THE FACTOR OF BINGOBOX TECHNOLOGY ADOPTION TOWARDS CONSUMERS BEHAVIORAL INTENTION IN MALAYSIA DURING EPIDEMIC OF COVID-19.

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APPROVAL

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is the result of my personal study except with the explanations or information from other researches as cited in the references clearly. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.’

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DEDICATION

I would like to express my deepest appreciation to my precious family members who have always aided and inspired me all the time in various spiritual, economical, and motivational ways. In addition, I would also like to devote my sincere gratitude to my beloved supervisor, Dr. Nurulizwa Binti Abdul Rashid, who are willing to spend much time and patiently guided me in the whole process of this research and my classmates/friends who share their knowledge during the study. Without their blessing and support, this study is difficult to complete.

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ABSTRACT

Earlier this year, China's pioneer in human-free and cashless convenience shops, Bingobox, was launched in Malaysia. It is also a salient feature of this retail model as customers are free to shop at their own rate without help from store employees. A QR code must be scanned in order to access the Bingobox shop. Whenever you go shopping, just scan the QR code to see how much you spent. You don't have to do anything to get your purchases into the system. This system is very new for use by Users. Therefore, the study aimed on how the factors analyzed by the UTAUT2 model the factor of bingobox technology adoption towards consumers behavioral intention in Malaysia. The research questions were generated to determine the factors that has statistically significantly affected their consumer behavioural intention. There are seven independent variables to be considered in the proposed UTAUT2 model after modified, which includes Performance Expectation, Effort Expectation, Social Influence, Facilitating Condition, Perceived Risk, Hedonic Motivation, Price Value, and Habit. The data obtained from questionnaire was recoded by SPSS and SmartPLS 3.0 was used to perform PLS-SEM path coefficient for data analysis. In conducting this study of the research project, the quantitative method was chosen for data collection, and the Statistical Package from the Social Science (SPSS) version 26 is used for data analysis. The constructed questionnaires are distributed to 150 of the target subjects through the URL or links of Google Form via WhatsApp, Telegram, Facebook and other network-based applications. The results show that seven independent variables have significant relationship with the dependent variable and are beneficial for practitioners and government to make more use of technology for sustainable business.

Keyword – *BingoBox , UTAUT 2, Performance Expectation, Effort Expectation, Social Influence, Facilitating Condition, Perceived Risk, Hedonic Motivation, Price Value, and Habit, SPSS.*

ABSTRAK

Awal tahun ini, perintis China dalam kedai serbaneka tanpa manusia dan tanpa tunai, Bingobox, telah dilancarkan di Malaysia. Ia juga merupakan ciri penting model runcit ini kerana pelanggan bebas membeli-belah pada kadar mereka sendiri tanpa bantuan daripada pekerja kedai. Kod QR mesti diimbas untuk mengakses kedai Bingobox. Setiap kali anda pergi membeli-belah, hanya imbas kod QR untuk melihat jumlah yang anda belanjakan. Anda tidak perlu melakukan apa-apa untuk memasukkan pembelian anda ke dalam sistem. Sistem ini sangat baharu untuk para Pengguna menggunakannya. Oleh itu, kajian bertujuan bagaimana faktor-faktor yang dianalisis oleh model UTAUT2 faktor penggunaan teknologi bingobox terhadap niat tingkah laku pengguna di Malaysia. Soalan kajian dijana untuk menentukan faktor yang secara statistik mempengaruhi niat tingkah laku pengguna mereka secara signifikan. Terdapat tujuh pembolehubah tidak bersandar yang perlu dipertimbangkan dalam model UTAUT2 yang dicadangkan selepas diubah suai, yang merangkumi Jangkaan Prestasi, Jangkaan Usaha, Pengaruh Sosial, Keadaan Memudahkan, Risiko yang Ditanggap, Motivasi Hedonik, Nilai Harga dan Tabiat. Data yang diperoleh daripada soal selidik telah dikod semula oleh SPSS dan SmartPLS 3.0 digunakan untuk melaksanakan pekali laluan PLS-SEM untuk analisis data. Dalam menjalankan kajian projek penyelidikan ini, kaedah kuantitatif telah dipilih untuk pengumpulan data, dan Pakej Statistik daripada Sains Sosial (SPSS) versi 26 digunakan untuk analisis data. Soal selidik yang dibina diedarkan kepada 150 daripada subjek sasaran melalui URL atau pautan Borang Google melalui WhatsApp, Telegram, Facebook dan aplikasi berasaskan rangkaian lain. Keputusan menunjukkan bahawa tujuh pembolehubah tidak bersandar mempunyai hubungan yang signifikan dengan pembolehubah bersandar dan memberi manfaat kepada pengamal dan kerajaan untuk menggunakan lebih banyak teknologi untuk perniagaan yang mampan.

Kata kunci – *BingoBox , UTAUT 2, Jangkaan Prestasi, Jangkaan Usaha, Pengaruh Sosial, Keadaan Memudahkan, Risiko yang Ditanggap, Motivasi Hedonik, Nilai Harga dan Tabiat, SPSS.*

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Research Objective, Research Questions, Research Hypothesis and Result.

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LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
IV	Independent Variables
DV	Dependent Variable
SPSS	Statistical Package for Social Science
COVID-19	Coronavirus 2019
ICT	Information and Communications Technology
URL	Uniform Resource Locator
PE	Performance Expectancy
EE	Effort Expectancy
SI	Social Influence
FC	Facilitating Conditions
HM	Hendonic Motivation
PV	Price Value
HB	Habit
BI	Behavioral Intention
QR	Quick Response
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
UTAUT	The Background of Unified Theory of Acceptance and Use of Technology
TPB	Theory of Planned Behavior

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CHAPTER 1

INTRODUCTION

1.0 Introduction

This thesis is about the presentation of the research that gives a general overview of the background study that relates to the factor of BingoBox technology adoption in relation to the behavioral intention in malaysia during the COVID-19 epidemic. This chapter presents the outline of the research and provides a general overview of the background study on the adoption of BingoBox technology. In addition, this chapter includes a problem statement about the factor of BingoBox technology adoption as it relates to the behavioral intentions of consumers in Malaysia during the COVID-19 epidemic, the research question and objectives, the scope of the study, the significance, and limitation of the study.

1.1 Background of Study

One of the most annoying aspects of shopping is the checkout process. Companies like BingoBox and the unmanned shop powered by the Internet of Things are trying to improve this process. Understanding the basic workings of newly developed concepts is still lacking. The first IoT-enabled retail facility has just opened its doors to the public. Large sums of money are now being invested in the growth of these new cashierless models. Practitioners believe that IoT companies are already giving their goods and services to stores on a trial basis, according to Capgemini, (2019). Therefore, it is safe to assume that this is just the beginning of a larger trend.

With the debut of JD.id's first unmanned shop in Indonesia and China's BingoBox in Kuala Lumpur, a new wave of unmanned stores is sweeping Southeast Asia. Although Irispay was the first cashierless shop in Malaysia, BingoBox stands out because it is backed by China's leading cashierless retailer. Chinese retailer BingoBox has formed a joint venture with Scientific Retail Sdn. Bhd in Malaysia to bring the idea of unmanned stores to the country, where there are more than 400 BingoBox stores (Tan, 2018). So, improving the checkout process is suitable for retailers. The benefits of these new solutions need to be explored as retailers are approaching this challenge in different ways. There are many advances on the part of companies and many discussions in the media about cashierless stores.

Figure 1.1: BingoBox outlet in Bukit Ceylon.

Source: A visit to BingoBox unmanned convenience store in KL - Mini Me Insights (Minimeinsights.com)

Retailers rely heavily on the old-fashioned checkout process. However, according to FitzSimmons (2003), the majority of transactions are still conducted through human interaction with the cashier and machine-based services such as self-service checkouts or electronic service solutions such as pick-up stations. Retailers can now implement cashierless ideas thanks to a range of previously unimaginable new technologies (Capgemini, 2019). Stores that do away with traditional checkouts and instead use cutting-edge technology in their checkout process are referred to as "cashierless ideas."

In an effort to alleviate shopping boredom, there has long been a desire to speed up the checkout process (Caballero, Lumpkin, Brown, Katsinas, & Werner, 1985; Kahneman, Wakker, & Sarin, 1997; Verhoef, Antonides, & de Hoog, 2004; Scholz, 2017). As a company, it makes sense to devote extra time and effort to the checkout process as well. First, the peak-end rule states that customers tend to remember the end of an experience, as noted by Bouraoui, Eriksson, Mansjoe & Thiel (2019). A whopping 81% of the time spent on cashier tasks today could be saved through automation (Begley, Hancock, Kilroy, & Kohli, 2019).

According to Tan (2018), the cost of BingoBox is reasonable. The long-term viability of this concept depends on the right location. BingoBox's growth could be constrained by local legislation. BingoBox competes not only with real c-stores and mini-markets, but also with vending machines, an industry that has grown rapidly due to its low entry threshold. Currently, each BingoBox needs a person to instruct customers on how to use the system. Since not every customer has a credit or debit card, working with Boost makes sense. When KK Mart ran a campaign, Boost was able to attract visitors to the shop with similar ads.

1.1.1 Industrial Revolution 4.0

The German government coined the phrase "Industrial 4.0" to emphasise manufacturing technology development in order to maintain Germany's industrial competitiveness (Tay et al.,2018). Big data exchange, integrated management of

production or manufacturing, smart computation, and performing a work via machines are all ways to improve efficiency and save costs (Qin, Liu & Grosvenor, 2016). The nine pillars of IR 4.0 are: Big Data, Augmented Reality, Simulation, IoT, Cloud Computing, Cyber Security, System Integration, Additive Manufacturing, and Autonomous Systems.

IR 4.0 aims to link the cyber-physical system (CPS), in which present and future industrial equipment are equipped with sensors that collect a vast quantity of critical data and use QR codes or RFID tags to identify unique commodities.. Faster and more precise product identification is possible using RFID tags, for example. Customers' requirements may be catered to, product monitoring and scheduling improved, and profit margins increased by using this technology. When it comes to AI, sensors and equipment may be used to detect emerging problems, enabling predictive maintenance to be performed before a breakdown occurs, minimising downtime and increasing asset utilisation.

Malaysia is eagerly anticipating the arrival of IR 4.0, which it hopes would boost the country's productivity growth. Priority will be given to manufacturing, followed by the rest of Malaysia's economy. This initiative was launched in response to Malaysia's economic stagnation, which was plagued by low productivity across all sectors. Malaysia's implementation of IR4.0 will be aimed at achieving:

- To fulfil the needs of the future economy, increase the number of high-skilled employees while restricting admission of low-skilled individuals.

- Increase business preparedness to use technology and capitalise on the benefits of the digital economy.

- Reduce dependence on non-critical subsidies, and connect financial support and regulatory liberalisation initiatives to productivity gains, as well as reposition the sector to focus on higher-value-add portions of the value chain.

- Address regulatory limits and create a strong accountability framework to guarantee that regulatory evaluations are carried out effectively.

- Establish a national productivity culture and promote productivity performance via an effective government mechanism.

In the end, the goal is for Malaysian businesses to become stronger thanks to cutting-edge technology. A readiness assessment, intervention programme, and high-speed internet connection to potential industrial parks have been started by the government. A reskilling initiative to alleviate technology and skill shortages among industry participants, especially small and medium-sized firms, is also being implemented.

