions (56 to 74 percent) and technology use (56 to 74 percent) (40 percent to 52

percent). The data from Venkatesh et al. (2012) also showed that age, gender, and experience all moderate the influence of hedonic motivation on behavioural intention, as well as the influence of price value and habit on technology use. Individual differences also moderate the influence of habit on technology use.

The first concept to be incorporated in the UTAUT is the hedonic motive. It has been demonstrated that the acceptance and usage of technology is significantly influenced by hedonic motivation, which is defined as the pleasure or satisfaction one obtains from using technology (Venkatesh et al, Brown, 2005). Hedonic motivation was found to be directly related to acceptance and use of technology in an IS study (Thong et al., 2006). One of the most significant factors determining technological acceptance and deployment in a consumer setting was found to be hedonic motivation (Venkatesh et al., 2005). The second component that was included in the UTAUT is the pricing value. A crucial distinction between the consumer use environment and the organisational use environment, where the UTAUT was established, is the pricing value. In the context of consumer use, the consumer often foots the bill for such use, as opposed to employees. How much something costs and how much it costs could greatly affect how people use technology (Andreas Chang 2021). The UTAUT's most recent addition is the experience and habit construct. Experience and habit, which are two independent but related structures, are linked to one another. Experience is broken down into three stages by Venkatesh et al. (2003), each of which is predicated on the passage of time. The second occurred one month later, and the third was three months after the system was originally made available for use following training. Theodore (2021) defined habits as the routines and behaviours humans engage in on a regular basis, some knowingly and some unknowingly.

In order to determine the use and acceptance of the new technology or system in this study, the UTAUT2 has been employed in earlier research (Chatterjee & Kumar Kar, 2020). For instance, the most recent application has information on the variables that affect customers' decision to use the self-checkout. The UTAUT2 model is where the variables used in this investigation were obtained from. The Watson client will also not be hesitant to utilise the self-checkout technology if it is not unfamiliar to them and fits with their prior experiences and behaviours to make them comfortable using the technology (Hsu et al 2007).

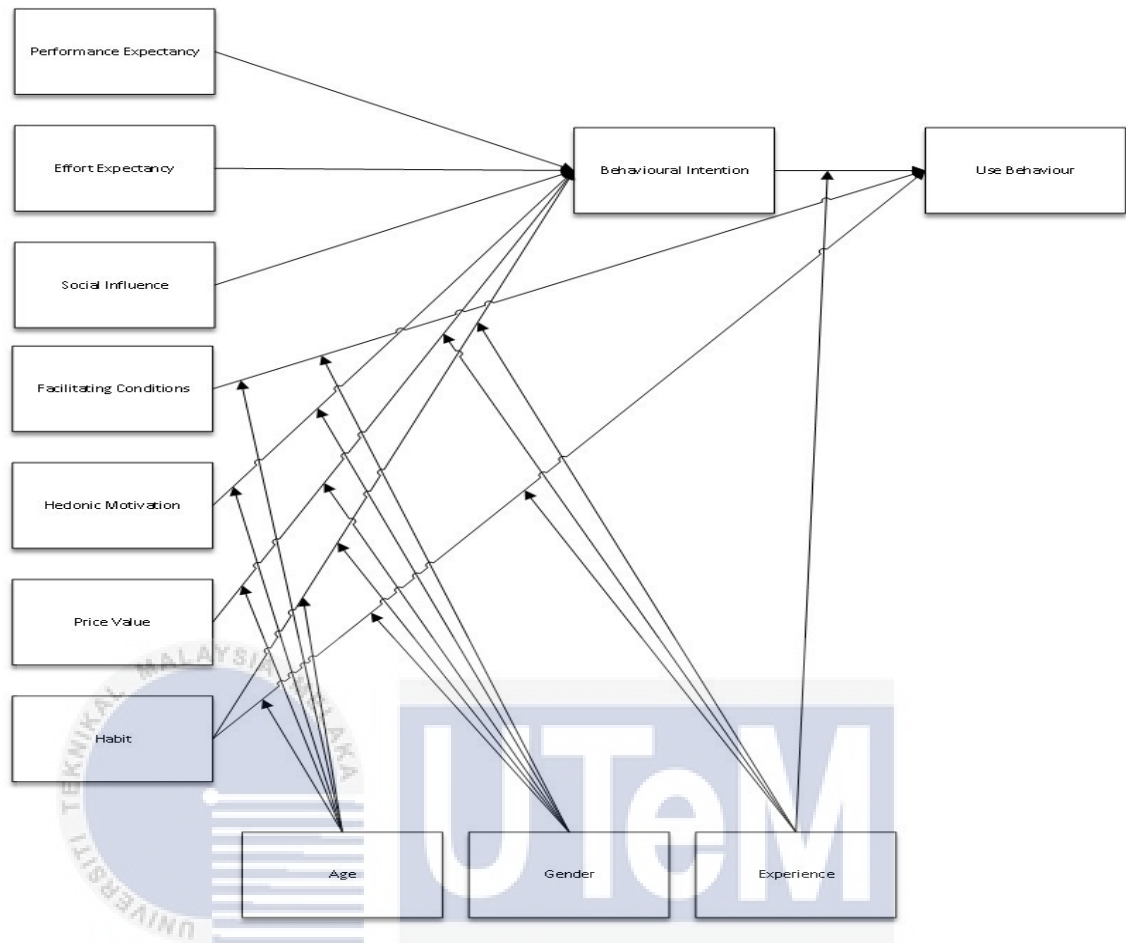


Figure 2.4 UTAUT2

Table 2.1: Types of Relation Found and Related Studies

No	Study (Year)	Industry / Research Area	PE	EE	SI	FC	HM	HT
1	Cong Qi (2019)	Factors Influencing Hong Kong People's Adoption Intention of Checkout-free Stores				+		+

2	Ufuk Cebeci, Abdullah Ertug & Hulya Turkcan (2019)	Exploring the Factors that Influence People's Decisions to Use Self-Checkout Systems in Supermarket Chains and Their Applications	+					+
3	Florian Baer & Michael Leyer (2018)	Identifying the Factor Influencing Self-service Technology Usage Intention			+		+	+
4	Azlinda Hakim Lokman Hakim, Hairunnisa Mohamed Ibrahim & Pauline Tang Pei Lin (2022)	Customer Opinions Regarding the Klang Valley's Adoption of Self-Service Technologies	+	+				
5	Mei Min, Chow, Jian	Factor Affecting	+					

	Ai, Yeow, Chun Kent & See (2022)	Generation Z Intention to Use Self- service Technology (SST)						
6	Hugo Simoes Passos De Sousa Campos (2021)	The Influence of Precedent Beliefs on Supermarket Self-Service Technology Adoption	+		+			+
7	Hyeon Mo Jeon, Hye Jin Sung, Hyun Young Kim (2020)	Client Acceptance Expanding UTAUT with Perceived Risk and Innovation: Restaurant Industry's Self-Service Technology Intentions	+	+	+	+		
8	James M. Curran, Matthew L.Meuther &	Intentions to Use Self- service Technology (SST)						+

	Carol F.Surprenant (2003)							
9	Tito Mendes Da Costa (2019)							+
10	Masood U (2018)	Self-service Technology's Impact	+					

2.5 Factors Influencing Customer Intention to Use Self-checkout

2.5.1 Performance Expectancy

Performance expectancy is when someone gains something from doing some work or activity. The previous study highlighted performance expectancy as the primary factor that can influence behaviour (J.M.Lee et al., 2019). Performance expectations and the customer's desire to use new technology are connected. Leong et al. claim that performance expectations have an effect on customer intention to use new technologies (2013). This is because Leong et al. (2013) found that these characteristics affect customers' intentions to adopt self-service technology (SST) in their study on this topic. Other than that, performance anticipation is the main factor influencing a person's intention to utilise a new technology, according to Khaled M. S (2021).

2.5.2 Effort Expectancy

According to Jambulingam (2013), effort expectancy refers to how user-friendly a technology is. These effort expectation features have a significant impact on each individual's tendency to use information technology, according to a previous study by Teo and Noyes (2012), who polled Singaporean trainee teachers. A second investigation was undertaken on this effort expectation by Tan, Sim, Ooi, and Phusavat (2011). After conducting research on the factors affecting students' intentions to use mobile learning, Tan, Sim, Ooi, and Phusavat found that effort expectations had a significant influence on such intentions. It has been found that effort expectations have a positive influence on new technology adopters' or users' intentions and behaviour (Jeong, San Martin, Herrero, 2019).

2.5.3 Social Influence

Social influence is where someone are perceive of what someone saying to them to use a certain technology. According to Saul Mcleod (2021), social influence is where an individual attitudes, beliefs or even behaviour are influenced by the presence or an action of others. In this context, the social influence is where an individual are influenced by the other people to use a self-service or self-checkout technology. Social influence can be divided into four areas which is conformity, obedience, compliance and minority (Saul Mcleod, 2021). Alalwan et al (2016) has stated that social influence is related to a peer thoughts and activities that they have done. In addition, the knowledge and inspiration offered by a family member, friend, or just a random person will be crucial in influencing someone's awareness of or intention to utilise a new technology (Saul Mcleod, 2021). This is also reinforced by Chen & Lin (2018), who claimed that caretakers, friends, or even family members can persuade someone to adopt a new technology like a self-checkout system. People around can have an impact on how a new technology, such as self-service technology (SST), is used. According to Maria Tsurela's (2015) research on consumer acceptability and actual usage of technology, societal influences have an impact on people's opinions and readiness to utilise new technologies.

2.5.4 Facilitating Condition

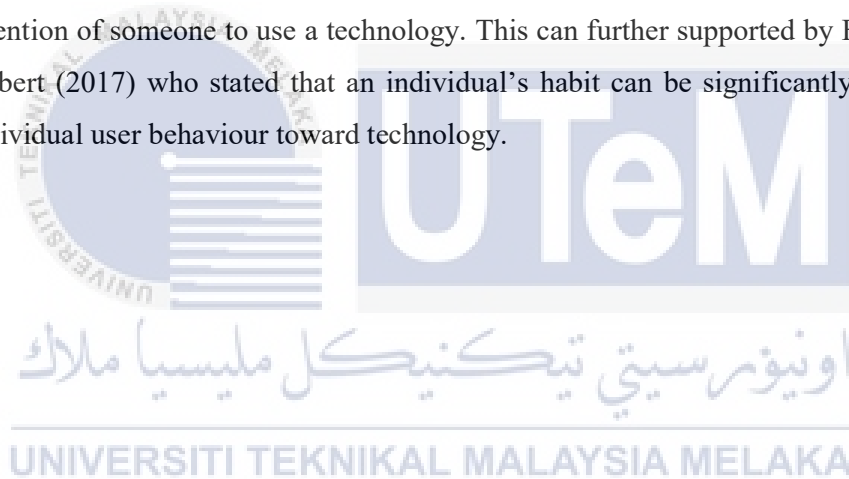
According to Chan et al. (2010), the term "facilitating circumstance" refers to the situation when a person thinks that the current organisational or technical infrastructure can support the application of a new technology. According to Venkatesh et al. (2012), another researcher, the availability of resources and support, as perceived by a consumer utilising a particular technology like a self-checkout device, are facilitating conditions. Neslin & Shankar (2009), who argued that the availability and sufficiency of resources or support for an individual to use new technology, can attest to this. People won't want to use new technologies like self-service technologies (SST) when there is a lack of assistance, inadequate information, or timely support (Kamaghe et al 2020). An elderly consumer is likely to prioritise the availability of competent help, according to Pimmer (2019). People who already use a technology or a system are better able to adapt new technologies even before they do so (Chao, 2019). Cong Qi (2019) asserts that both external and internal factors contribute to support and direction. Cong Qi (2019) conducted a previous study on the factors that affect Hong Kong residents' decision to use check-out free stores and discovered that favourable conditions had a beneficial impact on consumers' intentions to use these establishments.

2.5.5 Hedonic Motivation

According to Brown & Venkatesh (2005), hedonic motivation refers to the pleasure that one experiences when adopting new technology. Hedonic factors play a key role in whether or not a consumer will use a self-service technology (Yang, 2010). Hedonic motivation is the pleasure and enjoyment experienced when utilising new technological capabilities and functions. Hedonic motivation in this study refers to the pleasure experienced when using the self-checkout system, a novel innovation. At Watson, the self-checkout systems are really helpful. One advantage is that the technology or kiosks operate quickly. Quick checkout and payment options are available for the customer (Manju, 2015).