IR 4.0 is critical for Malaysia because it will speed up the pace of innovation while also helping businesses adapt to the challenges of today's local and global markets. The magnitude of the problems we face in today's local and global business. An entirely new industrial environment will be created as a result of the enabling technologies, which will increase efficiency, integrate and automate the operational system, and link the system through internet.

1.1.2 IoT Technologies in Malaysia

By 2020, Malaysia's Ministry of Science has created a national IoT strategic plan that is projected to invest around US$2.49 billion (Al-Ogaili et al., 2020) with the goal of promoting IoT adoption in Malaysia. Greater Kuala Lumpur (KL) is one of the initiatives already in the works, which aims to convert the city into a smart city by using new technologies across a wide range of fields. IoT-based smart grids and metres have been installed in three regions of Malaysia: Bayan Lepas in the north, Bukit Bintang in the middle, and Medini in its southernmost part. There were three factors that sparked the creation of the Smart Grid: ageing legacy infrastructure, financial and

environmental challenges. Malaysia has been implementing smart city initiatives as part of the country's 11th Malaysia Plan (2016–2020).

As part of the 11th Malaysia Plan (2016–2020), smart cities programmes have been implemented in places such as Kuala Lumpur, Johor, Selangor, and Putrajaya. IoT network construction has commenced. These initiatives employed IoT, cloud computing, big data analytics, and spatial geographic information integration to design a smart city. – In order to modernise Malaysia's present transportation system, the country's intelligent transportation system plan (2017–2022) was unveiled, which relies heavily on big data analytics. Smart mobility is one of the city-smart goals in Malaysia. Analyzing data from the ICT infrastructure allows for better understanding of current operations and the development of more cost-effective alternatives. As a means of enhancing its global competitiveness, Malaysia is looking for ways to expand its trade infrastructure and streamline its supply chain management procedures. Among the suggested applications are e-parking, taxi bookings, bus transportation information, and, most crucially, real-time travel and train information suggestions for a smooth travel experience.

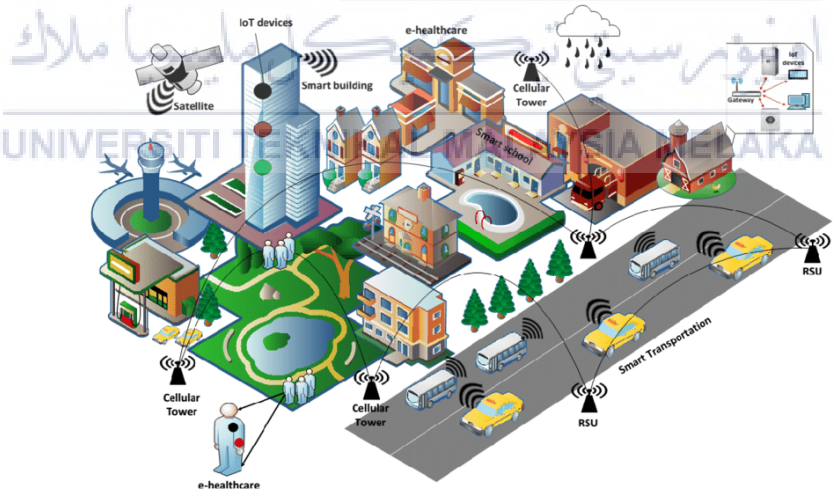

Figure 1.2: An illustration of IoT based smart city

Source: https://www.researchgate.net/figure/An-illustration-of-IoT-based-smart-city_fig3_316240064

1.1.3 Technology Adoption Models (TAM)

The ideas and frameworks that explain why individuals embrace and employ contemporary technology are known as technology adoption models. Modern technology adoption and utilisation in communication, business, health, and education are also discussed. The term "technology adoption" refers to a person's willingness to embrace and use new technologies. In the last decade, researchers have developed a number of technology adoption models to explain why people embrace new technologies. They also discuss the elements that encourage individuals to embrace new technologies in these models. A few aspects that academics take into account are the reasons why people reject contemporary technology. An important role is played by adoption models for new technologies. As the COVID-19 epidemic has shown, technology adoption is critical in a variety of situations, including politics, education, and business. To put it another way, modern technology and its applicability to our daily lives cannot be denied.

It was recommended by Rogers (1995) that the diffusion of innovation theory will be used as a framework for research on innovation adoption. Over 508 diffusion studies were integrated by Rogers to form the 'diffusion of innovation' hypothesis for the acceptance of inventions by individuals and groups. Over time, individuals of a social system are exposed to a new idea via a variety of routes, according to the hypothesis (Rogers, 1995). Diffusion is the method through which members of a social system spread information about a new technology over time. It was via a succession of phases that Rogers' (1995) S-shaped adoption curve of innovators, early adopters, early majority, late majorities, and laggards was described how and why innovation and adoption occurs.

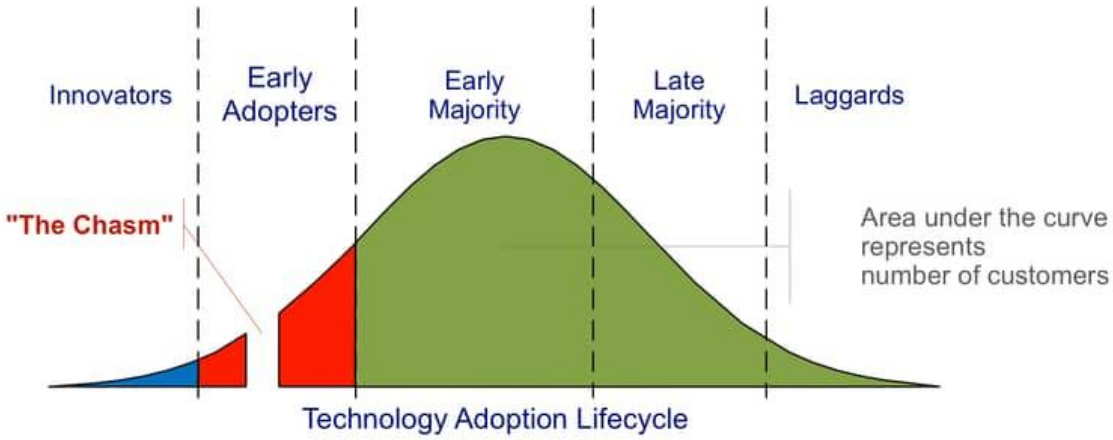

Figure 1.3 : Technology Adoption Lifecycle.

Source : https://medium.com/@shivayogiks/what-is-technology-adoption-life-cycle-and-chasm-e07084e7991f (Shivayogi Kumbar).

1.1.4 Covid-19 Epidemic Affected in Malaysia

There will be a serious danger to public health in 2020. When the SARS-CoV-2 coronavirus first surfaced in Wuhan in Hubei Province in December of 2012, it quickly travelled throughout the world and killed more than a dozen people. The official designation of this sickness by the World Health Organization is COVID-19.. There was a thorough examination of the SARS-CoV-2 morphology, pathogenic mechanism, comparisons with and distinctions from MERS and SARS-CoV as well as the mode of transmission and the diagnostic tools, treatment and prevention methods in this review. In this investigation, the epidemic of COVID-19 in Malaysia was examined. However, the origin of the SARS-CoV-2 virus is still unknown.

The COVID-19 epidemic outbreak is a major problem on a global scale because it has a significant influence on several industries and consequently, the national economy. It is a virus that has spread around the planet and can kill humans. However, as COVID-19 instances have increased in Malaysia starting March 2020, the government has announced the implementation of Movement control Order (MCO), public limitations and the permanent closure of several enterprises followed. Consequently, the COVID-19 epidemic has had an impact on the economy of a

country comprised of several industries (Che Omar et al., 2020). The COVID-19 epidemic is a long term threat on a global scale since there was little time to stop its spread.

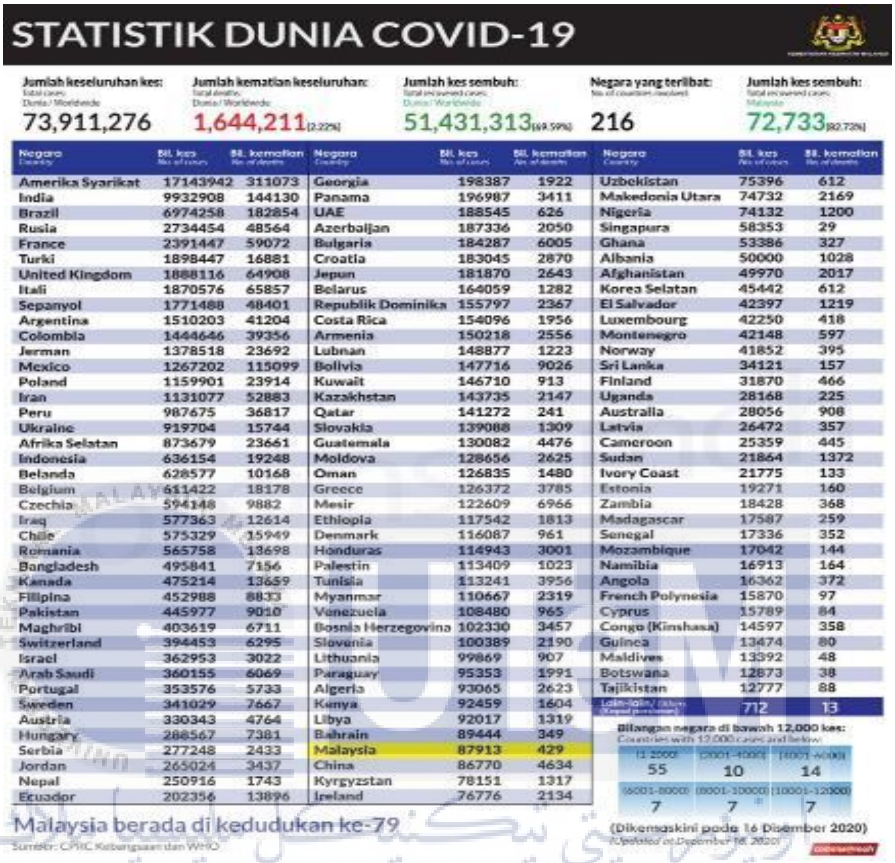

Figure 1.4: Statistic of Infected COVID-19 Cases Worldwide.

According to a study conducted by the Malaysia Retailers Association, more than 209,000 retail outlets, including 90 percent of stalls and marketplaces, were forced to close during the MCO period. They account for 61% of all retail establishments and 63% of total retail sales in Malaysia. Even before the COVID-19 outbreak, Malaysia's retail sector growth rate in January 2020 had plummeted by more than 13% compared to the same month the previous year. This was mostly due to weak sales over the Chinese New Year time and a decrease in the number of Chinese visitors. Smaller convenience shops, on the other hand, seemed to be on the rise.

1.2 Methods of Searching Article

There are several methods used to discover literature on this subject. The primary source of information was the UTeM library which offered an array of resources for searching scholarly works for topics related to the bingobox technology adoption towards consumers behavioral intention. The EZproxy tool was used to search multiple databases with a single search word or phrase and conducted a follow-up search were implementing within databases specific to information technology disciplines. Google Scholar has been used to search additional information to augment the message found in the UTeM library.