2.5.6 Habit

Habit is an automatic behaviour that is performed due to a learning and it is a natural behaviour for a person. Habit can be viewed in two different ways which is earlier behaviour and automatic behaviour. According to Theodore T (2021), habit can be defined as the routines and things or activity that an individual do on a regular basis which is some knowingly and some are unknowingly. Habits are the patterns of someone behaviour that include three overlapping important component which is knowledge, desire, and skill (Kumar Rathod, 2020). Habits are the elements that can affect someone behavioural intention to use a technology whether it is directly or indirectly (Venkatesh, 2012). When an individual are having a high experience in using a technology, it can be a habit to her or him. Tadesse et al. (2018) has stated that an individual habit are relating to the knowledge, gender, and age to the behavioural intention of someone to use a technology. This can further supported by Fakhoury & Aubert (2017) who stated that an individual's habit can be significantly affect that individual user behaviour toward technology.



CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

The researcher will outline the research approach employed to accomplish the study's research objectives in this chapter. This chapter will address theoretical background, hypothesis testing, research design, and research methodology. The researcher will also go through the variables and the design of the questionnaire. The researcher will also go over the procedures for acquiring data, the sample size, and other data analysis techniques that will be used to look at the information acquired for this study. In this chapter, the researcher will go into greater detail and demonstrate the data analysis tool.



3.1 THEORETICAL FRAMEWORK

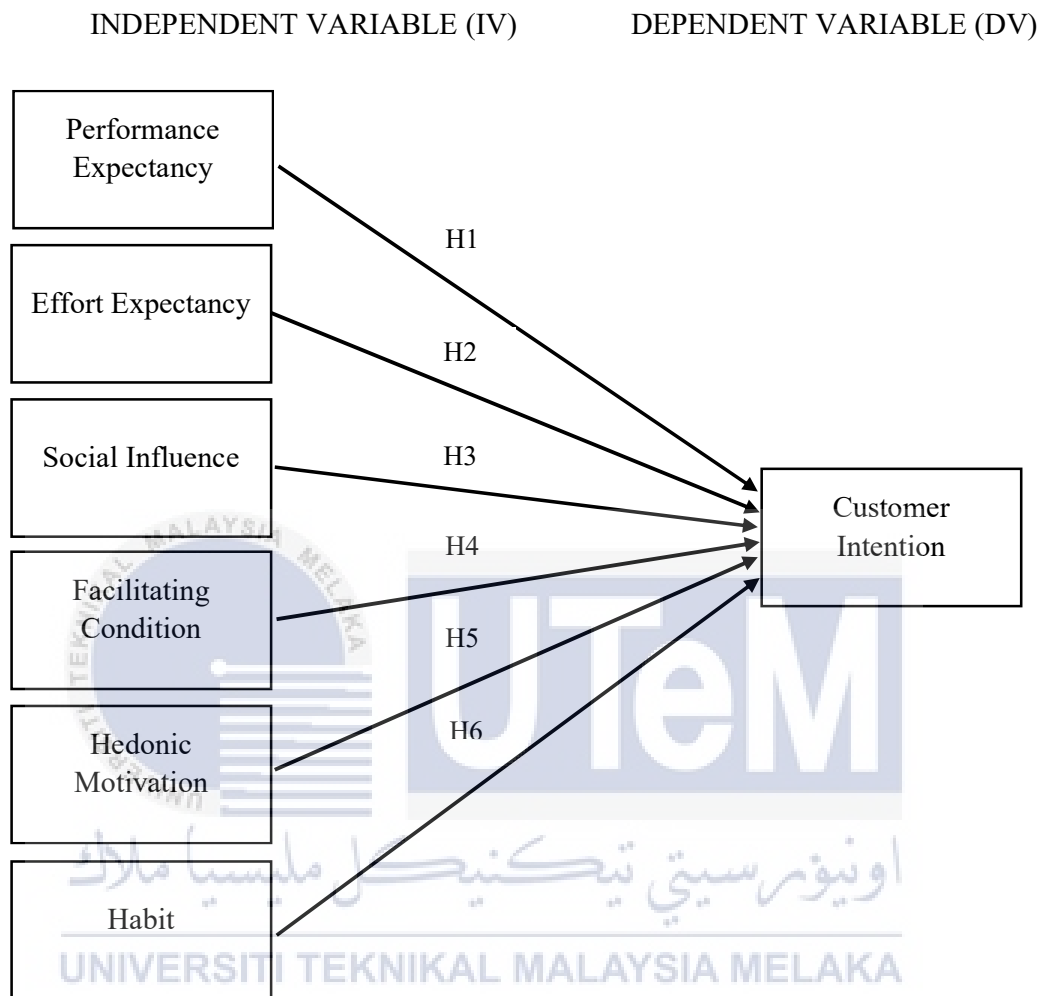


Figure 3.1: Theoretical Framework of the Research

The proposed structure for investigating the influence of social influence, facilitating conditions, hedonic incentive, and habit on customer intention to utilise Watson's self-checkout during the Covid-19 pandemic is shown in Figure 3.1.

3.1.1 Hypothesis Testing

There are total six hypothesis from the research framework discussed earlier are illustrated below:

Hypothesis 1

Performance Expectancy

H1: There is a positive relationship between performance expectancy towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H1: There is no relationship between performance expectancy towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

Hypothesis 2

Effort Expectancy

H2: There is a positive relationship between effort expectancy towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H2: There is no relationship between effort expectancy towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

Hypothesis 3

Social Influence

H3: There is a positive relationship between social influence towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H3: There is no relationship between social influence towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

Hypothesis 4

Facilitating Condition

H4: There is a positive relationship between facilitating condition towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H4: There is no relationship between facilitating condition towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

Hypothesis 5

Hedonic Motivation

H5: There is a positive relationship between hedonic motivation towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H5: There is no relationship between hedonic motivation towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

Hypothesis 6

Habit

H6: There is a positive relationship between habit towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

H6: There is no relationship between habit towards customer intention to use self-checkout at Watson during Covid-19 pandemic.

3.2 Research Design

A research design, according to Shona McCombes (2021), is a researcher's plan for employing empirical data to answer a specific research topic. For a researcher to decide on their overall goals, the method they will use for their research study, and the type of research design they will employ, it is crucial to create a research design. In addition, a study design serves as criteria or a sample strategy for the researcher to choose a subject and decide how to collect data. In a research study, the research design is crucial in order to understand the procedures that the researcher must adhere to in order to gather and analyse their data. Research design can be divided into five types which are descriptive research, correlation research design, experimental research design, diagnostic research design and explanatory research design.

A descriptive research plan is one that aims to gather data in order to systematically describe a situation, a phenomena, or a population. What, where, when, and how that is related to the research problem will be addressed with the aid of a descriptive research design. This type of research strategy is entirely theoretical, therefore the researcher will gather and analyse data. After gathering their information, the researcher will give it to their supervisor or other relevant parties. To analyse the variables under investigation in a study, a descriptive research design may employ or involve a wide range of research methodologies. An experimental study would use a different strategy, but a descriptive study just identifies, observes, and measures the variables under study. It won't be altered in any way to affect or regulate any of the research's variables.

In this study, the researcher will employ a descriptive research design in order to gather more exact information about the subject of the study. This study uses a descriptive research design to examine the factors that influence customers' intentions to use the self-checkout kiosks at Watson in Malaysia during the Covid-19 pandemic. A single issue or problem can be studied using the descriptive research design. Additionally, a descriptive research design is a technique that uses the prior study as a starting point. Additionally, this research or study has employed a haphazard analysis. In this study, a casual analysis is used to look into the causes of a certain problem and offer remedies. The characteristics that affect customer intents to utilise the self-checkout kiosks at Watson in Malaysia during the Covid-19 pandemic will be

identified by the researcher in this study. The researcher will be able to identify the most important element impacting consumer inclinations to use self-checkout during the trip through causal analysis. Additionally, a structured questionnaire can be utilised in this study to collect the necessary data from a large number of respondents and then analyse it to produce descriptive research results. The researcher will gain valuable insight into the research through this descriptive research design as a result of the conclusion drawn from the studied data. Descriptive research design is therefore the most appropriate research design to carry out this study.

3.2.1

In this study, a will be used, where the data collection and analysis are usually guided by a theory-driven hypothesis. A hypothesis is the first step in every deductive inquiry, according to Raimo Streefkerk (2019). The five steps of deductive inquiry begin with the formulation of a problem statement and continue through the existing theory. Following that, it will develop a falsifiable theory based on the accepted theory. The researcher must then gather information to test the theory. In order to determine whether they can reject the null hypothesis, the researcher will then examine and test the data.

A deductive investigation can uncover an established theory. Additionally, it can look at how well the theory applies to those particular circumstances. In addition, the researcher can employ a deductive technique to clarify the significance of the hypothesis. Deductive approaches try to examine the validity of an existing theory, whereas inductive theories aim to create new theories. As a result, a deductive approach concentrates on drawing conclusions from statements or premises.

3.2.2 Questionnaire Development

The identical set of question from questionnaire survey in this study will be distribute to a large group of respondents for the quantitative analysis. The data collection in this research will make the comparison to be done because the questionnaire in this research will be distribute to the different respondents. The questionnaire in this research is used to collect the primary data about the factor that influencing a customer intention to use the self check-out service at Watson. The questionnaire in this research are designed through the Google Form to survey questionnaire. This is to make sure that the questionnaire are easy and also free to distribute to all target respondents. Using the google form as the medium to make a questionnaire is good as it provides the researcher a wide range of measurement for a different requirement. Not only that, by using the google form, it also help to update automatically the responses from the respondents in excel spreadsheet. Besides that, designing a questionnaire through a google form will make it easier for the researcher to conduct the data collection as the researcher are only need to distribute the questionnaire in the format of URL or link to the target respondents. It also save the researcher time to gathering the data and enable him or her to transfer the information or data needed to excel spreadsheet. The URL or link of the questionnaire that has been made can be distributed through social media, e-mail or other online-based application. By doing so, the target respondents can easily access the questionnaire through their smartphone, computer or other devices that can view the questionnaire.

Section A, Section B, and Section C make up the three sections of the questionnaire used in this study. The general information provided by the respondents is the topic of Section A. Using the six dimensions from the UTAUT2 models, Section B is concentrating on the variables impacting customer intentions to use the self check-out at Watson during the Covid-19 epidemic. The final portion, C, focuses on how Watson customers perceive their intents to use self-checkout kiosks during the Covid-19 pandemic. The study questions and research objectives were reached by the creation of the questionnaire.

Table 3.1 Sections in Questionnaire

Section A	General Information of Respondents
Section B	Factors Influencing Customer Intentions To Use The Self Check-out Kiosk at Watson During The Pandemic of Covid-19
Section C	Perceptions of The Customer Towards The Intention to Use The Self Check-out at Watson During The Pandemic of Covid-19

Based on the questionnaire design, the target respondents will answer the question by using the likert scale which is start from 1 to 5 based on their opinions towards customer intentions to use the self check-out at Watson during the endemic of Covid-19. In the questionnaire, the respondents will need to choose for the most suitable and appropriate answer scale but according to their opinions in each questions. The questionnaire are having five total rating marks which is starting from 1 that is represent strongly disagree, followed by disagree, neutral, agree and lastly the 5 which represent strongly agree.

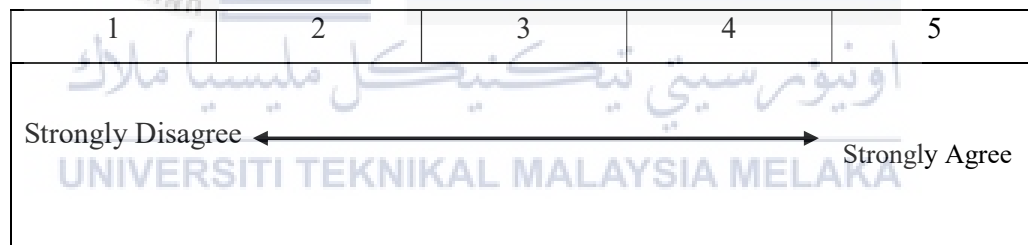


Figure 3.2 Likert Scale

Source: Saunders, M., Lewis, P., & Thornhill (2016) Research Method for Business Students.

3.2.3 Operationalize of Constructs

Table 3.2: Operationalize of Constructs

Constructs	No. of items	Scale of measurement
Performance Expectancy	5	Likert Scale (1-5)
Effort Expectancy	5	Likert Scale (1-5)
Social Influence	5	Likert Scale (1-5)
Facilitating Condition	5	Likert Scale (1-5)

Hedonic Motivation	5	Likert Scale (1-5)
Habit	5	Likert Scale (1-5)

3.2.3.1 Variables

Label	Items	Source
PE	Performance Expectancy	
PE1	I find the self-checkout technology useful in my daily life.	Venkatesh et al. (2012) & Leong et al. (2013)
PE2	Using self-checkout technology increases my chances of achieving things that are important to me.	
PE3	Using self-checkout technology helps me accomplish things more quickly.	
PE4	Using mobile apps increases my productivity.	
PE5	Overall, I would find self-checkout technology to be advantageous.	

Label	Items	Source
EE	Effort Expectancy	
EE1	Learning how to use the self-checkout technology is easy for me.	Venkatesh et al. (2012) & Venkatesh et al. (2003)
EE2	My interaction with self-checkout technology is clear and understandable.	
EE3	I find self-checkout technology easy to use.	
EE4	It is easy for me to become skillful at using the self-checkout technology.	
EE5	I find it easy to get the self-checkout technology to do what I want it to do.	

Label	Items	Source
SI	Social Influence	
SI1	People who are important to me think that I should use the self-checkout technology.	Venkatesh et al. (2012), Leong et al. (2013) & Yang (2010)
SI2	People who influence my behavior think that I should use the self-checkout technology.	
SI3	People whose opinions that I value prefer that I use the self-checkout technology.	
SI4	My family or friend suggestions affect my intention to use a new technology.	
SI5	I would use the self-checkout technology because the proportion of my friends uses the self-checkout.	

Label	Items	Source
FC	Facilitating Condition	
FC1	I have the resources necessary to use the self-checkout technology.	Venkatesh et al. (2012) & Venkatesh et al. (2003)
FC2	I have the knowledge necessary to use the self-checkout technology.	
FC3	Self-checkout technology are compatible with other technologies I use.	
FC4	I can get help from others when I have difficulties using the technology.	
FC5	I can use this technology very well.	

Label	Items	Source
HM	Hedonic Motivation	
HM1	Using self-checkout technology is fun.	Venkatesh et al. (2012), Yang (2013) & To et al. (2007)
HM2	Using self-checkout technology is enjoyable.	

HM3	Using self-checkout technology is entertaining.	
HM4	Using the self-checkout technology gives me pleasure.	
HM5	Using self-checkout is thrilling.	

Label	Items	Source
H	Habit	
HT1	The use of self-checkout technology has become a habit for me.	Venkatesh et al. (2012) & Verplanken & Orbell (2003)
HT2	I am addicted to using the self-checkout.	
HT3	I must use the self-checkout technology.	
HT4	Using self-checkout technology has become natural to me.	
HT5	Using self-checkout technology is something I do without thinking.	

3.2.4 Pilot Test

Pilot test is the testing research that will be done before the real research. Pilot test is one of the most important part in a research. Besides that, this pilot study is also important in a research as it will help to determine the feasibility of the research so the researcher will not waste their time and resources. In a research, a pilot study will help to make sure that the researcher are getting the good response and representatives for the sample size in the study.

Additionally, through the pilot test, the researcher will be able to get some idea on the validity of their questionnaire and then know whether it is seems accurate and make sense. In this research, the researcher will distribute the questionnaire to 8 respondents that is based on the sample size. This is to conduct the pilot test and to pre-check the questionnaire. This is important to make sure that the researcher are able to enhance the design questionnaire before it is distribute to the end respondents in the study. The feedback that is got from the 8 respondents will only be used to make a rescalling or rewording the specific statements in order to enable the potential

respondents understand better. The final version of the questionnaire in this study will be refined and used for the actual survey.



3.3 Data Collection

In this research, a quantitative method will be used for gathering the data needed. The quantitative research has led as the study technique to create meaning and a new knowledge to understand the factors that influencing customer intentions to use the self-checkout at Watson in Malaysia during the pandemic of Covid-19. Based on this study, the process of collecting data are involving two which is the primary and also a secondary data. The primary data in this research is used to gather the first-hand information for determination of the study and this can be done by examining the variable of interest. The questionnaire in this research will be used to gather the primary data. The questionnaire in this study will be distributed randomly to the target respondents. This will help to safeguard the reliability of the data in this research and at the same time the outcome of the results will not be damage. The outcome from this research will be either vital or not. The questionnaire in this research must be confidential. This is important in order to protecting and also respecting all the personal information that is given by the respondents.

Other than that, the secondary data in this research will be used as the technique for collecting the information that is needed in this research. For this secondary data, the researcher will be able to obtain the information needed from the previous research or study that is done by the other researcher (Sekaran, 2003). The secondary data in this research or study can be obtain through a reading from the newspaper, document analysis or other internet-based sources such as Google Scholar and Emerald Insight.

3.3.1 Sampling Technique

A sampling methodology, according to Dan Fleetwood (2020), is a method of choosing individual individuals or a subset of a population in order to draw statistical conclusions from them and then estimate the characteristics of the entire population. By using a sample, the researcher will be able to have a general view and then make an inferences of the whole target population. There are two types of sampling technique which is the probability sampling and non-probability sampling. A probability sampling is the sampling technique where a reseacher sets a selection of a few criteria and chooses members of a population randomly. All the members will have an equal opportunity to be part of the sample with this selection parameter. For

the non-probability sampling, the researcher will chooses member for the research at random. This kind of sampling is not a fixed or predefined selection process. This makes it become difficult for all elements of a population to have an equal opportunities to be included in a sample.

According to Shona McCombes (2022), sampling means selecting the group that the researcher will actually collect data from in their research. A probability sampling are known as the random sampling. This is means that each individual are having the equal opportunity and probaility to be chosen and answer the survey that was distribute by the researcher. The used of a probability sampling enable the researcher to obtain a more accurate data but it will take so much work for the researcher. For the non-probability sampling, the technique is based on the subjective judgement from the researcher instead of random selection. Unlike the probability sampling, the non-probability sampling is the method where not all individual are having a chance to answering the survey from the researcher.

In this study, the probability sampling has been used. The questionnaire in this study were designed using the Google Form. The using of google form for the questionnaire in this study was enable the researcher to create the questionnaire easily. The final questionnaire in this research will be distributed or share to the target respondents by link or URL. It will be distributed through email, social media, or other internet-based application. In this research, the stratified random sampling is used in order to select the samples for study. According to Julia Simkus (2022), a stratified sampling is the method of random sampling where the researcher are first divide a population into a smaller subgroups, or strata which is based on the shared characteristics of members and then randomly select among that groups to form the final sample. The shared characteristics are include the gender, sex, race, age, income, or education level. According to Lauren Thomas (2020), in a stratified sample, a researcher are dividing the population into homogenous subpopulations which is called strata that is based on specific characteristic. A stratified sampling is an effective sampling technique. This is because this technique is providing more information within a sample size. Other than that, this stratified sampling technique will help the researcher to make sure the homogeneity of each of the stratum while variability between the strata. So that, in this research, the researcher are using the stratified random sampling for selecting the Watson customer in Malaysia.

3.3.2 Sampling Size

In this research, the probability sampling are used which the stratified sampling is used. This research using a total of 30 items and the sample are between 144 to 360 samples. For this study, there will be 150 respondents that will be study in this research. There will be 150 copies of questionnaire that will be distributed by the researcher to the target respondents – Customer of Watson in Malaysia.

3.3.3 Key Informants

The key informants of this study are the Customer of Watson that doing shopping at the Watson store in Malaysia. The respondents of this study will be focus to the customer of Watson in Malaysia with the different aspects such as gender, ages, frequency of buying at Watson and other.

3.4 Data Analysis

The Statistical Package for Social Science (SPSS) will be utilised to examine all of the data that has been collected in this research project for data analysis. Because this research or study employs a quantitative approach, SPSS is a useful tool for managing big amounts of data and for speeding up the data collecting and tabulation process. SPSS, according to Pallant (2010), use standard multiple regression to determine the data's reliability, correctness, and validity. When the survey is completed, the SPSS programme will be used to test the hypotheses that have been proposed. Aside from that, the analysis will assist the researcher in doing a variable analysis in order to increase the variables' validity. Not only that, but SPSS will assist the researcher in hypothesis testing and connecting all of the variables that have been included.

This research will use the SPSS version 26 in order to analyzing the gathered data that has been collect from the target respondent. This kind of method will enable the researcher to execute an analysis of two variables where the part one will centralized the descriptive statistic. In this research, the statistic is used to depict and also evaluate the data obtained from the respondent. The outcome result from the

analysis will show in the form of descriptive statistic, reliability and validity analysis, pearson correlation and multiple regression analysis.

3.4.1 Descriptive Analysis

In this research, by using the SPSS statistic for the data analysis, the descriptive analysis will become an important part because it will assist the researcher to understand the data dissemination and also examines the relationship between the variables. According to Ayush Singh Rawat (2021), a descriptive analysis is the type of analysis data that helps the researcher to describe, show or summarize the data points in a constructive way such that patterns might emerge that fulfill every condition of the data. The use of tables, figures or graphics will be shown with the data gathered in the software. Descriptive analysis can be categorized into four types which are measures of frequency, central frequency, dispersion or variation, and position (Ayush Singh Rawat, 2021). The most common types of data that is used for the central tendency are the mode, median, and mean. The dispersion is used to describe how the data values are disseminated around the central tendency. In this study, the researcher will use the frequency distribution and percentage to illustrate the factor that influences the customer intention to use the Watson self-checkout during the pandemic of Covid-19. The results are explained based on the mean and standard deviation value. The level of mean score can be classified into three levels which are low, medium, and high level.

Table 3.4: Mean Score

Range of Mean	Level
0.00 – 1.67	Low
1.68 – 3.33	Medium
3.34 – 5.00	High

3.4.2 Reliability and Validity Analysis

The reliability and validity analysis is one of the most important parts in this research. This is because it is important to ensure the optimal of research quality. The both analysis which are reliability and validity analysis are important for a researcher

to conduct the quantitative study. In this research, the researcher are able to obtain credible output data with the both analysis through the consistency and accurate measurements. In the quantitative method research, a reliability are refers to the conformity of the data collection as the same outcomes results obtained consistently each time in a same situation and while the validity are been defined as the accuracy and are precisely of the measure.

In this study, Cronbach's Alpha was used to determine the average correlation of each measurement across all variables. Cronbach's Alpha is a commonly used metric for determining the consistency of data in research. The Alpha coefficient involves a value that is between 0 and 1. The alpha coefficient value of 0.5 and above, according to Yolanda Williams (2021), can be selected as the metric that is appropriate to guarantee the reliability of all variables. The range of Cronbach's Alpha coefficients and the strength of each relationship are shown in Table 3.5. More than 0.7 will be deemed acceptable, more than 0.8 will be rated good, and 0.9 and above will be considered great. All of the factors will be used in this study to determine its reliability and validity.

Table 3.5 Cronbach's Alpha Coefficients Range and Strength of Association

Cronbach's Alpha Coefficient	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

The researcher will be able to determine the number of items in an investigation, the variance of the overall mark, and the average covariance between item-pairs using Cronbach's Alpha. Analyzing reliability and validity is important for assessing consistency. The three categories of validity—internal validity, external validity, and construct validity—are shown in Table 3.6 below.

Table 3.6 Validity Analysis

Validity	
Internal Validity	<p>The extent to which the researcher can be confident that a cause-and-effect relationship established in a study cannot be explained by other factors (Pritha, 2020).</p> <p>The extent to which a study demonstrates a trustworthy cause-and-effect relationship between a therapy and a result is known as internal validity, according to Arlin Cuncic (2021).</p>
External Validity	<p>Used to understand the scope of findings from certain study that can generalized all relevant contexts such as different setting, time, population etc.</p> <p>Pritha (2020) has mentioned that external validity is refer to on how well the outcome of a study can be expected to apply to other settings.</p>
Construct Validity	<p>Used to determine on how well a test measures what it supposed to measure.</p> <p>Pritha Bhandari (2022) has mentioned that The construct validity of a test refers to how well it measures the concept it was created to evaluate.</p>

3.4.3 Pearson Correlation Analysis

In order to evaluate whether all of the independent and dependent variables are under independent or intercorrelated control, the Pearson correlation was used in this study. The Pearson correlation analysis will be used to determine the significance of the linear bivariate among the independent and dependent variables. In order to assess the strength of a relationship between two variables, Pearson correlation analysis is also used. From 0 (random outcome) to 1 (perfect linear relationship), or -1, will be displayed on the square (perfect negative relationship). The closer the value of the correlation coefficient, r , is to 1 or -1 in a Pearson correlation study, the smaller the variation data from the line best suited. The Pearson Correlation Coefficient Range is shown in table 3.7. As a result, the researcher will utilise Pearson correlation analysis to examine and determine the strength of the relationship between the six factors and the factor that influences customer intention to use self-checkout at Watson during the Covid-19 endemic in this study.

Table 3.7: Pearson Correlation Coefficient Range

Coefficient Range	Strength of Correlation
± 0.91 to ± 1.00	Very strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
± 0.00 to ± 0.20	Slight, almost negligible

3.4.4 Multiple Regression Analysis

Multiple regression can be defined as the extension of simple linear regression. A multiple regression will be used when a researcher want to predict the value of a variable which is based on the value of two or more other variables. A regression analysis will help the researcher to examine the path of the relationship, level of study, and the strength of the relationship. The multiple regression analysis has been identified as one of the most effective tools for a researcher to analyse in a quantitative research data. In this multiple regression analysis, the outcome results will be examined and estimated based on the set of independent variables on dependent variable.