1.3 Problem Statement

Customers may pick and bag their own products at the Bingobox shop without the help of a salesperson. Cashless payment methods and unified payment systems have replaced the numerous payment terminals. Using cutting-edge technology, such as artificial intelligence (AI), Bingobox sellers may save money over the long term. It will provide communication between a mobile phone and a product. It was at this moment that the mania had taken hold. As a result of this revolutionary retail structure, clients may complete the whole purchasing process without the presence of shop employees. By using Wechat or Alipay to open the door, consumers may then pay using their phones. Rebranding brick-and-mortar grocery shops in Malaysia in order to implement a new business transaction is the goal of this problem.

Consumers' unique experiences include code scanning, facial recognition, remote customer assistance, and intelligent cash registers that reduce check-out pain points throughout the pre-buy, purchase, and post-purchase phases. Users may enjoy the convenient and private shopping experience given by unmanned store's revolutionary technology. Homewer, some customers are resistant to technology because to privacy concerns or changes in user behaviour patterns or purchasing methods, preventing consumer conversion from conventional retail services. The services provided totally include stress levels not often seen in regular establishments

offering full services. The unfavourable impressions create performance uncertainty and hinder standardisation with self-service technology, which is defined as any use of a technical interface to generate a service without the participation of service personnel.

According to Shishah and Alhelaly (2021), the COVID-19 crisis has bought a major transformation in users' experience worldwide in encouraging remote work and modifying their behaviour. Mobile communication and advanced information technology played a significant role during the COVID-19 epidemic (Shanker et al., 2021). Though the shift towards mobile and store technology-based business solutions had ready begin much before the epidemic, the COVID-19 has fostered the transformation (Soodan and Rana, 2020). Mobile technology that has been use in BingoBox store among one initiative which emerged as one of the innovative touch-free payment solutions (Shin, 2009). It has been claimed that technology at BingoBox are comparatively simple to operate and superior to the traditional store methods as the permit users to go cashless and facilitate proximity payments (Sharma et al., 2018). COVID-19 epidemic has further accelerate the consumers behaviorial intentions towards BingoBox technology e-wallet payment (Sarmah et al.,2021). According to Undale et al. (2020) preventive measures like social distancing compelled users to utilise for buying or make payments.

It has a potential to resolve various problems by delivering creative knowledge into the technologies that can help during the COVID-19 epidemic. In store ordering, checkout or loyalty scanning, this technology can judge consumer control and well being. To fulfill the knowledge gap, the research has lack because this store is very new contexts of developing countries like Malaysia because of that has only one BingoBox Store in this countries which is in Bukit Ceylon, Kuala Lumpur (Wang et al., 2021). Because of this is new for developing countries, not everyone will know about this technology. As you can see, they do not use marketing to promote this retail store and also some consumer not awareness about this technology (Park and Zhang, 2021). Since this study would contribute significantly to the typical literature by expanding the knowledge and understanding of customer preferences to a more extensive framework of conceptual in the context of Unmanned Technology.

1.4 Research Question

This research discovers the following key questions:

i. What are the level factors of bingobox technology adoption towards consumers behavioral intention in malaysia during covid-19 epidemic?
ii. What are the relationships between the factor of bingobox technology adoption and consumers behavioral intentions during the epidemic of Covid-19?
iii. What is the most significant factor of bingobox technology adoption that affecting the consumers behavioral intentions during the epidemic of Covid-19?

1.5 Research Objective

The study's finding will generate relevant solutions for the research objectives. The research objectives are framed as the following:

- To measure the level factor of bingobox technology adoption towards consumers behavioral intention in malaysia during Covid-19 epidemic.
- To examine the relationship between the factor of bingobox technology adoption and consumers behavioral intentions during the epidemic of Covid-19.
- To determine the most significant factor of bingobox technology adoption that affecting the consumers behavioral intentions during the epidemic of Covid-19.

1.6 Scope of Study

This study focuses on the Theory of Acceptance and Use of Integrated Technology 2 (UTAUT 2) and how the theory may be used to investigate the elements that influence purchase behaviour. Using UTAUT 2, we confined the scope of behaviour

change and prediction and discovered relevant strategies to enhance forecasts of bingobox technology adoption toward behaviour intention in Malaysia. This is accomplished by the integration and evaluation of the performance of UTAUT 2, which is SmartPLS 3.0 software. The partial least squares route modelling approach is used in SmartPLS 3.0 to model structural equations based on variance. To evaluate a structural equation modelling approach that permits estimating complicated effect connection models with latent variables, we will conduct an assessment test utilising the Semi-Square Structural Equation Modeling (PLS-SEM) algorithm. SmartPLS 3.0 software is capable of calculating standard result assessment criteria as well as supporting alternative statistical analyses. The tests were carried out using quantitative data readings, and they included hypothesis testing on the significance of theoretical factors throughout the questionnaire.

1.7 Significant Of Research

Five chapters make up this study, the first of which includes the context, issue statement, research questions and objectives as well as the scope of the investigation. In the second chapter, we take a look at previous studies on the subject. Continue with a discussion of how this study's theoretical framework was developed so that hypotheses may be proposed at the end of this chapter. Data analysis and data collection techniques are covered in Chapter 3. The findings of this study are also explained in chapter 4, which provides answers to the research questions. You may be able to figure out how certain pieces fit together by decrypting the data that was collected. Chapter 5 summarises the results and prepares the reader for the conclusion and discussion of the findings. The study limitations and recommendations for further research are then presented.

1.8 Limitation of Study

There are some limitations throughout the conduct of this study. This study could not be conducted well due to the outbreak epidemic of Covid-19 which limited research activities. Not only that, this research is a new research, this is because not many others take this title as their research. The source of knowledge about Bingobox is very limited. In addition, quantitative analysis was selected and taken into consideration by researching the computational needs of the data. The researcher conducted a quantitative method to distribute the questionnaire using google form to the users.

1.9 Summary

This section summarises the study's findings and conclusions. Bingobox technology adoption in Malaysia during epidemic of Covid-19 outbreak is the primary emphasis of the study's backdrop. Also included is a description of the research's aims and the issues it intends to address, as well as a discussion of the scope of the study, its relevance, and its limits. In Chapter 2, we'll go into more detail about this topic.

CHAPTER 2

LITREATURE REVIEW

2.0 Introduction

A literature review is a synthesis of all available material on a particular study subject. It is the goal of a literature review to shed light on existing information about the subject under investigation. In this chapter, we'll go over the information we've gleaned about the issue and the factors influencing the use of bingobox technology by Malaysians during the epidemic of Covid-19 outbreak. Bingobox technology and the epidemic of Covid-19 in the nation will be introduced in this chapter. In addition, the researcher will describe social media marketing, including its definition, platforms to utilise, advantages, and bingobox technology acceptance toward behavioural intention.. When researchers discuss TAM and UTAUT 2, the factor of bingobox technology adoption toward consumers' behavioural intention in Malaysia during the epidemic of Covid-19 is generated from these two models, which contribute to a conceptual framework related to the study and discussion of the previous study.

2.1 Overview of Bingobox Technology

A young Chinese company When it comes to automated retail, Bingobox is ahead of Amazon Go. The Chinese have been going without workers for a long time at over 300 outposts spread over 30 cities throughout China. According to previous statements, the corporation aims to expand its activities throughout Europe. Auchan, a Sun Art Retail Group Ltd. affiliate, established a cashless convenience shop named Bingobox in Shanghai's Yangpu area in June 2017. This retail model also has the unique characteristic of allowing clients to shop at their own leisure without the need for store workers to help them. A Tencent app called "Wechat" is required to scan the QR code and join the Bingobox store. Your items will be tallied at the checkout if you scan the QR code again while you're at the shop. All of your purchases will be recognised and totaled automatically by the system. Face recognition is also used in China's system to make sure that only authorised customers enter the store and that the merchandise they've purchased is genuine.

As reported by Surin Murugiah / theedgemarkets.com, in 2018, revolutionary humanless retail technology known as Bingobox Retail Technology, a joint venture between a group of forward-thinking Malaysian shareholders and Bingobox, the pioneer of the humanless and cashless convenience store in China, will be introduced in Malaysia. An unmanned 24-hour convenience fuel station, powered by Bingobox Retail Technology, has opened in Malaysia at Shell Tezz Enterprise on Jalan Tun Razak. At any hour of the day or night, Malaysians may visit the Shell Select store for cashless payment choices thanks to this idea. Bingobox Retail Technology's Shell Select is a significant step forward in the retail journey of Shell in Malaysia with the goal of improving customer satisfaction. At Shell Select, customers may not be able to purchase their favourite foods anytime they want, as well as experience the convenience of electronic transactions.

2.1.1 Types of Technology used in Bingobox Store

In Bingobox Retail Technology, a state-of-the-art image recognition technology can automatically recognise items. Intelligent monitoring and interaction systems such as face recognition and patent-pending artificial intelligence are also part of this system. As a result, customers will benefit from an unparalleled level of ease and seamlessness. Additional services include end-to-end set up and implementation, as well as 24-hour monitoring, customer assistance through remote 'face-to-face' interaction for customers, provided by Scientific Retail.

2.1.1.1 Facial Recognition

In 2021, Visionify predicts that face recognition will be used to identify or authenticate a person based on his or her facial features. This code is often used to gain entry to a software, system, or service. Face and head measurements are used to validate a person's identity using their facial biometric pattern and data, which is a biometric identification strategy. Face and facial expression biometric data is used to identify and validate a person's identity, verify their identity, or authenticate their identity. According on the camera's capabilities, face recognition systems capture an image in either two or three dimensions. Real-time photo or video signals are compared to a database of pertinent information, which is significantly more trustworthy and secure than static images. A connection to the internet is required to utilise this biometric face recognition method.

If the received image is compared to a database of known users, applications, or even the security of an entire building, it is guaranteed that the biometric data is accurate. Face-recognition systems can fulfil the most demanding safety and reliability criteria thanks to artificial intelligence (AI) and machine learning. Many algorithms and computer processes must work together for the task to be performed in real time.

Figure 2.1: Facial Recognition Use Cases in Retail.

Sources: Visionify, 2021

2.1.1.2 Patented Artificial Intelligence

Artificial intelligence refers to a computer's capacity to execute cognitive processes such as thinking, perceiving, learning, problem solving, and decision making. This branch of computer science is concerned with developing intelligent machines that can replicate human cognitive processes. It utilises a complicated computational architecture as code. Artificial intelligence (AI) is a vast area that comprises a wide variety of technologies targeted at tackling both complicated and common issues. Machine learning is a method that may be used to teach a machine to learn and develop from its own experience. Machine learning is one of the most widely utilised types of artificial intelligence technology. Because AI is a relatively new technology, entrepreneurs are inexperienced with these topics. Because there is no contemporary literature or regulation addressing the essential question, "Can AI-aided technology be patented?" There is some positive news to report. To comprehend how AI patents function, you must first comprehend how AI functions.

2.1.1.3 Theft Prevention

It is prohibited to conceal or seize anything belonging to a merchant without paying for it, according to SafetyCulture, 2022, so denying the shop's ownership rights over its merchandise. The prevention of retail theft is increasingly important to company owners and managers. A real-time inspection and reporting platform may help teams work together more effectively to prevent retail theft and enhance the safety, security, and profitability of retail locations. Merchandisers may want to consider the following popular retail theft prevention systems:

- RFID tags, or electronic or security tags, are used in electronic item monitoring in clothing stores to keep track of inventory fast. It is common practise to attach a small RFID tag to the label or price tag, which may be deactivated to pay at the registers.