The general form of the multiple regression equation is as follow:-

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6$$

Where,

Y = Dependent variable (Customer intention to use the self-checkout at Watson during the pandemic)

A = Constant term

$b_1b_2b_3b_4b_5$ = Coefficient

X_1 = Independent variable (Performance Expectancy)

X_2 = Independent Variable (Effort Expectancy)

X_3 = Independent Variable (Social Influence)

X_4 = Independent Variable (Facilitating Condition)

X_5 = Independent Variable (Hedonic Motivation)

X_6 = Independent Variable (Habit)

3.5 Summary

Table 3.8: Summary of Research Question, Research Objectives, Research Hypothesis and Data Analysis

Research Question	Research Objectives	Research Hypothesis	Data Analysis
What is the factor that influencing consumer intention to use the self-checkout kiosk?	To identify the factors that influencing consumer intention to use the self-checkout kiosks.		Descriptive analysis, Mean, Standard deviation, Cronbach alpha

What is the relationship between the usefulness, ease of use, security and privacy, enjoyment, need for interaction, and the traditional consumption habit with the factors influencing consumer intention to use self-checkout?	To identify the relationship between the usefulness, ease of use, security and privacy, enjoyment, need for interaction, and the traditional consumption habit with the factors influencing consumer intention to use self-checkout.		Correlation coefficient
What is the most significant factors that influencing consumer intention to use the self-checkout kiosk?	To measures the most significant factors that influencing consumer intention to use self-checkout kiosks.	<p>1. There is a positive relationship between performance expectancy towards customer intention to use self-checkout at Watson during Covid-19 pandemic.</p> <p>2. There is a positive relationship</p>	Multiple regression

		<p>between effort expectancy towards customer intention to use self- checkout at Watson during Covid-19 pandemic.</p> <p>3. There is a positive relationship between social influence towards customer intention to use self- checkout at watson during Covid-19 pandemic.</p> <p>4. There is a positive relationship between facilitating condition</p>	
--	--	--	--

		<p>towards customer intention to use self- checkout at Watson during Covid-19 pandemic.</p> <p>5. There is a positive relationship between hedonic motivation towards customer intention to use self- checkout at Watson during Covid-19 pandemic.</p> <p>6. There is a positive relationship between habit towards customer intention to use self-</p>	
--	--	---	--

		checkout at Watson during Covid-19 pandemic.	
--	--	--	--



اونيورسيتي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

This chapter will include the study's findings. The results were analysed in accordance with the study's objectives, which included identifying the variables that affected customers' intentions to use self-checkout kiosks and the relationships between performance expectations, effort expectations, social influence, facilitating conditions, hedonic motivation, and habit and those variables. In addition, this study will assess the most important variables impacting shoppers' intentions to utilise self-checkout kiosks.

Only an online survey that was completed by respondents in order to meet the guidelines was used to collect the data. 200 users of self-service technology were given online questionnaires to complete in order to gather data for the findings using a quantitative methodology. The data gathered from the respondents in this study was analysed using IBM SPSS 26.0. The descriptive analysis, reliability analysis, validity test, Pearson correlation analysis, and multiple regression analysis will all be covered in this chapter.

4.1 Descriptive Analysis

4.1.1 Background of the Respondents

The background of the respondents that are includes in this research is the respondent's gender, age, race, education level, employment status and the frequencies they using the machine of self-checkout technology at Watson. This demographic sample profile is gathered from 200 respondents.

4.1.1.1 Profiling of Gender and Age

Table 5.1: Profiling of Gender and Age

Gender	Age				
	18 – 20 years	21 – 23 years	24 – 26 years	27 years and above	Grand total

Female	1	8	3	2	14
Male	19	75	57	35	186
Grand total	20	83	60	37	200

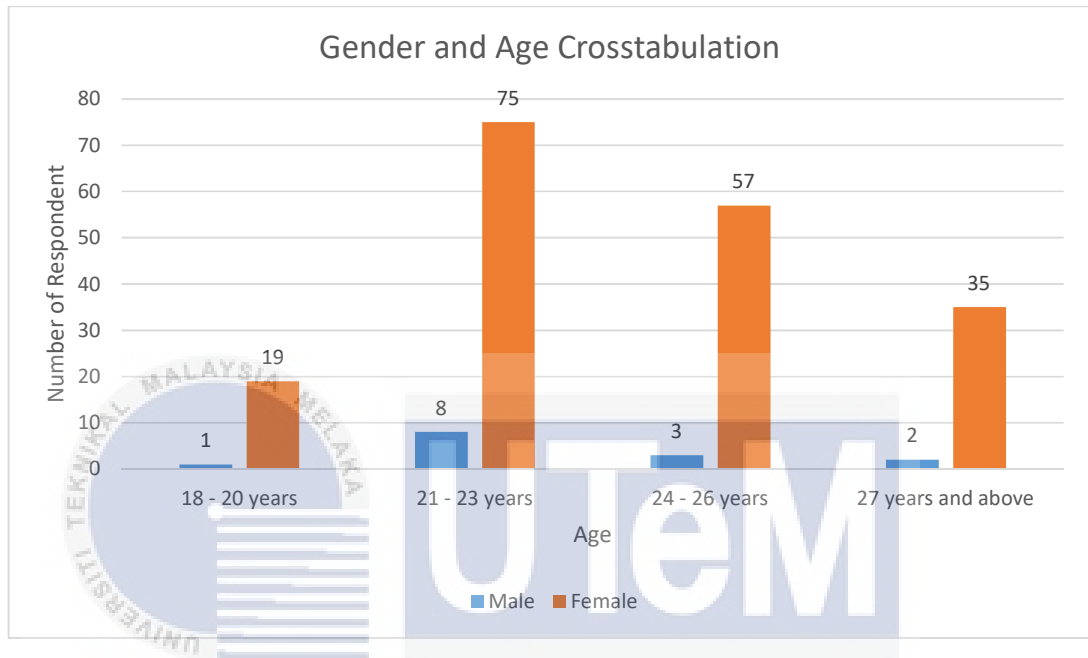


Figure 4.1: Profiling of Gender and Age

The data on genders and ages from the survey of 200 respondents are shown in Table 4.1 above. The results show that 2.5% of respondents ($n=14$) were men, whereas 97.5% of respondents ($n=186$) were women. The respondents' ages are also shown in the table above, and they are broken down into four groups based on their age: 18 to 20, 21 to 23, 24 to 26, and 27 years and older. The highest age group that replies to the survey has a proportion of 44.0% ($n=88$), with 75 respondents being female and 8 respondents being male. This age group makes up the majority of the survey's respondents. The respondents who are between the ages of 18 and 20 make up the lowest age group that answers the inquiry. Only one male respondent and 19 female respondents were included in this group.

4.1.1.2 Profiling of Races

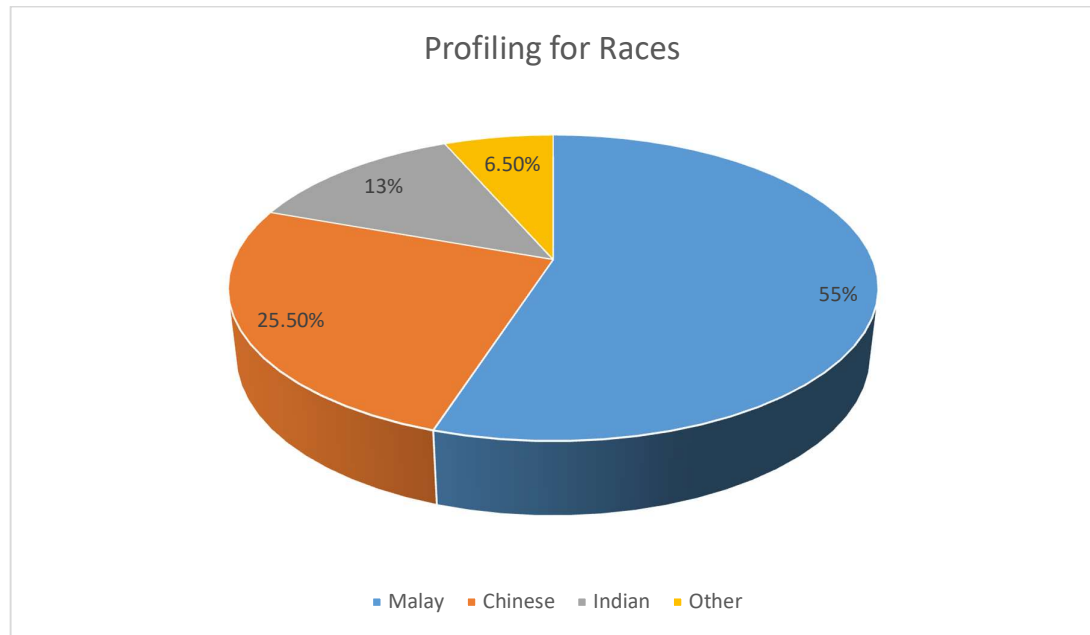


Figure 4.2: Profiling of Races

Figure 4.2 shows the races of respondents that took part in the survey of this research. Based on the pie chart above, there were 55% (n=110) of the Malay respondents while there were 25.5% (n=51) Chinese respondents. Besides that, the pie chart also shows that there is 13% (n=26) are Indian respondents and 6.5% (n=13) are from other races.

4.1.1.3 Education Level

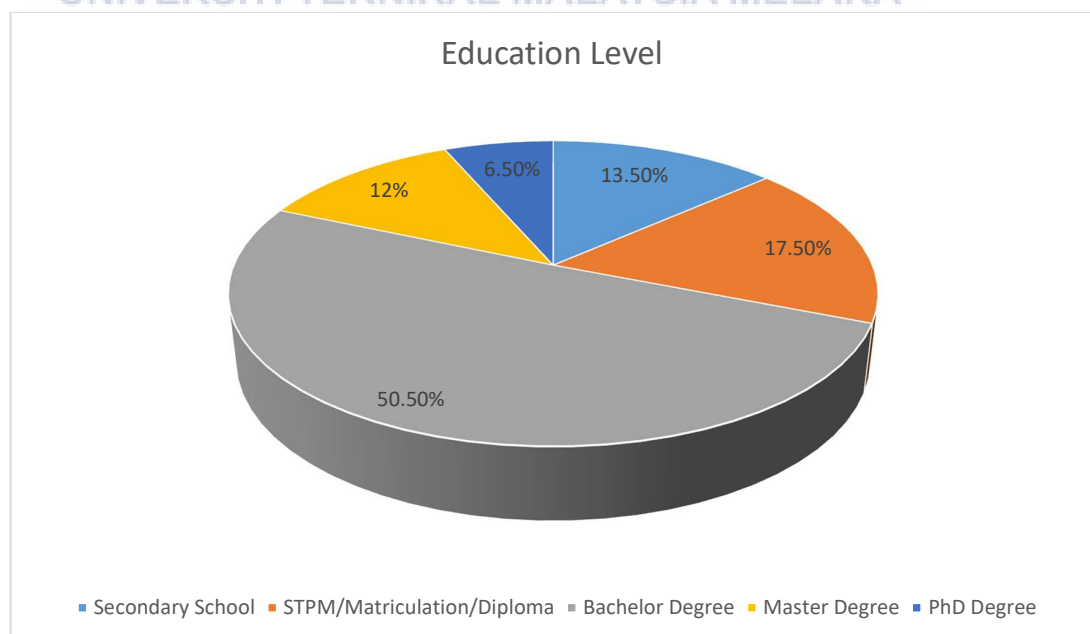


Figure 4.3: Education Level

Figure 4.3 shows the education level of the respondents that have been participated in the survey. Based on the pie chart above, there were 50% (n=100) respondents who have a bachelor degree and 18.5% (n=37) respondents have an STPM/Matriculation/Diploma. Besides that, there were 13% (n=26) respondent are from the secondary school education level and 12% (n=24) have a master degree background education level. Last but not least, there are 6.5% (n=13) respondents are having PhD.

4.1.1.4 Employment Status

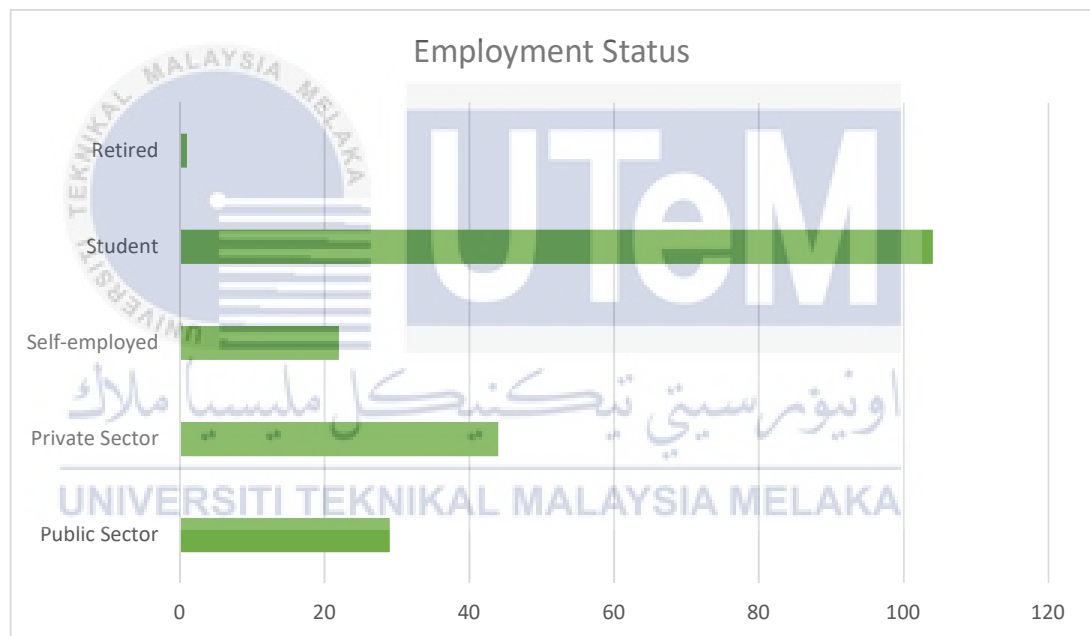


Figure 4.4: Employment Status

The respondents' employment status is depicted in the above figure. Out of 200 responses, 104 (or 52%) were students. 44 (22%) of the respondents work in the private sector. There were 200 responders in all, and of those, 29 (14.5%) and 22 (11%) work in the public sector. In addition, 1 (0.5%) of the responders are retired.

4.1.1.5 Usage of Watson Self-checkout

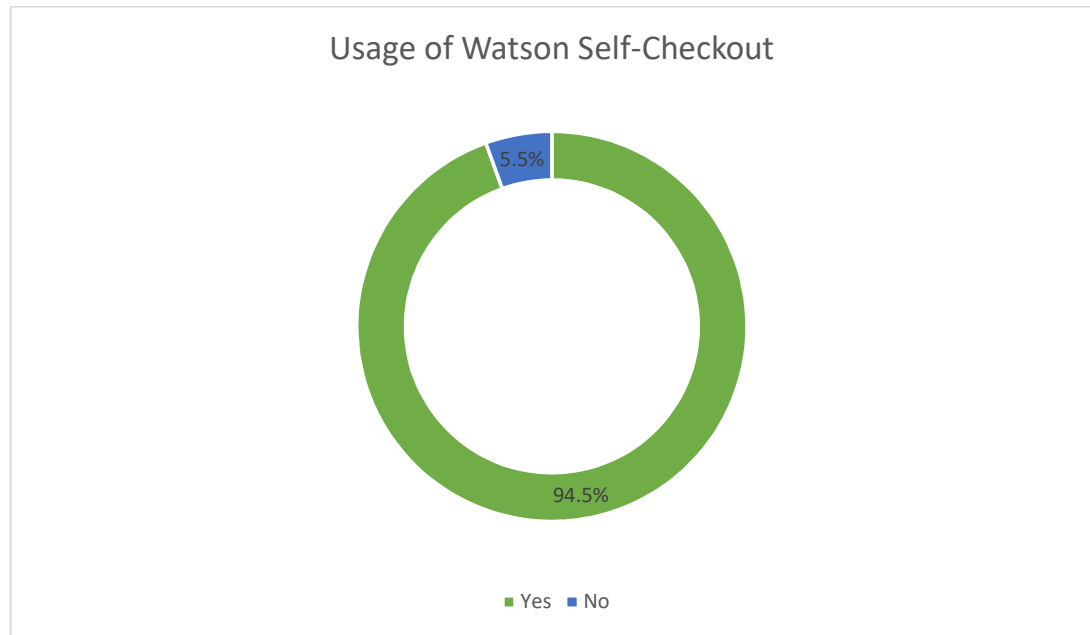


Figure 4.5

Figure 4.5 illustrates the usage of Watson self-checkout by the respondents during the endemic of Covid-19. Based on the figure above, there were 189 (94.5%) respondents are using the Watson self-checkout during the endemic of Covid-19. Whereas there were 11 (5.5%) respondents answer that they did not use the Watson Self-checkout during the endemic of Covid-19.

4.1.2 Mean Score Analysis for Variables

4.1.2.1 Performance Expectancy

The scale of minimum rating for each item was 1, and the scale of highest rating was 5, as shown in Table 5.2 below. According to the aforementioned data, the item "In general, self-checkout technology is advantageous" had the greatest mean value of "performance expectancy" of 4.17 and a standard deviation of 0.991. This demonstrates how the Watson self-checkout offers the user a number of advantages. The mean value and standard deviation for the response "Self-checkout technology helps me complete tasks more quickly" are 4.15 and 0.946, respectively. Additionally, the item "Self-checkout technology boosts my odds of doing things that are important to me" had a mean value of 4.12 and a standard deviation of 0.954. Item on "self-checkout technology is useful in my daily life" showed the mean value of 4.09 and a

standard deviation of 1.001. Lastly, the item “using self-checkout increases my productivity” had the lowest value of mean which were 3.97 with the standard deviation 0.972. The average low mean of the outcomes shows that the Watson self-checkout are increasing customer productivity and it needs to be improved by the service provider.

Table 5.2: Descriptive Statistics for Performance Expectancy

	N	Minimum	Maximum	Mean	Std. Deviation
Self-checkout technology is useful in my daily life	200	1	5	4.09	1.001
Self-checkout technology increases my chances of achieving things that are important to me	200	1	5	4.12	.954
Self-checkout technology helps me accomplish things more quickly	200	1	5	4.15	.946
Using self-checkout increases my productivity	200	1	5	3.97	.972
In overall, self-checkout technology is advantageous	200	1	5	4.17	.991
Valid N (Listwise)	200				

4.1.2.2 Effort Expectancy

According to Table 5.3 below, each item had a minimum rating scale of 1 and a maximum rating scale of 5. Table 5.3's results show that the item "self-checkout is straightforward to use" has the highest mean value, 4.09, and the item "self-checkout

technology fulfils my needs" has the second-highest mean, 4.06, and a standard deviation of 0.944. Moreover, the item on "it is easy for me to become skilful at using the self-checkout technology" had mean 4.05 with a standard deviation which were 1.001. The item "learning on how to use the self-checkout technology is easy for me" have mean of 3.97 and a standard deviation of 1.039 while the item "my interaction with self-checkout technology is clear and understandable" have the lowest mean which is 3.95 and the standard deviation is 1.050.

Table 5.3: Descriptive Statistics for Effort Expectancy

	N	Minimum	Maximum	Mean	Std. Deviation
Learning on how to use the self-checkout technology is easy for me	200	1	5	3.97	1.039
My interaction with self-checkout technology is clear and understandable	200	1	5	3.95	1.050
Self-checkout is easy to use	200	1	5	4.09	1.001
It is easy for me to become skilful at using the self-checkout technology	200	1	5	4.05	1.001
Self-checkout technology fulfill my requirements	200	1	5	4.06	.944
Valid N (Listwise)	200				

4.1.2.3 Social Influence

According to table 5.4 below, this component had a minimum and maximum rating scale of 1 and 5. The items on "the fraction of my friends uses the self-checkout" had the highest mean, which was 4.02, while the items' standard deviation was 1.005. Next, the item on "people who are important to me think that I should use the self-checkout technology" and "my close friends or family recommendation make me want to use

this technology” respectively had mean 4.01. The item “People who influence my behaviour think that I should use the self-checkout technology” showed the mean value 3.96 with the standard deviation 1.017. Lastly, the item “People whose opinions that I value prefer that I should use the self-checkout technology” had the lower mean value of 3.93 and standard deviation 0.956.

Table 5.4: Descriptive Statistics for Social Influence

	N	Minimum	Maximum	Mean	Std. Deviation
People who are important to me think that I should use the self-checkout technology	200	1	5	4.01	1.056
People who influence my behaviour think that I should use the self-checkout technology	200	1	5	3.96	1.017
People whose opinions that I value prefer that I should use the self-checkout technology	200	1	5	3.93	.956
My close friends or family recommendation make me want to use this technology	200	1	5	4.01	.997
The proportion of my friends uses the self-checkout	200	1	5	4.02	1.005
Valid N (Listwise)	200				

4.1.2.4 Facilitating Condition

The results of descriptive statistics for the facilitating condition factor are shown in Table 5.5 below. The table below shows that the minimum and maximum rating scales

are 1 and 5, respectively. The maximum mean for the item "self-checkout technology are compatible with other technologies I use" is 4.06, and its standard deviation is 0.903, as shown in the table below. Next, the items on "using the self-checkout technology is entirely within my control" had the mean value 4.05 with standard deviation of 0.926. Besides that, the items of "I can get help from others when I have difficulties using this technologies" had the mean value of 4.02 and a standard deviation of 0.916. Other than that, the item of "I have the necessary resources to use the self-checkout technology" has a mean of 3.98 and a standard deviation of 0.972. Lastly, the item of "I have the knowledge necessary to use the self-checkout technology" has the least mean which is only 3.91 with a standard deviation of 1.052.

Table 5.5: Descriptive Statistics for Facilitating Condition

	N	Minimum	Maximum	Mean	Std. Deviation
I have the necessary resources to use the self-checkout technology	200	1	5	3.98	.972
I have the knowledge necessary to use the self-checkout technology	200	1	5	3.91	1.052
Self-checkout technology are compatible with other technologies I use	200	1	5	4.06	.903
I can get help from others when I have difficulties using this technologies	200	1	5	4.02	.916
Using the self-checkout technology is entirely within my control	200	1	5	4.05	.926
Valid N (listwise)	200				

4.1.2.5 Hedonic Motivation

The minimum rating scale for each item was 1 and the highest rating scale was 5, as shown in Table 5.6 below. According to the data below, the statements "using the self-checkout technology is pleasant" and "using the self-checkout technology provides me pleasure" had the highest mean values of "Hedonic Motivation" at 4.01 and 0.975 and 0.943, respectively. Use of self-checkout technology is enjoyable, as evidenced by the mean value of 4.00 and the standard deviation of 0.940 for this item. Apart from that, the data for the statement "using self-checkout is thrilling" have a mean of 3.99 and a standard deviation of 0.954. The last item, "Using self-checkout technology is fun," displays the lowest mean, 3.96, and the lowest standard deviation, 0.940.

Table 5.6: Descriptive Statistics for Hedonic Motivation

	N	Minimum	Maximum	Mean	Std. Deviation
Using self-checkout technology is fun	200	1	5	4.01	.975
Using self-checkout is enjoyable	200	1	5	3.96	.940
Using self-checkout technology is entertaining	200	1	5	4.00	.940
Using the self-checkout technology gives me pleasure	200	1	5	4.01	.943
Using self-checkout technology is thrilling	200	1	5	3.99	.954
Valid N (listwise)	200				

4.1.2.6 Habit

Table 5.7 below shows the minimum rating scale for each item was 1 while the maximum rating scale was 5. From the table below, the item on "using self-checkout technology has become natural to me" has the highest mean which is 4.03 with its standard deviation 1.029 followed by the second highest mean of item on "I must use the self-checkout technology" where the mean value is 4.02 and its standard deviation is 1.042. Moreover, the item on "the use of self-checkout technology has become a habit for me" had mean 4.00 with a standard deviation which were 1.051. The item "I

will use the self-checkout technology without thinking” have 3.89 mean value and 1.071 standard deviation. Lastly, the item on “I am addicted to using the self-checkout technology” has the lowest mean value which is 3.78 with its standard deviation of 1.066.

Table 5.7: Descriptive Statistics for Habit

	N	Minimum	Maximum	Mean	Std. Deviation
The use of self-checkout technology has become a habit for me	200	1	5	4.00	1.051
I am addicted to using the self-checkout	200	1	5	3.78	1.066
I must use the self-checkout technology	200	1	5	4.02	1.042
Using self-checkout technology has become neutral to me	200	1	5	4.03	1.029
I will use the self-checkout technology without thinking	200	1	5	3.89	1.071
Valid N (listwise)	200				

4.1.2.7 Intention to Use Self-checkout Technology

Table 5.8 below show the result of descriptive statistics for customer intention to use self-checkout technology. The table below revealed that the highest mean was 4.32 with its standard deviation 0.891 which is for the item “is the technology that I really need”. Next, the item on “save my time when shopping” had the mean value 4.30 with standard deviation 0.891. From the outcomes below, it shows that majority of the respondents are satisfied with the Watson self-checkout technology and agreed that it is useful. The item on “are useful for my shopping experience” had the mean value 4.28 with its standard deviation 0.988. Besides that, the item “is efficient” had a mean

value of 4.26 with 0.882 standard deviation. Lastly, the item “are easy to use” had the least mean which is 4.19 with standard deviation 0.861.