- Large home renovation companies use Bluetooth padlocks to secure expensive equipment, such as top-of-the-line power supplies. Retailers are looking at the latest technologies to prevent shoplifting, such as Bluetooth activation, which prevents the item from being used until it has been paid for.

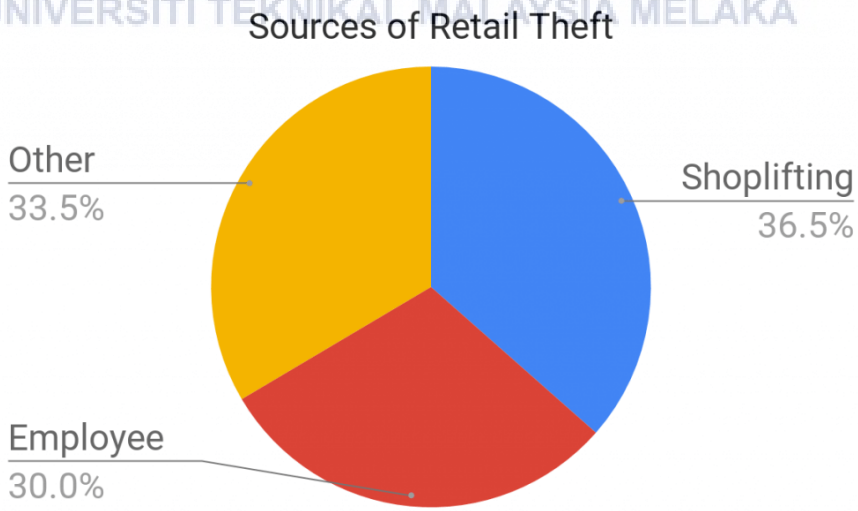

Figure 2.2: Source of Retail Theft.

Source: YourCash, 2018.

2.2 Bingobox Mobile Payment Method

Over 500 BingoBox flat-pack stores have already opened in the United States, Taiwan, South Korea, and Malaysia, with plans for further development in Japan and Australia. In compared to 7-Eleven and Tesco Express, a typical BingoBox site is 160 square feet, making it easier to identify appropriate locations, lowering overheads, and allowing for high sales volumes. Customers access the establishments by scanning a QR code with their phone's BingoBox app, then placing their items in a scanner and paying using WeChat, Alipay, or another local payment option. They may also pay in cash (Retail Insight Network, 2019).

Boost and Scientific Retail cooperated to provide a smooth mobile payment experience for customers. Boost's vice president of sales and marketing, Chris Tiffin, stated, "We are pleased to collaborate with Scientific Retail to build an integrated payment solution that works flawlessly with Bingobox Retail Technology." In our pursuit of digitising cash, we've always sought to make things easier for our three million customers, and this relationship is another another illustration of that effort: With the integration of Bingobox Retail Technology, customers will just have to use one mobile app to make purchases and pay. Make a cashless purchase using the Boost eWallet App. Pay by scanning a QR code at one of Boost's partner sites or by providing a unique QR code to a merchant.

2.3 Overview of UTAUT 2

In the late nineteenth century, information technology (IT) started to recognise the need of user acceptance surveys. The user's acceptance of technology, regardless of how sophisticated it is, was a prerequisite for its use and recognition of its hidden value. IT acceptability issues have been investigated utilising ideas such as the diffusion of innovation theory, PC model use, and the theory of social cognition. The most successful and renowned theories in the IT adoption family are the Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), and UTAUT. While the second iteration of the Unified Theory of

Acceptance and Use of Technology (UTAUT), which incorporates members of the IT adoption theories, is a step forward from the first (MIN Qingfei & JI Shaobo , 2008).

2.3.1 The Background of Theory of Reasonable Action (TRA)

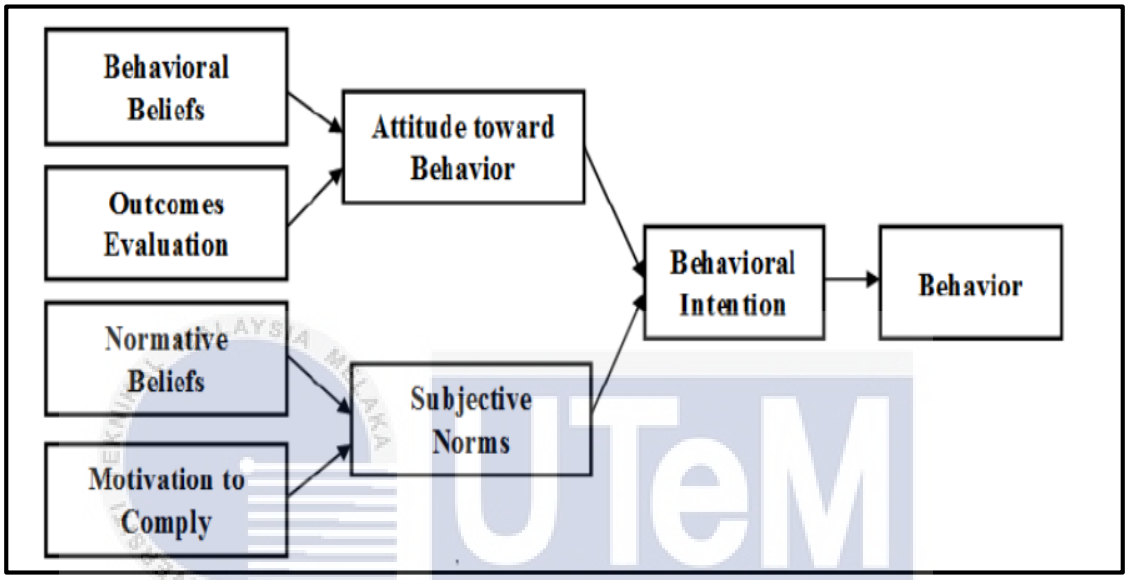

Figure 2.3: Theory of Reasoned Action (TRA).

Source: Fishbein & Ajzen, 1975.

Theory of Reasoned Action (TRA) was proposed by Fishbein and Ajzen in 1975 based on the social psychology (Fishbein & Icek Ajzen, 1975). According to the research, prediction on individuals' behaviour can be formed based on the measurement of an individual's intention in conducting events which further extended to behavioural intention (BI). Behavioural Intention can be identified through the attitude and subjective norm in concerning the behaviour in question by an individual. Definition of attitude can be determined with the individual's belief with subjective probability provided that after behavioural action will have a given consequence. Subjective norm can be impressed as a perception of an individual influenced by social pressure from other people who are important to him for individual to exercise in performing the behaviour and their motivation in complying with the view of those people. Based on previous studies, forming intention under the subjective norm's influence will proved to be feebler than the affection of attitude.

Subjective norms and people's desire to develop them are not linked, according to recent research. As a potential explanation for inconsistencies, it is feasible that the information component which contains the variables is already included inside the desirability of executing a behaviour variable. The most commonly cited flaw in the theory of planned behaviour is the poor connection between behavioural intention and subjective standards. It was hypothesised, according to the theory's creator, that a person's mood and sense of behavioural control may have a significant impact on his or her aim. As a result of this, the association between intents and normative views is shown to be very low (Armitage & Conner, 2001).

2.3.2 The Background of Technology Acceptance Model (TAM)

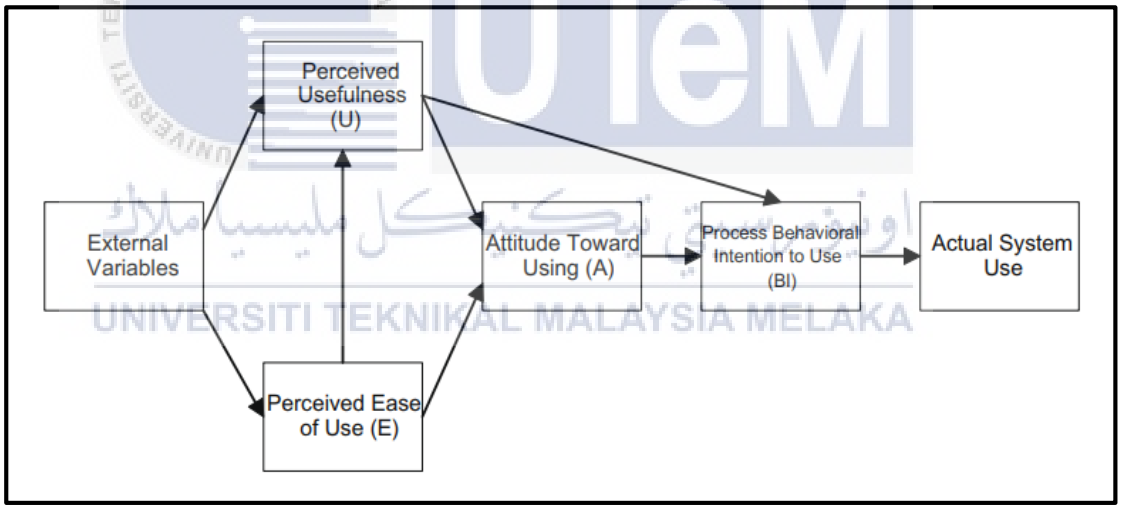

Figure 2.4: Technology Acceptance Model (TAM)

Source: Davis & F. D., 1989.

On the basis of Davis's Technology Acceptance Model (TAM), which is based on the TRA, Davis claims that the user's perceived ease of use and perceived utility may influence the user's purpose of use and behaviour to adopt a new information system (F D, 1986). A person's perception of how much simpler something will be when they use a system. Positive or negative feelings about a system's usefulness and ease of use have a significant impact on a user's attitude toward it. It is the assumption

that a person's job performance will increase if they employ a system that is seen to be helpful (PU). When doing a certain job, the usefulness of a system may be seen. A person's expectation that a system is simple to use. Another way to put it is that the low learning curve will be an advantage. In the worst case scenario, the interface will be difficult for consumers to use, and they may acquire a negative attitude about it. The actual usage behaviour may then be distinguished based on behavioural intention.

Introduction of organisational elements and social as subjective norms, impression, output quality, and job relevance into the technological acceptance model, followed by the suggested extension model, TAM 2. TAM 2 has been thoroughly tested and was universally acknowledged as a simple and useful theoretical model. The model strongly supported both voluntary and required testing on the expanded model, TAM 2. It states that perceived usefulness and use intentions are influenced by social variables such as subjective norms, voluntariness, and imagery; cognitive instrumental processes include job relevance, quality of output, outcome demonstrability, and perceived ease of use. Voluntarism is defined as the degree to which prospective adopters view adoption decisions to be non-mandatory. Image may be defined as the degree to which one's social position is seen to be improved by employing an invention. Job relevance is a personal assessment of how well a job fits into a desired system. Quality of output is defined as an individual's impression of the system's capacity to fulfil tasks. The generation of tangible outcomes has a direct influence on the usability of a system, which is what result demonstrability means.