Table 5.8: Descriptive Statistics for Intention to Use Self-checkout Technology

	N	Minimum	Maximum	Mean	Std. Deviation
Are useful for my shopping experience	200	1	5	4.28	.988
Are easy to use	200	1	5	4.19	.861
Is efficient	200	1	5	4.26	.882
Save my time when shopping	200	1	5	4.30	.891
Is the technology that I really need	200	1	5	4.32	.891
Valid N (listwise)	200				

4.2 Reliability Analysis and Validity Test

Table 5.9 below shows the reliability analysis of the data collected through the online survey. Table below present the reliability value based on 35 (without the demographic item) in questionnaire with 200 samples. The result in the table presents the value of Cronbach's Alpha is 0.987 which is significantly higher than 0.70. According to Malhotra (2012), the measurement of reliability in this research will use Cronbach Alpha where the value of ≤ 0.60 is considered not reliable. If the value was more than ≥ 0.70 , the data was considered as highly acceptable. Thus, the result of this survey was highly acceptable.

Table 5.9 Reliability Analysis of All Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized items	N of items
.987	.987	35

The results of this survey were regarded as credible since, according to table 5.10 below, each variable's alpha value was greater than 0.70. All of the variables' ranges fell between 0.928 and 0.958. This demonstrates that each subscale's overall alpha coefficient was quite good. The alpha values for performance expectation ($=0.941$),

effort expectation (=0.956), social influence (=0.928), facilitating condition (=0.958), hedonic motivation (=0.958), habit (=0.953), and customer intention (=0.955) are all listed in the table.

Table 5.10: Reliability Analysis of Each Variable

Variable	Number of Item	Cronbach's Alpha	Result
Performance Expectancy (PE)	5	0.941	Good
Effort Expectancy (EE)	5	0.956	Good
Social Influence (SI)	5	0.928	Good
Facilitating Condition (FC)	5	0.958	Good
Hedonic Motivation (HM)	5	0.958	Good
Habit (HT)	5	0.953	Good
Customer Intention (CI)	5	0.955	Good

4.3 Pearson Correlation Analysis

In order to examine the link between one independent variable and one dependent variable, the bivariate analysis of correlation was frequently used. This method is used to assess the potency or strength of the relationship between the dependent variable, performance expectations, effort expectations, social influence, enabling conditions, hedonic motivation, and habit. The correlation coefficient runs the gamut from +1 to -1 depending on how strong an association is. The strength of the relationship between two variables is indicated by a value that is closer to +1 or -1, whereas a value that is closer to 0 suggests a weaker relationship.

4.3.1 Performance Expectancy

The association between a dependent variable and an independent variable, the performance expectancy factor, was shown in Table 5.11 below (customer intention to use the self-checkout technology). The results of the test are significant at $r = 0.714$, $p < 0.001$, as shown in the table below. Customer intention and the factor performance

expectancy had a positive association that was statistically significant. These two factors therefore have a reasonable relationship.

Table 5.11 Correlations Results of System Quality Factor and User Satisfaction

		MEANPE	MEANSST
PE	Pearson Correlation	1	.714**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.714**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.2 Effort Expectancy

The relationship between a dependent variable and an independent variable, effort expectancy factor, is shown in Table 5.12 below (customer intention to use the self-checkout technology). The results of the test are significant at $r = 0.732$, $p = 0.001$, as shown in the table below. As a result, the component and customer intention were considerably and positively associated, and they also had a close association.

Table 5.12: Correlations Results of Effort Expectancy and Customer Intention

		MEANEE	MEANSST
EE	Pearson Correlation	1	.732**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.732**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.3 Social Influence

The correlation between a dependent variable, consumer intention to utilise Watson self-checkout technology, and an independent variable, social influence factor, was shown in Table 5.13 below. The test is significant where $r = 0.735$, $p = 0.001$ as displayed in the result I table below. Customer intention and the social impact factor

were positively connected in a substantial way. These two factors therefore have a reasonable relationship.

Table 5.13: Correlations Results of Social Influence Factor and Customer Intention

		MEANSI	MEANSST
SI	Pearson Correlation	1	.735**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.735**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.4 Facilitating Condition

The association between a dependent variable—customer intention to utilise Watson self-checkout technology—and an independent variable—facilitating condition factor—was shown in Table 5.14 below. The test is significant at $r = 0.780$, $p = 0.001$, as shown by the findings in the table below. Customer intention and the facilitating condition strongly and positively connected. These two factors therefore have a reasonable relationship.

Table 5.14: Correlations Results of Facilitating Condition Factor and Customer Intention

		MEANFC	MEANSST
FC	Pearson Correlation	1	.780**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.780**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.5 Hedonic Motivation

The hedonic motivation component, an independent variable, and consumer desire to utilise Watson self-checkout technology, a dependent variable, were correlated, as shown in Table 5.15 below. The results of the test are significant at $r = 0.820$, $p = 0.001$, as shown in the table below. As a result, the component and customer intention were considerably and positively associated, and they also had a close association.

Table 5.15: Correlations Results of Hedonic Motivation Factor and Customer Intention

		MEANHMT	MEANSST
HM	Pearson Correlation	1	.820**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.820**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.6 Habit

The dependent variable, customers' intention to utilise Watson self-checkout technology, and the independent variable, habit factor, were correlated, as shown in Table 5.16 below. The results of the test are significant at $r = 0.821$, $p = 0.001$, as shown in the table below. Customer intention and the habit component were highly positively connected. So, there is a reasonable link between these two variables.

Table 5.16: Correlations Result of Habit Factor and Customer Intention

		MEANHMT	MEANSST
HT	Pearson Correlation	1	.821**
	Sig. (2-tailed)		.000
	N	200	200
SST	Pearson Correlation	.821**	1
	Sig. (2-tailed)	.000	
	N	200	200

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

4.3.7 Overall Correlation Results of All Variables

Table 5.17: Overall Correlation Result of All Variables

		MEANPE	MEANEE	MEANSI	MEANFC	MEANHMT	MEANHST
PE	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	200					
EE	Pearson Correlation	.858**	1				
	Sig. (2-tailed)	.000					
	N	200	200				
SI	Pearson Correlation	.757**	.816**	1			
	Sig. (2-tailed)	.000	.000				
	N	200	200	200			
FC	Pearson Correlation	.820**	.881**	.825**	1		
	Sig. (2-tailed)						
	N						

	Sig. (2-tailed)	.000	.000	.000			
	N	200	200	200	200		
HM	Pearson Correlation	.853**	.884**	.786**	.929**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	200	200	200	200	200	
HT	Pearson Correlation	.713**	.813**	.799**	.880**	.840**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200
SST	Pearson Correlation	.714**	.732**	.735**	.780**	.820**	.821**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200

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

4.4 Inferential Statistics

Inferential statistics is the branch of a statistics which make the use of a various analytical tools in order to draw inferences about a population data from the survey or questionnaire data. An inferential statistics are helping in developing a good understanding of a certain population data by analysing the data from the survey. In other words, inferential statistics is something that use a random sample in order to get a conclusions about the population.

4.4.1 Multiple Regression Analysis

A multiple regression analysis is the technique of predicting the value of a variable that is using the value of two or more other variables. Multiple regression method is used to determine whether the independent and dependent variable are related. The relationship between independent variables (performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation and habit) and dependent variable (customer intention) can be explained by using multiple regression analysis. An equation are used to express the result of the regression analysis.

4.4.1.1 The Effect of Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Hedonic Motivation and Habit on Customer Intention

The outcomes where the R value was a positive number were shown in Table 5.18 below. The multiple regression coefficients in the table indicate that the R value for this model summary is 0.864. This indicates that the dependent and independent

variables have a high degree of correlation. Since the R value is greater than 0.70, there is a significant and favourable link. The dependent variable (consumer intention) is influenced by the independent variables (performance expectancy, effort expectancy, social influence, enabling condition, hedonic motivation, and habit) by 74.7% according to the model's R square value of 0.747. The other elements that were not covered in this study had an impact on the remaining ($100\% - 74.7\% = 25.3\%$).

Table 5.18: Model Summary of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.864 ^a	.747	.739	.42510

- a. Predictors: (Constant), HABIT, PERFORMANCE EXPECTANCY, SOCIAL INFLUENCE, EFFORT EXPECTANCY, MEAN FACILITATING CONDITION
- b. Dependent Variable: CUSTOMER INTENTION

F-test is used to ascertain the data from the survey; see table 5.19 below. The significance level is less than 0.01 and the F value is 94.977 with a significant value of 0.000. This finding demonstrates how the dependent variable is influenced by all the independent factors (performance expectancy, effort expectancy, social influence, enabling condition, hedonic incentive, and habit) (customer intention).

Table 5.19: Regression Analysis on ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102.978	6	17.163	94.977	.000 ^b
	Residual	34.876	193	.181		
	Total	137.854	199			

- a. Dependent Variable: MEANSST
- b. Predictors: (Constant), HABIT, PERFORMANCE EXPECTANCY, SOCIAL INFLUENCE, EFFORT EXPECTANCY, HEDONIC MOTIVATION, FACILITATING CONDITION

Table 5.20 below illustrates that the degree of coefficient beta values for each of the independent variable that effect on the dependent variable. The results in the table below shows that B1= 0.166, B2= 0.210, B3= 0.137, B4= 0.283, B5= 0.580, B6= 0.521 respectively to all independent variables. Based on the table, hedonic motivation has the highest coefficient beta value (B= 580, t= 5.008, $p < 0.05$) among other variables and largest impact on customer intention to use Watson self-checkout. This shows that 58% of customer intention to use the Watson self-checkout are hedonic motivation. Next, habit (B= 0.521, t= 6.059, $p < 0.05$) was the second largest predictor of customer intention with the variation 52.1%. For the performance expectancy, it is

revealed that $B = 0.166$, $t = 2.086$, $p < 0.05$ with the variation of 16.6%. Besides that, the social influence shows $B = 0.137$, $t = 1.885$, $p > 0.05$ with the variation 13.7%. For the facilitating condition, it is revealed that $B = 0.283$, $t = 2.265$, $p < 0.05$ with variation 28.3%. Lastly, the effort expectancy shows that $B = 0.210$, $t = 2.190$, $p < 0.05$ with variation 21%. Hence, performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation and habit act as important inputs for the prediction model.

Table 5.20: Regression Analysis on Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.976	.152		6.402	.000
	PERFORMANCE EXPECTANCY	.158	.076	.166	2.086	.038
	EFFORT EXPECTANCY	.188	.086	.210	2.190	.030
	SOCIAL INFLUENCE	.128	.068	.137	1.885	.061
	FACILITATING CONDITIONS	.266	.118	.283	2.265	.025
	HEDONIC MOTIVATION	.549	.110	.580	5.008	.000
	HABIT	.449	.074	.521	6.059	.000

a. Dependent Variable: CUSTOMER INTENTION

The relationship revealed as the below mathematically analysis equation based on the Table 5.20 above:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6$$

Where:

Y= Use of Watson Self-checkout Technology

b_0 = Regression Constant

X_1 = Performance Expectancy

X_2 = Effort Expectancy

X_3 = Social Influence

X_4 = Facilitating Condition

X_5 = Hedonic Motivation

X6= Habit

b1 b2 b3= Regression Coefficient

$$Y (\text{Use of Watson self-checkout technology}) = 0.976 + 0.158 (\text{Performance Expectancy}) + 0.188 (\text{Effort Expectancy}) + 0.128 (\text{Social Influence}) + 0.266 (\text{Facilitating Condition}) + 0.549 (\text{Hedonic Motivation}) + 0.449 (\text{habit})$$

4.5 Hypothesis Test

In order to analyse the research's findings, which were based on the hypotheses presented in Chapter 3's introduction, the researcher employed significant values. A statistical method known as hypothesis testing is used to deduce the conclusion of a hypothesis based on a sample of data. Using a sample drawn at random from the population, the analyst will test the null hypothesis and the alternative hypothesis in this section. To determine whether the null hypothesis is accepted or rejected, the statistical sample will be put to the test. Using the information acquired from the regression analysis, the hypothesis test has been employed in this study to evaluate every variable. The result shown in table 5.20 will be investigated by determining whether the significant value is less than or greater than 0.05.

The Hypothesis for Performance Expectancy

H1₁: There is a positive relationship between performance expectancy and customer intention to use the Watson self-checkout technology.

H1₀: There is no relationship between performance expectancy and customer intention to use the Watson self-checkout technology.

Accept H1₁

Table 5.20 revealed the relationship between performance expectancy factor and customer intention to use Watson self-checkout technology. The result marked significant value of performance expectancy factor, $p = 0.038$ which is lower than 0.05. This shown that performance expectancy has a significant relationship on customer intention. Thus, H1₁ is accepted in this study.

The Hypothesis for Effort Expectancy

H2₁: There is a positive relationship between effort expectancy and customer intention to use the Watson self-checkout technology.

H2₀: There is no relationship between effort expectancy and customer intention to use the Watson self-checkout technology.

Accept H2₁

Table 5.20 revealed the relationship between effort expectancy factor and customer intention to use Watson self-checkout technology. The result marked significant value of effort expectancy factor, $p = 0.030$ which is lower than 0.05. This show that effort expectancy has a significant relationship on customer intention.

The Hypothesis for Social Influence

H3₁: There is a positive relationship between social influence factor and customer intention to use the Watson self-checkout technology.

H3₀: There is no relationship between social influence factor and customer intention to use the Watson self-checkout technology.

Reject H3₁

Table 5.20 revealed the relationship between social influence factor and customer intention to use the Watson self-checkout technology. Based on table 5.20, the significant value of social influence factor, $p = 0.061$. This value is more than 0.05. As the result, H3₁ is rejected and it is negatively influenced by the customer intention.

The Hypothesis for Facilitating Condition

H4₁: There is a positive relationship between facilitating condition factor and customer intention to use Watson self-checkout technology.

H4₀: There is no relationship between facilitating condition factor and customer intention to use Watson self-checkout technology.

Accept H4₁

Table 5.20 revealed the relationship between facilitating condition factor and customer intention to use Watson self-checkout technology. The result marked significant value of facilitating condition factor, $p = 0.025$ which is lower than 0.05. This shown that facilitating condition has a significant relationship on customer intention to use Watson self-checkout technology. Thus, H4₁ is accepted in this study.

The Hypothesis for Hedonic Motivation

H5₁: There is a positive relationship between hedonic motivation factor and customer intention to use Watson self-checkout technology.

H5₀: There is no relationship between hedonic motivation factor and customer intention to use Watson self-checkout technology.

Accept H5₁

Table 5.20 revealed the relationship between hedonic motivation factor and customer intention to use Watson self-checkout technology. The result marked significant value of hedonic motivation factor, $p = 0.000$ which is lower than 0.05. This shown that hedonic motivation has a significant relationship on customer intention to use Watson self-checkout technology. Thus, H5₁ is accepted in this study.

The Hypothesis for Habit

H6₁: There is a positive relationship between habit factor and customer intention to use Watson self-checkout technology.

H6₀: There is no relationship between habit factor and customer intention to use Watson self-checkout technology.

Accept H6₁

Table 5.20 revealed the relationship between habit factor and customer intention to use Watson self-checkout technology. The result marked significant value of habit factor, $p = 0.000$ which is lower than 0.05. This shown that habit has a significant relationship on customer intention to use Watson self-checkout technology. Thus, H6₁ is accepted in this study.

4.6 Summary

The findings and data acquired in this research was discussed in this chapter. The data acquired through an online questionnaire which is google form from 200 respondents was interpreted by using the Statistical Package for Social Science (SPSS Version 26.0). The descriptive analysis, reliability test, and regression analysis method were

used in order to analyse the acquired data in this study. This chapter include the presented outcomes for the hypothesis that mentioned in Chapter 3.



CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

Based on the data analysis in the previous chapter which is chapter 4, this chapter will wrap up the study's findings. In this chapter, it will be determined whether the research questions are relevant to the research or study's goals. This chapter 5 also provide a discussion of the rationale for accepting or even rejecting the hypothesis in this research. Other than that, the limitations of this study will also be discussed. The implications and recommendations for this research will be discussed.

5.1 Discussion of Findings

5.1.1 Relationship between Performance Expectancy and Customer Intention

The author has discovered that there was a significant value ($p < 0.05$) of performance expectancy factor with customer intention to use the Watson self-checkout kiosks based on the findings acquired in chapter 4 (Data Analysis). This found that both variables had a significant positive connection ($\beta = 0.166$, $p = 0.038$). As a result, the hypothesis which said that there is a relationship between performance expectancy and customer intention has been accepted.

The findings can be support by the previous study Eva-Maria Schomakers (2021) on the research of the user acceptance of lifestyle and therapy mobile health apps who finds out that performance expectancy was significantly influenced a use intention and it is the strongest predictor in a research. Performance expectancy is where someone believes that using that certain technology will gain benefit or profit from that technology Nasrin Roozbahani (2020). The item on 'In overall, self-checkout technology is advantageous' had the highest mean among all the items in performance expectancy. This shows that the customer intention to use the Watson self-checkout kiosks is influenced by their experience using the kiosks. According to Taqwa Hariguna (2019), a customer experienced is having a positive relationship with their intention to use something.

5.1.2 Relationship between Effort Expectancy and Customer Intention

Based on the data from chapter 4's research, the author found that the effort expectancy component was significantly correlated ($p < 0.05$) with customers' intention to utilise the Watson self-checkout kiosks (Data Analysis). This discovered a

substantial positive relationship between both variables ($r = 0.210$, $p = 0.030$). As a result, the idea that effort expectancy and consumer intention are related has been recognised.

Effort expectancy is the expectations of how easy is certain technology can be use. According to Hoque and Sorwar, a factor of effort expectancy is a significant predictor. According to Alireza (2020), effort expectancy can predict the behavioural intention to use a certain technology like the technology of e-learning system. The item 'self-checkout is easy to use' had the highest mean among all the items in effort expectancy. This shows that in the variable of effort expectancy, the most factor that influenced customer intention to use Watson self-checkout technology is because they find it easy to use the self-checkout kiosks. The second higher mean is the item on 'self-checkout technology fulfil my requirements'. This shows that customer are think that the Watson self-checkout kiosks are fulfil their requirements. Some of the example that make the kiosks fulfil customer requirements is that the kiosks are helping customer to make their own privacy especially when buying a product for their intimate area.

5.1.3 Relationship between Social Influence and Customer Intention

Based on the findings, the relationship between social influence factor and customer intention was insignificant. The p value of social influence factor was 0.061 which was higher than the significant value 0.05. Hence, the $H3_1$ was not accepted in this research. This shows that the customer intention to use the Watson self-checkout technology is not depend on social influence factor. This is also mean that social influence is not always the factor that can influenced people intention to use a certain technology or system.

A social influence factor is not influence the attitude of the customer or users, Zelly Alfany, Akhmad Saufi & Lalu Edy Herman Mulyono (2019). On the previous research by Zelly Alfany, Akhmad Saufi and Lalu Edy Herman Mulyono (2019) which is titled 'The impact of Social influence, Self-Efficacy, Perceived Enjoyment, and Individual Mobility on Attitude toward use and Intention to use Mobile Payment of OVO, it is said that an advice from the important people or people around of a customer like an advice is not influence their attitude to use a certain technology like the Mobile Payment of OVO.

From the descriptive statistics, the item which is ‘The proportion of my friends uses the self-checkout’ has the highest mean in the factor of social influence. This item is having 4.02 mean value. This factor is mean that someone is influenced to use a certain technology by the proportion of his or her friends. However, in this research, this factor of ‘social influence is not significant’.

5.1.4 Relationship between Facilitating Condition and Customer Intention

The researcher has discovered that there was a significant value ($p < 0.05$) of facilitating condition factor with customer intention to use Watson self-checkout technology which is based on the findings in the previous chapter which is chapter 4 (Data Analysis). This found that both variable is having a significant positive connection ($\beta = 0.283$, $p = 0.025$). As a result, the hypothesis that there is a relationship between the facilitating condition factor and customer intention has been accepted.

This findings can be supported by some other researcher in their previous research. In the previous research which is about an e-learning system, its researcher, Sattari et al. (2017) found that a facilitating condition factor are effecting the behavioural intention of a customer in using the e-learning system. Other than that, the researcher which is Wang et al, it is found that a facilitating condition factor are having a significant impacts on someone intention to use a certain technology. The item on ‘Self-checkout technology are compatible with other technologies I use’ was having the highest mean value in the facilitating condition factor which is 4.06. This shows the other technologies that the respondent use are compatible with the Watson self-checkout technology. The second highest mean in the facilitating condition is on the item of ‘ Using the self-checkout technology is entirely within my control’ which have the mean value of 4.05. This shows that the Watson self-checkout technology can be control by the customer and that is why it is influenced their intention to use the Watson self-checkout kiosks.

5.1.5 Relationship between Hedonic Motivation and Customer Intention

The researcher has discovered that there is a significant value ($p < 0.05$) of hedonic motivation factor with customer intention to use the Watson self-checkout technology which is based on the findings that is acquired in chapter 4 (Data Analysis). According to the findings, the both variables had a significant positive connection (β

= 0.580, $p = 0.000$). As a result, the hypothesis that there is a positive relationship between hedonic motivation and customer intention has been accepted.

The finding in this research about the customer intention to use Watson self-checkout technology can be supported by some previous research by other researcher. According to the study about the acceptance of e-learning by Seyyed Mohsen Azizi, Nasrin Roozbahani and Alireza Khatony (2020), the factor of hedonic motivation factor is one of the important factor that can predict customer intention to use a certain technology. Hedonic motivation is one of the factor that influenced people acceptance and intention to use something, Martina Ziefle (2021). The item on 'Using self-checkout technology is fun' and 'Using the self-checkout technology gives me pleasure' has the highest mean which is both of this item are having a 4.01 mean value. This is shows that customer are using the Watson self-checkout kiosks because they are feeling fun and pleasure in using it.

5.1.6 Relationship between Habit and Customer Intention

The author has discovered that there was a significant value ($p < 0.05$) of habit factor and customer intention to use Watson self-checkout kiosks that is based on the findings that was acquired in chapter 4 (Data Analysis). According to the findings, it is found that both of the variables had a significant positive connection ($\beta = 0.521$, $p = 0.000$). As a result, the hypothesis that there is a positive relationship between habit factor and customer intention has been accepted.

Habit is one of the important factor that can validated customer intention to use something (Venkatesh, 2012). According to the previous research about the customer intention to use the self-checkout kiosks at super market by Ufuk Cebeci, Abdullah Ertug and Hulya Turkcan (2019), the factor of habit was significantly affect the customer intention in using the self-checkout in supermarket. The item on 'Using self-checkout technology has become natural to me' had the highest mean value which is 4.03. This is mean that using the Watson self-checkout technology already become natural to the customer and that is why they are using the Watson self-checkout kiosks.

5.2 Significant Implications of the Research

The theoretical, managerial, and government implications of the study are examined in the implications of the study that is based on the research findings from the previous chapter.

5.2.1 Implication of Theoretical

The findings of this research had successfully integrated the dimensions in Unified Theory of Acceptance and Use of Technology (UTAUT2) that was developed by Venkatesh (2003) to discuss the influence of performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation and habit on customer intention to use the Watson self-checkout technology. The research results found out that the key factors that influence customer intention to use Watson self-checkout technology is performance expectancy, effort expectancy, facilitating condition, hedonic motivation and habit. The social influence shows an insignificant relationship with the customer intention to use Watson self-checkout and it may be because people nowadays is not anymore to much attached with people around as they always using technology and mostly they are influenced by social media like Facebook, Instagram, Tiktok and so on.

From the theoretical standpoint, the findings are imply on a variety of consequences. Firstly, this study had contributed to enhance the literature knowledge regarding Customer Intention to Use Watson Self-checkout Technology in Malaysia as this system is still in a new phase and lack of research. Second, the overall findings are new in the literature review and contrast with those of previous research (Fida, 2020).

Last but not least, this study contributes to the growing body of knowledge about the intention to deploy Watson self-checkout technology in developing countries like Malaysia. In order for the Watson company in Malaysia to know what aspects of the self-checkout kiosks may be enhanced, it is crucial to understand what factors customers use to decide whether or not to use self-checkout technology like the Watson self-checkout technology.

5.2.2 Implication of Managerial

The findings of this study provide useful information that can help professional and developer to improve their adoption of Watson self-checkout technology. By knowing what makes a customer using the self-checkout kiosks, it will become easier for the company to add what is not enough or even improve their kiosks machine.

This research is about the customer intention to use the Watson self-checkout technology. By doing this research, the management of the company will be able to know what makes their consumer to use their machine. If they get the positive

response, they may add another machine to another place which does not have that kiosks yet.

5.2.3 Implication of Government

There is still a lack of understanding and capabilities in our country Malaysia about the use of Watson self-checkout technology. Hence, the goal of this research is to look at the customer intention to use Watson self-checkout technology using the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2).