The TAM has been frequently criticised for its poor heuristic usefulness, weak explanatory and predictive ability, triviality, and lack of practise value. The scholars' focus has been diverted away from other essential research concerns, creating the appearance of progress in knowledge acquisition. To adapt TAM to the ever-changing IT environment, numerous researchers performed separate tests for TAM growth, resulting in theoretical chaos and uncertainty (Benbasat, Izak , & Barki, 2007). In general, this model focuses on the computer user with the concept of perceived usefulness expanded by bringing more factors in explaining the ways of user perceived usefulness which ignored the essentially social processes of the development and implementation of Information System without asking the performance of technology and the social consequences of usefulness of Information System. Perceived

usefulness and simplicity of use take precedence over other reasons such as structural imperatives and cost, which push consumers to embrace the technology.

2.3.3 The Background of Theory of Planned Behaviour (TPB)

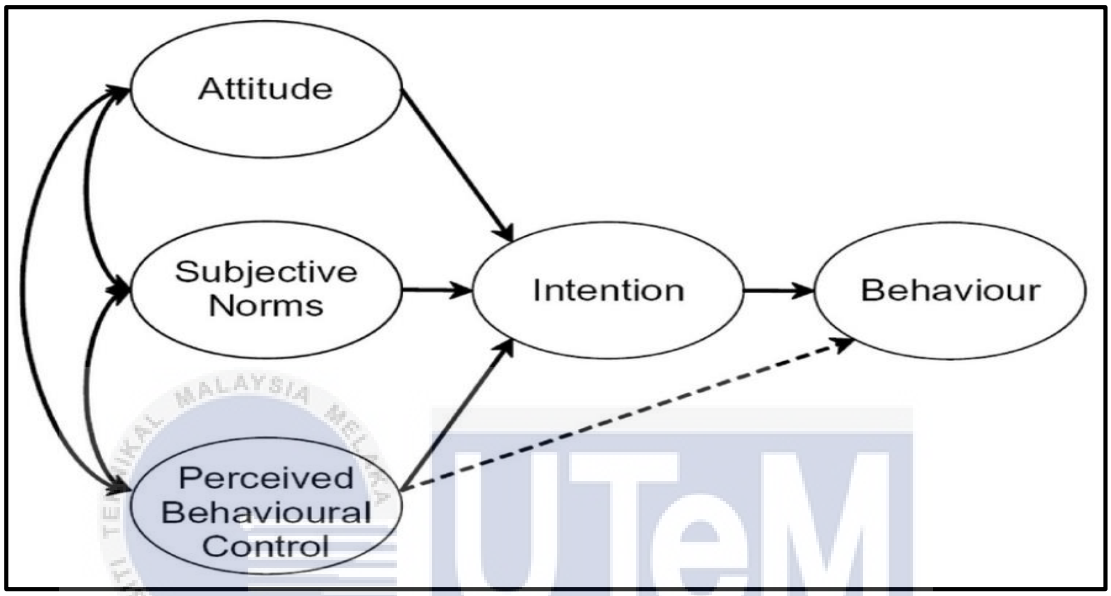

Figure 2.5: Theory of Planned Behaviour (TPB)

Source: Ajzen I & Madden T J, 1986

The influence of control variables is not taken into account in TRA. TRA makes the assumption that the user will have complete control over the type of technology adopted and that behaviour will not be influenced by aptitude or external support. Since Ajzen and others identified the issue, modifications to TRA have resulted in the proposed Theory of Planned Behaviour (TPB) (Ajzen I & Madden T J, 1986). An additional construct is perceived behaviour control in accounting situations in which an individual lacks substantial control over the targeted behaviour (Ajzen, 1991). Individual behaviour can be explained by behavioural intention, which is influenced by subjective norms, attitude, and perceived behavioural control. Attitude is an individual's assessment of the performance impact of a given behaviour. Subjective norms may be defined in TAM as an individual's perceptions of other people's opinions on whether an individual should perform a specific behaviour. TPB defined perceived behavioural control as an individual's sense of the existence of the essential resources or opportunities for exhibiting a behaviour. Perceived behavioural

control developed from Bandura's self-efficacy theory (SET), which was extended from social cognitive theory (Bandura, 1977).

According to current research, expectations such as performance, motivation, and emotions of frustration linked with repeated failures might impact the effect and behavioural response. Expectation may be divided into two types: self-efficacy and outcome expectation. Self-efficacy is defined as the conviction that one can effectively execute the behaviour necessary to achieve results. While outcome expectancy refers to a person's estimate that certain outcomes will be led by a given behaviour. Self-efficacy is the most important premise for behavioural change because it identifies the initiation of coping behaviour. Individuals' behaviour is influenced by their confidence in their ability to perform behaviour.

The contribution of SET to various relationships between beliefs, attitudes, intentions, and behaviour has been given, and it is widely applied to health-related fields such as physical activity and mental health in preadolescents and exercise. TPB's strengths include the ability to explain people's non-volitional behaviour, whereas TRA cannot. The proposed of TPB has the variable addition of perceived behavioural control grants it an ability in interpreting the relationship between behavioural intention and actual behaviour. TPB was found to be more effective than TRA in predicting health-related behavioural intention in studies. TPB has been shown to be capable of predicting intention in health-related fields such as condom use, leisure, exercise, and diet. Furthermore, TPB performs the same function as TRA in explaining an individual's social behaviour while taking social norms into account as an important variable. Previous research on these models, such as TRA, TAM, and TPB, has been significant to the field of information technology adoption theories, generating discussions and debates. By the way, the theories were still not perfect. Despite the fact that the acceptance factors of each theory have different terminologies, the concepts are the same. Because of the complexities of behaviour and the limitations of research, these theories are unlikely to cover the majority of factors.

2.3.4 The Background of Unified Theory of Acceptance and Use of Technology (UTAUT)

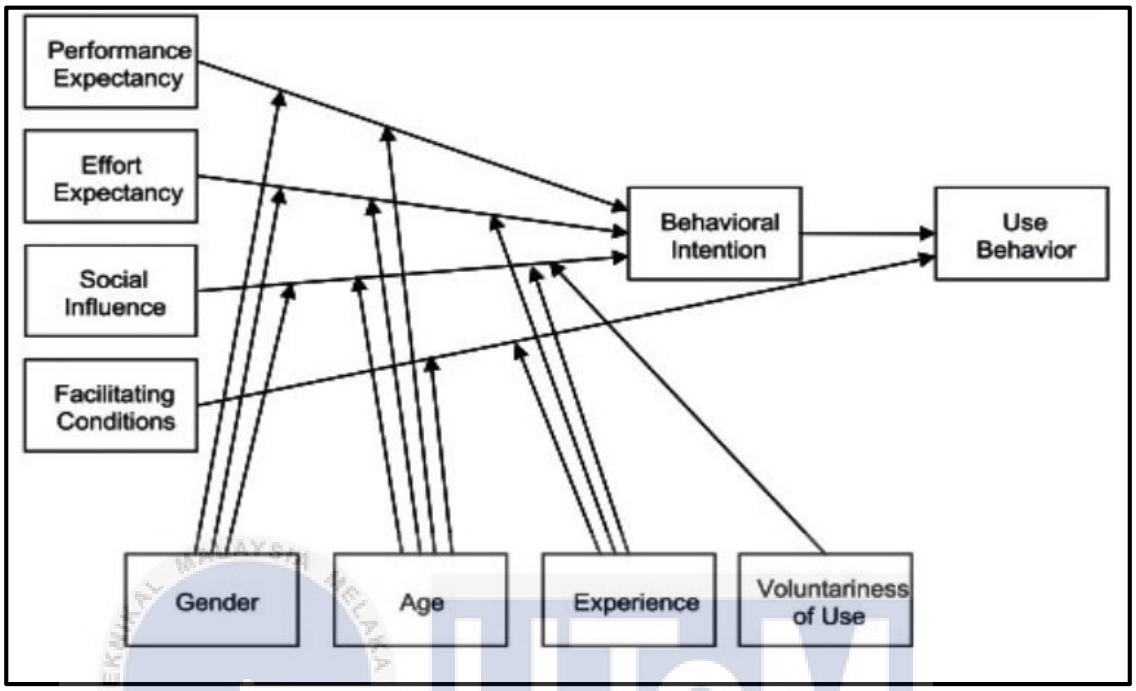

Figure 2.6: Unified Theory of Acceptance and Use of Technology (UTAUT)

Source: Venkatesh et al. 2003

Venkatesh et al. established the UTAUT, or Unified Theory of Acceptance and Use of Technology, in 2003 after assessing the eight most prominent theories on IT adoption (V, Morris M G, & Davis G B, 2003). Adjusted R2 for the UTAUT was 70 percent bigger than that of the TAM and TPB models, which were evaluated with just 30 percent of the dependent variable variation. UTAUT believes that elements like performance expectations, effort expectations, social influence, and enabling situations all play a part in determining human behaviour. Utilizing TAM considerably improves one's work performance to the extent that one feels using the system would have a direct link to the value placed on TAM by the user. Additionally, the degree to which one expects that utilising the supported technology will make the work simpler is defined as "effort expectation." One may define social impact as a person's belief in the significance of others, and this new approach could help measure that belief. Whether or not one has faith in the organisation and its technological infrastructure to give the present assistance needed to operate the system is referred to as the "enabling condition."

Furthermore, from the standpoint of social psychology, UTAUT has included moderating characteristics such as age, gender, usage experience, and voluntariness of use. These moderators have the ability to remedy the inconsistencies and lack of explanation produced by earlier models. Furthermore, they may explain the behavioural disparities between various groups of individuals. The responsibilities of moderators are crucial in the study of information technology adoption or e-commerce. UTAUT was used to explore the attitudes of 243 respondents living in northern Finland towards mobile services and technology; the findings revealed that consumer perceptions are influenced by familiarity with devices and user abilities (Koivimäki, Ristola, A, & Kesti, M, 2008).

There are considerable limitations to the UTAUT paradigm not with standing its efficacy in explaining user adoption of IT. At least eight independent variables for predicting behaviour have been added to the existing model, which comprises 41 unique elements for determining intentions and at least eight independent variables for predicting behaviour (Bagozzi & R.P., 2007). There are four primary moderating elements required for a high R2 in UTAUT compared to TAM and TAM2. The proposed UTAUT makes grouping and labelling of items and structures challenging since a variety of unrelated aspects were combined to express a single psychometric notion. UTAU. Several studies have shown that the modifiers used to get high R2 are unimportant and unworkable when trying to understand how organisations embrace new technologies. Initial screening techniques may be used to achieve great predictive power in demonstrations.

2.3.5 The Extension of UTAUT

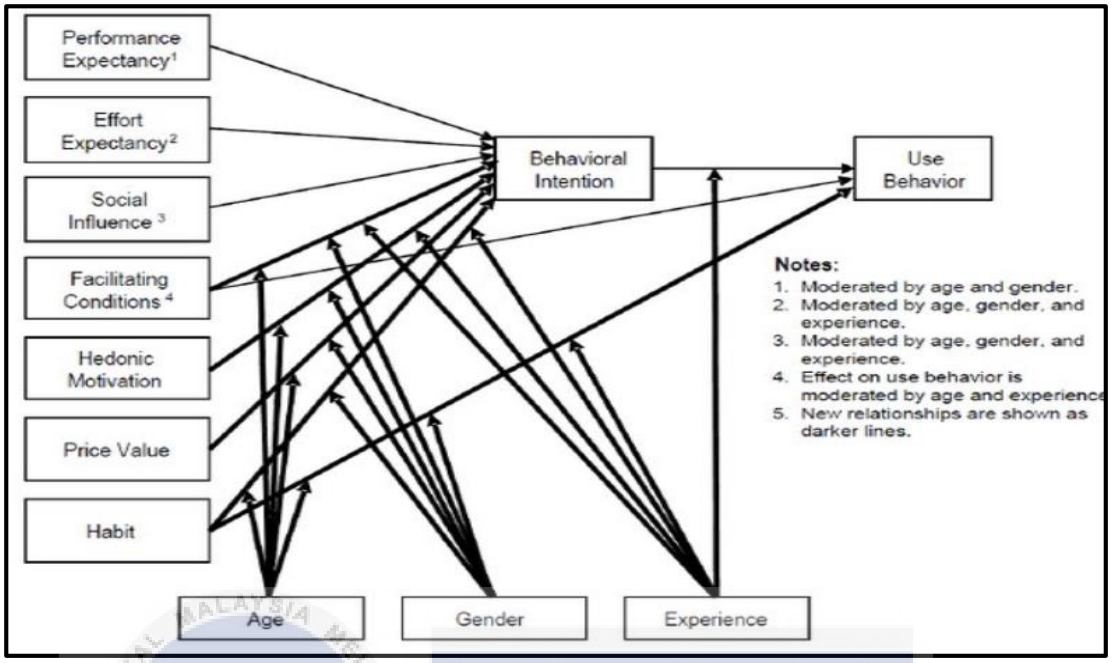

Figure 2.7: Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

Source: Venkatesh et al. 2012

To overcome the inadequacies of the previous model, Venkatesh et al. have proposed a new model, UTAUT 2, (Viswanath Venkatesh, James Y. L, Thong , & Xin Xu , 2012). Age, gender, experience, and individual characteristics all have an effect on a person's behavioural intention, as do factors like hedonic incentive, price value, and habit. Studies on the uptake of mobile health technology, for example, have employed UTAUT 2 extensively (Duarte & José Carlos Pinho, 2019). PLS-SEM and fuzzy set comparison analysis were used to investigate the number of causative factors that contribute to mHealth uptake. As a result, they concluded that the study's UTAUT2 framework was limited by the lack of characteristics such as healthcare literacy and healthcare status, which necessitated a cautionary note on the sample size. By adjusting the variables' size, this issue may be remedied.

The results showed that all the significant constructs in the model are usable to both gender groups an educational level. Insignificant of moderating effects may found as gender and educational level when applying to the certain target market such as university students. The targeted respondents have known in having high

educational level, which could show that the educational level as less power to affect the result of study. The situation could be overcome by testing different moderating effect which was the socioeconomic status that will be discovered by this study.

2.4 The Factor Of Bingobox Technology Adoption Towards Consumers Behavioral Intention.

In this study, the researcher had made an integration of two models – TAM and UTAUT 2 in order to identify the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. Besides, apart from the variables derived from TAM and UTAUT 2, the other independent variable for instance compatibility also considered as a significant measurement of the factor of bingobox technology adoption (Chong & Chan, 2012; Misirlis & Vlachopoulou, 2018).

2.4.1 Performance Expectancy

When it comes to a person's performance expectations, the system is described as how much he or she feels it can assist him or her achieve at work (Davis et al., 1992; Shin, 2009). the technological acceptance model, extrinsic motivation, job fit, relative benefit, and outcome expectancies are all theoretical foundations of this variable according to Compeau & Higgins (1995). (Social Cognition Theory). Performance expectations are influenced by a variety of factors, including intrinsic drive, perceived utility, and work fit (Shin, 2009). Performance expectation was shown to be the most significant predictor of the intention to use the target technology in each of the models studied. An optimistic outlook, performance expectations, social influence, and favourable conditions all have a significant impact on an individual's decision to file electronically (Schaupp, et al., 2010). The amount of IT adoption and use in CHCs was influenced by elements such as expectations for performance, effort, social influence, and the level of voluntariness (Kijsanayotin, Pannarunothai, & Speedie,

2009). According to Zhou et al. (2010), user adoption is strongly influenced by factors such as performance expectations, task technology fit, social impact, and enabling circumstances. Furthermore, we discovered that task technology fit had a considerable impact on performance expectations. effect, There are two factors influencing consumers' behaviour intentions: (1) how much effort they anticipate from their transactions and (2) how inventive they are. An further finding from Martn and Herrero (2012) is that innovativeness has a moderating influence on the connection between performance expectancies and bingobox technology behavioral intentions.

2.4.2 Effort Expectancy

When it comes to UTAUT, effort expectation relates to how easy the system may be utilised by the user. Perceived ease of use was obtained from Venkatesh et al's Technology Acceptance Model (TAM) (2003). (TAM). User-friendly programmes are more likely to be adopted by the general population, according to Davis (1989). There is evidence that effort- oriented notions tend to be more prominent in the beginning of a new behaviour, when process issues represent impediments to be overcome, and then are overtaken by instrumentality concerns. (Davis et al., 1989). This finding is in line with that made by three other researchers: Davis (1989), Davis et al. (1989), and Venkatesh and Davis (2000). (Diaz & Loraas, 2010). WBQAS (Web-based question and answer services) is a significant predictor of a willingness to use WBQAS, according to Deng et alfindings. .'s (2011). Predictions of performance and effort, as well as other enabling and societal variables, all have a role in determining whether or not someone would actually utilise a product (Yen-Ting Helena Chiu et al., 2010).

2.4.3 Social Influence

To put it another way, how much weight does a person attach to what other people think about the way they utilise technology? For further information on this topic, see Diaz and Loraas (2010). When describing "subjective norm" in the TAM 2

extension, it's a lot like this. Image, according to Moore and Benbasat (1991), is the degree to which a person's social status is improved via the use of a technological innovation. How people behave is influenced by how they think others will see them because of their use of technology, whether that expectation is explicit or implicit, regardless of the label given to it.

According to TAM 2, perceived utility and perceived ease of use for required systems have a substantial direct influence on utilisation intentions. However, in voluntary situations, none of the social impact components are relevant. The usage of technology was shown to have a significant impact on subjective standards (Schepers & Wetzels, 2007). Subjective norms have a significant impact on perceived usefulness through both internalisation, in which people incorporate social influences into their own usefulness perceptions, and identification, in which people use a system to gain status and influence within the work group and thereby improve their job performance, especially in the early stages of experience (Keong, et al., 2012).

2.4.4 Facilitating Conditions

The degree to which a person feels that the system's organisational and technological infrastructure is ready to facilitate its usage is referred to as facilitating conditions. Thompson et almodel .'s of personal computer use has a similar topic (1991). Technology and/or organisational environments are both considered as components in determining whether a circumstance is considered a facilitating condition or not (Keong et al., 2012). Using components from perceived behavioural control, the UTAUT construct is supposed to describe how an organisation strives to overcome hurdles to use, and how a prospective user intends to utilise those obstacles. This measure has the same predictive ability as effort expectation in predicting use declines after initial acceptance.

2.4.5 Hendonic Motivation

In the context of technology, hedonic motivation refers to the delight or pleasure derived from the use of a certain piece of technology (Brown and Venkatesh 2005). Hedonic motivation (defined as perceived joy) has been shown to have a direct impact on technology adoption and use in the area of information systems (IS) (e.g., van der Heijden 2004; Thong et al 2006). According to studies, hedonic drive is also a big role in consumer technology uptake and use (e.g., Brown and Venkatesh 2005; Childers et al. 2001). Hedonic motivation may indicate a consumer's behavioural intention to use a technology.

2.4.6 Price Value

UTAUT was established in the context of an organisational usage scenario, where customers typically incur the cost of their use, but workers do not. It's possible that the price and cost structures influence how much technology is used by customers.

2.4.7 Habit

As a last addition to UTAUT, experience and habit are two distinct but interconnected things. Venkatesh et al. (2003) distinguished three levels of experience based on time: post-training, one month later, and three months later. Kim et al. (2005) linked learning-induced automaticity with habit, whereby habit was defined as the extent to which people prefer to conduct actions automatically. Despite the fact that they are fundamentally equivalent, habit has been organised in two distinct ways. As a starting point, we might consider habit in terms of prior behaviour (see Kim and Malhotra 2005). For the second time, habit is defined as the degree to which an individual believes a behaviour is inherent.

2.5 Theoretical Framework

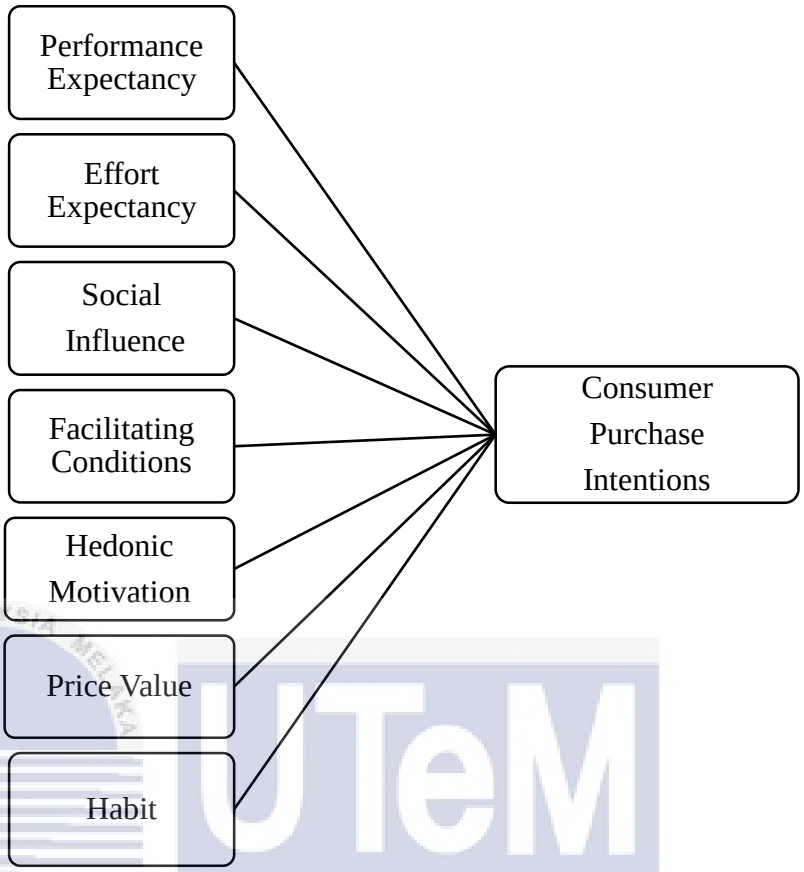

Figure 2.8: UTAUT 2 Model of BingoBox Technology Adoption Towards Consumers Behavioral Intention.

To investigate the behavioural change and generate prediction, a related behavioural prediction conceptual framework in technology acceptance model should be referred and applied. Thus, Unified Theory of Acceptance and Use Technology 2 (UTAUT 2) is a behavioural and technology based conceptual framework that is suitable to be applied in this case study. Inside the conceptual framework, there are 8 mains conceptualise element (Performance Expectation, Effort Expectation, Social Influence, Facilitating Condition, Hedonic Motivation, Price Value and Habit, and Behavioural Intention) proposed by Venkatesh et al (Javier et al., 2017).

2.6 Summary Of The Factor Of Bingobox Technology Adoption Towards Consumers Behavioral Intention In Malaysia During Covid-19 Pandemic

Table 2.1: Summary of the factor of BingoBox technology adoption towards consumers behaviorial intention in Malaysia during Covid-19 pandemic.