The use of the Watson self-checkout technology gives a lot of benefits to its user. Some of the benefits is the machine can save time and protect the customer privacy. For example, if they want to buy an intimate product from the Watson, it will protect them because they do not need to go to the counter to pay but just using the machine kiosks. Sees this benefit and what makes customer use the machine may make the government to invest on self-checkout technology. It is may be not for the Watson but at some place like hospitals to make it easier for a consumer.

5.3 Limitation of the study

The first limitation for this research is that the researcher was never using the Watson self-checkout technology itself. This is because the researcher are from the state that does not provide the machine kiosks at the Watson in their state which may due to some reason. So, the researcher are not really know about the technology. The researcher are only searching for the information about the technology through google.

The second limitation of this study is that the researcher are facing the difficulties to find the 300 respondents. This is because the researcher are lives in the state that does not provide that kind of machine kiosks. The researcher are only using WhatsApp, Facebook and Instagram to distribute the questionnaire and not using the face to face method to find the respondents. Even using online platform looks easy but there is also a difficulties in using it. For example, the researcher may give the questionnaire to someone to answer it but that respondent may only read it but not answering it.

5.4 Recommendation for the Future Research

This research is about the customer intention to use the Watson self-checkout technology. The recommendation is that the future researcher may doing a research

that have a relation about the Watson self-checkout technology like measuring the customer satisfaction using the Watson self-checkout technology. In this research, there are only five items in each dimensions. The future researcher may add the items when they are doing the same research in the future. Other than that, the researcher also recommend the future researcher to do a research about other self-checkout technology like the self-checkout technology at the supermarket, hospitals, school and others.

5.5 Conclusion

Using Venkatesh's Unified Theory of Acceptance and Employ of Technology 2 (UTAUT2), this study's findings about customers' intentions to use Watson self-checkout technology are discussed (2003). The research's findings indicated that the model's constructs—performance expectancy, effort expectancy, enabling condition, hedonic incentive, and habit—are important for predicting whether customers will use Watson self-checkout technology. The approach taken in this study is to carry out several types of analysis, including descriptive analysis, Pearson correlation analysis, reliability analysis, inferential analysis, and hypothesis testing, in order to achieve the study's goals.

According to the finding, performance expectancy, effort expectancy, facilitating condition, hedonic motivation and habit had a significant relationship with the customer intention to use the Watson self-checkout technology. The social influence factor may not be significant because people are influenced to using the self-checkout because of the influenced from the advertisement in a social media and not the important people or people around them.

Reference

- Hyeon Mo Jeon, Hye Jin Sung & Hyun Young Kim (2020). Customer's acceptance intention of self-service technology of restaurant industry: expanding UTAUT with perceived risk and innovativeness. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=intention+to+use+SS+T+%28UTAUT%29&oq=#d=gs_qabs&t=1655556189693&u=%23p%3DK0Q5fTTgACAJ
- Andreas Hasselhof (2021). Top Self-service Technologies. <https://ombori.com/blog/self-service-technology>
- Flanders Trade (2021). Coronavirus – The Situation in Malaysia. <https://www.flandersinvestmentandtrade.com/export/nieuws/coronavirus-%E2%80%93-situation-malaysia>
- Asita Elenge (2020). Covid-19 Outbreak in Malaysia. <https://ophrp.org/journal/view.php?number=559#:~:text=On%20the%2025th%20January,the%2024th%20January%202020>
- Arlin Cuncic (2021). Understanding Internal and External Validity. <https://www.verywellmind.com/internal-and-external-validity-4584479>
- Ayush Singh Rawat (2021). An Overview of Descriptive Analysis. <https://www.analyticssteps.com/blogs/overview-descriptive-analysis>
- Lauren Thomas (2022). Stratified Sampling. <https://www.scribbr.com/methodology/stratified-sampling>
- Davit Marikyan & Savvas Papagiannidis (2021). Unified Theory of Acceptance and Use of Technology. <https://open.ncl.ac.uk/theories/2/unified-theory-of-acceptance-and-use-of-technology/>

I Wayan Kandi Wijaya, Anak Agung Gede Rai & Taqwa Hariguna (2019). The Impact of Customer Experience on Customer Behavior Intention Use in Social Media Commerce, An Extended Expectation Confirmation Model: An Empirical Study. https://www.researchgate.net/publication/334312372_The_impact_of_customer_experience_on_customer_behavior_intention_use_in_social_media_commerce_an_extended_expectation_confirmation_model_An_empirical_study

Cuemath (n.d.). Inferential Statistics. <https://www.cuemath.com/data/inferential-statistics/>

Cong Qi (2019). Is Checkout-free Store A Flash In the Pan? Factors Influencing Hong Kong People's Adoption Intention of Checkout-free Stores. <https://aisel.aisnet.org/acis2019/11/>

Smitha Geetha (2019). Factors Influencing Consumers' Intention To Use McDonald's Self-Service Kiosks In Klang Valley. <https://www.semanticscholar.org/paper/FACTORS-INFLUENCING-CONSUMERS%E2%80%99-INTENTION-TO-USE-IN-Yang-Geetha/40da8a9f0a47df03b4c4c259f7500f75b26cb007>

Ufuk Cebeci, Abdullah Ertug & Hulya Turkcan (2019). Exploring the Determinants Of Intention To Use Self-checkout System In Supermarket Chain and Its Application. https://www.researchgate.net/publication/337416125_Exploring_the_determinants_of_intention_to_use_self-checkout_systems_in_super_market_chain_and_its_application

Florian Baer & Michael Leyer (2018). Identifying The Factors Influencing Self-Service Technology Usage Intention – A Meta-Analysis. <https://aisel.aisnet.org/pacis2018/144/#:~:text=The%20meta%20analysis%20provides%20the,be%20forced%20to%20use%20SSTs.>

Adelyn Kuan Lai Kit, Ann Hui Ni, Emeilee Nur Freida Binti Mohd Badri & Tang Kia Yee (2014). UTAUT2 Influencing The Behavioural Intention To Adopt Mobile Applications. <https://www.semanticscholar.org/paper/UTAUT2-INFLUENCING-THE-BEHAVIOURAL-INTENTION-TO-Kuan-Ann/902f8db42c2af50cf76625228a269038ee56834f>

Sina Nordhoff (2020). Using the UTAUT2 Model To Explain Public Acceptance of Conditionally Automated (L3) Cars: A Representative Questionnaire Study Among 8,044 Car Drivers From Seven European Countries.

<https://eprints.whiterose.ac.uk/156249/>

Liangchuan Wu & Yi-Fan Wu (2020). An Application of The UTAUT2 Model For Understanding User Intention Adopting Google Chromecast In Taiwan.

<https://kiss.kstudy.com/thesis/thesis-view.asp?key=3890422>

Nyesiga Catherine (2017). Effort Expectancy, Performance Expectancy, Social Influence and Facilitating Condition as Predictors of Behavioural Intentions to Use ATMS With Fingerprint Authentication In Ugandan Banks.

<https://computerresearch.org/index.php/computer/article/view/1622/1606>



[illegible]

Revised Report Refore Presentation																	
Presentation FYP 1																	
Correction FYP 1																	
Submission of FYP 1																	



اونیورسیتی تکنیکل ملیسیا ملاک

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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																



FACTOR INFLUENCING CUSTOMER INTENTION TO USE SELF-CHECKOUT AT WATSON DURING THE PANDEMIC OF COVID-19

INTRODUCTION:

This survey form reveals the set of customer intention to use Watson self-checkout during the pandemic of Covid-19. The main purpose of this study is to examine the factors influencing customer intention to use the self-checkout technology at Watson during the pandemic of Covid-19. The information collected would be useful and beneficial for all the Watson customer to encourage them to use the self-checkout technology. The result of this study will be only used for research purpose and will keep highly confidential.

INSTRUCTIONS:

This questionnaire consists of three (3) main sections. Please read the questions carefully and answer them with tick or in the space provided. This survey needs to fill up by Watson Customer. The survey will take approximately 10 minutes to be completed and your participation is highly appreciated.

**For further clarification and
/or
instruction, please contact:**

Anisah Jospat
anisahjospat@gmail.com
011-25169854

Address:

Faculty of Technology Management and
Technopreneurship (FPTT)
Universiti Teknikal Malaysia Melaka,
Hang Tuah Jaya, 76100 Durian Tunggal
Melaka, Malaysia.
Fax: 06-283 3131

Dr. Nurulizwa Binti Abdul
Rashid (Supervisor)
nurulizwa@utem.edu.my

STATEMENT OF CONFIDENTIALITY

The information provided will be held as strictly confidential. We will neither publish, release, nor disclose any information on or identifiable with, individual or organization.

THANKS FOR YOUR COOPERATION

INVESTIGATE FACTORS INFLUENCING CUSTOMER INTENTION TO USE SELF-CHECKOUT TECHNOLOGY DURING THE PANDEMIC OF COVID-19

SECTION A: GENERAL INFORMATION OF RESPONDENTS

This section aims to obtain your personal information with some questions listed.

Please tick (✓) on the space provided.

1. Gender

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

2. Age

<input type="checkbox"/>	18 – 20 years old
<input type="checkbox"/>	21 – 23 years old
<input type="checkbox"/>	24 – 26 years old
<input type="checkbox"/>	27 years old and above

3. Race

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

4. How often did you shop at the Watson store?

<input type="checkbox"/>	By weekly
<input type="checkbox"/>	By monthly
<input type="checkbox"/>	By yearly

**SECTION B: FACTORS INFLUENCING CUSTOMER INTENTION TO
USE SELF-CHECKOUT TECHNOLOGY AT WATSON DURING THE
PANDEMIC OF COVID-19**

This section shows the questions that related to your experience when using Watson self-checkout during Covid-19 pandemic. Please rank your statement by using the appropriate scale. Please tick (✓) on the space provided.

1	2	3	4	5
Strongly Disagree ←————→ Strongly Agree				

	Performance Expectancy					
Label	I prefer to adopt self-checkout	1	2	3	4	5
PE 1	I find the self-checkout technology useful in my daily life.					
PE 2	Using self-checkout technology increases my chances of achieving things that are important to me.					
PE 3	Using self-checkout technology helps me accomplish things more quickly.					
PE 4	Using mobile apps increases my productivity.					
PE 5	Overall, I would find self-checkout technology to be advantageous.					

	Effort Expectancy					
Label	I use self-checkout because	1	2	3	4	5
EE 1	Learning how to use the self-checkout technology is easy for me.					
EE 2	My interaction with self-checkout technology is clear and understandable.					
EE 3	I find self-checkout technology easy to use.					

EE 4	It is easy for me to become skillful at using the self-checkout technology.					
EE 5	The self-checkout technology fulfill my requirements.					

	Social Influence					
Label	I choose to utilize self-checkout technology	1	2	3	4	5
SI 1	People who are important to me think that I should use the self-checkout technology.					
SI 2	People who influence my behavior think that I should use the self-checkout technology.					
SI 3	People whose opinions that I value prefer that I use the self-checkout technology.					
SI 4	My close friend or family recommendation make me want to use the technology.					
SI 5	I would use the self-checkout technology because the proportion of my friends uses the self-checkout.					

Label	Facilitating Condition					
	I use self-checkout because	1	2	3	4	5
FC 1	I have the resources necessary to use the self-checkout technology					
FC 2	I have the knowledge necessary to use the self-checkout technology.					
FC 3	Self-checkout technology are compatible with other technologies I use.					
FC 4	I can get help from others when I have difficulties using the technology.					
FC 5	Using the self-checkout technology is entirely within my control.					

	Hedonic Motivation					
Label	I use self-checkout because	1	2	3	4	5
HM 1	Using self-checkout technology is fun.					
HM 2	Using self-checkout technology is enjoyable.					
HM 3	Using self-checkout technology is entertaining.					
HM 4	Using the self-checkout technology gives me pleasure.					
HM 5	Using self-checkout is thrilling.					

	Habit					
Label	I use self-checkout because	1	2	3	4	5
HT 1	The use of self-checkout technology has become a habit for me.					
HT 2	I am addicted to using the self-checkout.					
HT 3	I must use the self-checkout technology.					
HT 4	Using self-checkout technology has become natural to me.					
HT 5	I will use the self-checkout technology without thinking.					

**SECTION C: PERCEPTION OF WATSON CUSTOMER TOWARDS
SELF-CHECKOUT TECHNOLOGY**

This section evaluates your perception on the Watson self-checkout kiosks. Please tick (✓) on your answer.

1	2	3	4	5
Strongly Disagree ←————→ Strongly Agree				

	Intention to use self-checkout technology					
Label	In my opinion;	1	2	3	4	5
SST 1	Self-checkout are useful for my shopping experience.					
SST 2	Self-checkout kiosks are easy to use.					
SST 3	Self-checkout is efficient.					
SST 4	Self-checkout save my time when shopping.					
SST 5	Self-checkout is the technology that I really need.					

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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

**END OF
QUESTION -**