Authors	Abstract	PE	EE	SI	FC	HM	PR	PV	HB
Shu-Ling Hsu, 2022	With the advancement of the technology era, the technology of various industries has gradually developed rapidly. The type of shopping that people pursue has also changed with time.	+	+	+	+	+	+	+	+
Kim S, Yoo B, 2020	This study tests the suitability of a new technology acceptance model for a mobile payment system by checking how statistically significant the change is from the UTAUT (Unified Theory of Acceptance and Use of Technology) and UTAUT 2 models.	+	+	+	+	+	+	+	+
Rahman, Ismail and Bahri, 2021	This study examines factors influencing the adoption of cashless payment in Malaysia using	+		+					

	a well-established unified theory of adoption and use of technology, UTAUT2.								
Moghavvemi et al., 2020	The Malaysian market consists of a large consumer-base carrying mobile phones. However, the adoption and proliferation of mobile (m-) payments remain dismal. Evidence from the literature necessitates the need for elucidating the adoption barriers and drivers from multiple perspectives.	+							
Lin, 2022	This study aims to identify the antecedent factors influencing consumer attitudes and patronage intentions toward an intelligent unmanned convenience store (IUCVS) in Taiwan.			+	+		+		
Tonder et al., 2018	This study examined if technology acceptance	+	+	+	+	+			

	drives affective commitment and ultimately existing users to assist potential users, as measured by direct customer citizenship behaviour (advocacy, help in using the technology) and indirect customer citizenship behaviour (tolerance and feedback to the retailer for improvement).								

(Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM) , Price Value (PV) and Habit (HB), Behavioral Intention (BI))

('+'= Positive Relationship)

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, the researcher will discuss about the research methodology that will used to accomplish the research objectives of this research. The researcher will explain on the theoretical framework, hypothesis testing, research design, research approach that utilized in this research. Besides, researcher will also discuss on the questionnaire development with variables. Furthermore, the researcher discusses on the data collection, sampling frame and some data analysis tools that will used to analyse the gathered data. The details information of data analysis tools will be illustrated by researcher in this chapter.

3.1 Thereotical Framework

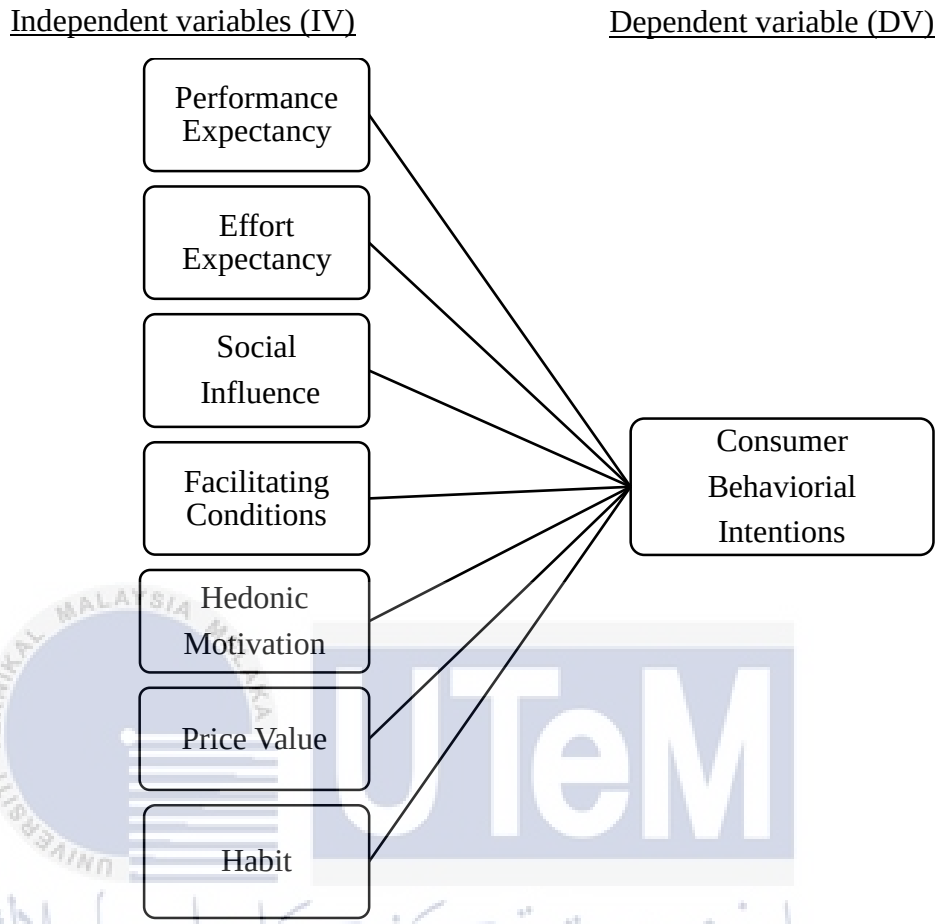

Figure 3.1: Conceptual Framework of the Research.

Source: P. Brewer & A.G. Sebby (2021).

The research framework shown in Figure 3.1 is developed and modified from the research of P. Brewer & A.G. Sebby (2021). This theoretical framework is used to examine the determinants of consumers' behavioural intention. The independent variables, including Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM) , Price Value (PV) and Habit (HB) are discussed in previous few paragraphs, while dependent variable is Behavioral Intention. In short, the proposed framework in this study helps the public and readers to obtain a deeper insight into the factors of BingoBox technology adoption towards consumer behavioral intention in Malaysia during epidemic of Covid-19.

3.1.1 Hypothesis Testing

There are 7 hypothesis which can help to solve the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of Covid-19 will illustrated as below:

Hypothesis 1

Performance Expectency

$H1_1$: There is a positive relationship between performance expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H1_0$: There is no relationship between performance expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 2

Effort Expectancy

$H2_1$: There is a positive relationship between effort expectancy towards towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H2_0$: There is no relationship between effort expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 3

Social Influence

$H3_1$: There is a positive relationship between social influence towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H3_0$: There is no relationship between social influence towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 4

Facilitating Conditions

$H4_1$: There is a positive relationship between facilitating conditions towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic Covid-19.

$H4_0$: There is no relationship between facilitating conditions towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 5

Hedonic Motivation

$H5_1$: There is a positive relationship between hedonic motivation towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H5_0$: There is no relationship between hedonic motivation towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 6

Price Value

$H5_1$: There is a positive relationship between price value towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H5_0$: There is no relationship between price value towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

Hypothesis 7

Habit

$H5_1$: There is a positive relationship between habit towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

$H5_0$: There is no relationship between habit towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of Covid-19.

3.2 Research Design

The research design could provide researcher an overview of this study for better understanding. According to Saunders et al. (2016), research design can be considered as a fundamental aspect of understanding the overall strategy of the researcher in conducting research where it will be indicated how the researcher answering research questions in order to achieve research objectives. There have 3 types of research designs which is exploratory design, explanatory design, and descriptive design. Research design is important where researcher able to decides the sources used to collect data and how to gather data from target respondents then analyse it. It will allow a greater value of information needed as well as help researcher to make decision in the entire study of project.

In order to obtain a more exact and accurate information regarding to the study, the researcher will use the descriptive research design in this research. It can be considered as a concept that entails observing and evaluating the items, functions, and behaviour without affecting it in any manner. Hence, descriptive research design is important to provide an overview or describe key features of the phenomena of interest from concern target population (Sekaran, 2003). This is because of the information of a specific issue or problem can be determined through the descriptive research design. Then, it will used to learn the the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19.

Furthermore, there is a casual analysis been adopted in this study which it can help to recognize the cause of certain issues and with solutions. In this study, the researcher will come out with the variables which contribute to the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. By through the casual analysis, researcher can discover the most significant the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. Besides that, a quantitative methodology is implemented by a structured questionnaire where to evaluate the statistical hypothesis that correspond to the questions of analysis. This survey methods are enabling a large population of respondents to gather standardized information and make a direct comparison possible (Saunders et. Al, 2016). The researcher can have a

good insight on the conclusion that reached by the analyzed data. As a result, descriptive research design is the most suitable research design to conduct this study of research.

3.2.1 Research Approach

The research methodology is a method and strategy that involves phases ranging from general assumptions to specific data gathering, analysis, and interpretation procedures. This research approach is divided into two parts: data gathering strategy and data interpretation strategy. The deductive technique will be employed in this research since it often begins with a theory-driven hypothesis that leads data gathering and analysis. This method is used to measure and assess the connection between independent and dependent variables.

According to Gulati (2009), deductive approach can be established as unique to a general of reasoning. It can find out the exist known theory and investigate if the theory is effective in the specific circumstances as well as used to explain the means of hypotheses. The deductive approach begins with a predicted pattern that is 'tested against observations, while induction begins with observations and attempts to identify a pattern within them'. Thus, deductive approach is a step-by-step, rational and structured method where it is focuses on deducing conclusions from propositions or premises (Babbie, E. R., 2010).

3.2.2 Questionaire Development

This research used quantitative method for collecting the primary data by using survey form. An identical set of questions from questionnaire survey will be distribute to a large group of target respondents for quantitative analysis. The data collection is easy to make comparison as the questionnaire will be distribute to different respondents (Saunders et al., 2016). The questionnaire is designed through Google

Form whereas it is easy and free to distribute to target respondents in the format of URL or link. Besides from the reason of Google Form can make the questionnaire survey runs efficiently but also due to the epidemic of Covid-19. By doing so, researcher can distribute the survey form through social media, e-mail, or others online-based application which correspond to the contactless during this crisis. The target respondents can easily access to the questionnaire through computer, mobile phone, pad, tab, or other devices which it can connect to network. Besides, it also helps to save time on data collection where the needed information can be easier transmitted into Excel spreadsheet.

There are 3 sections in the questionnaire form which are Section A, Section B, and Section C. Section A will emphasis on the general information of respondents. In Section B, the questions will relate to the independent variables such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM) , Price Value (PV) and Habit (HB) which are the the level factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. While Section C will focus on the dependent variable which is consumers behavioural intentions in Malaysia during epidemic of Covid-19 from the point of respondents' view. This survey form is created with the aim of address and achieve all the research questions and research objectives, was thus set based on the past study by other researchers.

Table 3.1: Sections in Questionnaire

Section A	General Information Of Respondents.
Section B	The Level Factor Of Bingobox Technology Adoption Towards Consumers Behavioral Intention In Malaysia During Epidemic of Covid-19.
Section C	Consumers Behavioural Intentions In Malaysia During Epidemic of Covid-19.

Based on the questionnaire design, the respondents will answer the questions by using the Likert scale which start from 1 to 5 based on their opinions Consumers

Behavioural Intentions In Malaysia During Epidemic of Covid-19. The respondents need to choose for the most suitable and appropriate answer scale for each question. There are total five rating marks which starting from 1 represent strongly disagree, followed by disagree, neutral, agree and 5 represents strongly agree.

1	2	3	4	5
Strongly Disagree ←				→ Strongly Agree

Figure 3.2: Likert Scale

Source: Saunders, M., Lewis, P., & Thornhill, A. (2016) Research methods for business students.

3.2.3 Operationalization Construct

Table 3.2: Operationalization of Constructs.

Constructs	No of Items	Scale of Measurement
Performance Expectancy (PE)	5	Likert Scale (1-5)
Effort Expectancy (EE)	5	Likert Scale (1-5)
Social Influence (SI)	5	Likert Scale (1-5)
Facilitating Conditions (FC)	5	Likert Scale (1-5)
Hendonic Motivation (HM)	5	Likert Scale (1-5)
Price Value (PV)	5	Likert Scale (1-5)
Habit (HB)	5	Likert Scale (1-5)

3.2.3.1 Variables

Table 3.3: The Variables.

Label	Items	Source
PE	**Performance Expectancy**	
I prefer to adopt BingoBox store;		
PE 1	The technology improves the quality of my life.	Yu Lin (2021), Kyun Na, Yeon Yang & Ho Lee (2021),
PE 2	Can increases my shopping effectiveness.	
PE 3	Its helps me to get what I need more quickly.	
PE 4	Technical functions and service allow people to control their daily lives better.	
PE 5	The technology enables me to get and pay with minimal effort.	

Label	Items	Source
EE	**Effort Expectancy**	
I use BingoBox technology because;		
EE 1	Its easy for me to become skilful at using technology	Chi Wang et al. (2021) ,Yu Lin (2021), Kyun Na, Yeon Yang & Ho Lee (2021),
EE 2	I find the technology is easy to use.	
EE 3	Its beneficial for me.	
EE 4	Its make transaction more efficient.	
EE 5	It is easy to use smartphone mobile payment.	

Label	Items	Source
SI	**Social Influence**	

I willing to use the BingoBox Technology because;		
SI 1	My family members suggest to me.	Yu Lin (2021), Kyun Na, Yeon Yang & Ho Lee (2021)
SI 2	Some celebrities recommend.	
SI 3	People I consider important prefer to use technology.	
SI 4	People surounding influential me.	
SI 5	People I deem important think I should use the service technology.	

Label	Items	Source
FC	**Facilitating Conditions**	
I use BingoBox Technology because;		
FC 1	I know how to use a service technology	H.J Park & Y Zhang (2021) ,Yu Lin (2021)
FC 2	I already know how to use a technology in this store.	
FC 3	The store is compatible with other technology.	
FC 4	I have no more difficulty than others in using new technologies and improved function.	
FC 5	I can figure out new technology service in this store without any help.	

Label	Items	Source
HM	**Hedonic Motivation**	
I use BingoBox Technology because;		
HM 1	Using smartphone mobile payment provides pleasure.	Na, Yang and Lee, 2021
HM 2	Optional services of a smartphone mobile payment company provide interest and satisfaction.	

HM 3	Its enjoyable.	
HM 4	Its entertaining.	
HM 5	Its very interesting.	

Label	Items	Source
PV	**Price Value**	
I use BingoBox Technology because;		
PV 1	Items in are reasonably priced.	Na, Yang and Lee, 2021
PV 2	Is worth the current item price.	
PV 3	The items is good value for the money.	
PV 4	The items has a good value within the current price.	
PV 5	I can save money by using shopping.	

Label	Items	Source
HB	**Habit**	
I use BingoBox Technology because;		
HB 1	Using a service technology in this store has become natural to me.	Kyun Na, Yeon Yang & Ho Lee (2021)
HB 2	I am well accustomed to the use of service technology in this store.	
HB 3	I am addicted to using the service technology in this store.	
HB 4	I must use the service technology in this store at least once a week/month.	
HB 5	I like service technology in this store more than traditional one.	

3.2.4 Pilot Analysis

A pilot test is one of the essential parts of research where it is conducted by using questionnaire form for data collection. This is because of the pilot testing helps to ensure that good response rate and representative of sample size in this research. It is preferred to small-scale of study where to improve the feasibility of the questionnaires and then enhance the performance of overall research study. This helps researcher to refine the questions constructed in questionnaire whereas there will be no problems occur for actual respondents in answering survey (Saunders et al., 2016). In addition, it allows the researcher to boost the validity of research questions and the reliability of data to be collected then contribute to a successful study (Thabane et al., 2010).

In this research, researcher will distribute the survey form to 10 respondents based on the sample size where to carry out a pilot test and pre-test on the questionnaire. The researcher will collect and record the feedback or response from the respondents in order to accomplish the questionnaire and decide whether it is reasonable. Therefore, researcher can enhance and modify the design of questionnaire such as re-scaling or re-wording the specific statements before it is distributed to the end respondents. Then the final version of questionnaire will be refined and adopted for the actual survey in this study of research.

3.3 Data Collection

Quantitative approach is chosen and will be used in this study of research for collecting the data needed. The quantitative research has a lead as the study technique to make sense and new knowledge to understand the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. As this study is conducting in quantitative method, then a questionnaire that blasted in management section of Google Form will be utilized in this research. The provided questionnaire will be distributed to potential respondents in the format of URL/links through WhatsApp, Telegram, Instagram, Facebook, and others social

media platform. The questionnaires need to be confidential for protecting and respecting the humanity of respondents.

Based on this study, the process of collecting data involves primary and secondary data. The primary data with the purpose of gather the first-hand information for determination of the study by examine the variable of interest. According to Formplus Blog websites (2021), primary data is the type of data that is direct acquired from the data source without undergo any existing sources. By distribute the questionnaire to respondents can ensure that the reliability of data, while at the same time the findings will not be damaged. The outcome of results would be either vital for study or not.

Additionally, secondary data is also utilized in this study as an approach for collecting information needed. The secondar data is consists of a broad range of information that can obtain from the reading materials like journals, books, articles, newspaper, and other internet-based sources. According to Sekaran (2003), the researcher can attain the necessary information and knowledge from past research that had been conducted and done by other researchers. Therefore, the documents that are important yet useful for this study of research will select and gather from the database of ScienceDirect, Google Scholar, and Emerald Insight.

3.3.1 Sampling Technique

There are three types of sampling strategies, according to Barreiro and Albandoz (2001): (1) Probability sampling or random sampling; each sample has an equal chance of being chosen. (2) Sample selection depending on the researcher's research goal, or purpose sampling. (3) Each sample in non-probability or no-rule sampling is unlikely to be chosen in the same way. The five ways utilized in probability sampling are simple random, systematic random, stratified random, cluster, and multi-stage procedures.

Sampling is the process of selecting an appropriate component, such as population, target population, and sample, in order to achieve the study's purpose. The sampling strategy reduces the amount of data that the researcher must collect by selecting data from a subset rather than all available examples or components (Saunders et al., 2016). Simple random sampling, often known as random sampling, comprises selecting a sample at random from the sampling frame using a computer or random number tables (Saunders et al., 2016).

Simple random sampling is commonly used when you have a detailed and immediately accessible sample frame that lists the target population, ideally in an electronic format. While relevant lists are frequently available from employees or members of clubs or societies, businesses are less likely to have them. If the population spans a vast geographic region, a random sample ensures that selected instances are likely to be dispersed across the country. Because users are dispersed across Peninsular Malaysia, this study's samples were chosen using simple random selection.

3.3.2 Sampling Size

The stratified random sampling method, known as probability sampling, was utilised in this investigation. It is more likely to govern the chance of each sample being identified as a probability sample, as well as the sampling units that belong to each sample. It was suggested by Hinkin (1995) that for each set of scales to be examined, the optimal sample size should have an item to response ratio ranging from 1:4 to 1:10. The recommended number of participants for this study is between 144 and 360. A sample size of 150 responders, however, was recommended by Hinkin for the most accurate results. This means that a total of 150 people will be answer the questionaire for the purpose of this study. The sample size for this research will be 150 questionnaires, and they will be sent to the target respondents who use Bingobox technology in Malaysia through Google Form as a distribution medium, in agreement with Hinkin (1995).

3.3.3 Key Informants

The key informants of this study are the consumer that adopt the Bingobox technology especially during the epidemic of Covid-19. The respondents of this study will focus on the consumer bingobox store in Malaysia with different aspects such as gender, ages, gender, race, education level, usage of Bingobox technology during epidemic of covid-19.

3.4 Data Analysis

After collected all the data from respondents, these data need to be analysed so that it can provide a result for this research and each of the hypotheses. Due to the technology nowadays, there is a system called SPSS (Statistical Package for Social Sciences). This computer software can give a hand for this research to analyse and interpret the result based on data collected in this report. Hence, SPSS is utilized in this report as this research is conducting in quantitative method. SPSS is effective in managing a large volume of data and can accelerate the evaluation processes of the data collection and tabulation.

According to Pallant (2010), SPSS uses standard multiple regression where to obtain the reliability, accuracy, validity of the data gathered. When the questionnaire is conducting, SPSS can also use to test the hypotheses proposed. Besides, normal multiple regression analysis will help to make evaluation on the collected data where to improve and strengthen the validity of the variables. SPSS can also help the researcher to carry out the hypothesis testing with the connection of all variables included. Then, there are 4 data analysis techniques which is descriptive, reliability, validity, Pearson corelation, Multiple Regression Analysis that will need to do for this research. (Hoque et al., 2018).

3.4.1 Descriptive Analysis

Descriptive statistics is an important part as it will assists the researcher to understand the data dissemination and examines the relationship between the variables. It is a technique that use to explain the basic characteristic of a research where it will give a summary for a particular data. According to Vetter (2017), the descriptive analysis can assist the researcher to summarize data collected in an effective and logical way. This method will used to measure the frequency distribution, tables, histogram, charts, central tendency such as mean, median and mode. The Demographic Respondents segment containing the personal details of the respondents, such as age, gender, race, educational level, will be presented using the descriptive study. Moreover, the frequency distributions will be used in this study and the findings can be explained in percentage terms where to describe the factor of bingobox technology adoption towards consumers behavioral intention in malaysia during epidemic of covid-19. The results are explained based on the mean and standard deviation values. The level of mean score can be classified into low, medium and high, based on the mean range as below of Table 3.5:

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 are one of the important parts for researcher to conduct quantitative study in order to ensure the optimal of research quality. In this analysis, reliability test is used to ensure that there is internal consistency of reliability in the dependent variable and all of the independent variables. Besides, all the variables should have the same underlying structure whereas

to be correlated in this study of research. While the validity test is referring to the accuracy and precisely of the measure. Researcher can obtain a credible output data through the consistency and accurate of measurements.

In this study, Cronbach's Alpha is utilized to calculate the average correlation of each item measurement in all variables. It is usually utilized to evaluate the consistency of data. The value of alpha coefficient is within 0 and 1. According to Hoque & Awang (2016), stated that the alpha coefficient value of 0.5 and above can identified as the measure is acceptable to prove the reliability of all variables. Table 3.6 shows the Cronbach's Alpha Coefficient Range and its internal consistency. The Cronbach's Alpha which is exceed 0.7 is considered acceptable; more than 0.8 is good while 0.9 and above indicated as excellent. In this study, both the dependent variable and independent variables will be utilised to identify its reliability and validity.

Table 3.5: Cronbach's Alpha Coefficient Range and Strength of Association.
Source : Source: George and Mallery (2003).

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

3.4.3 Pearson Correlation Analysis

Pearson Correlation Analysis is used to examine the existence and strength of connections between dependent and independent variables. This analysis is said to be a highly valuable technique since it may reveal whether or not there is a probable link between the two variables. This study will get a result ranging from 0 (random) to 1 (perfect linear connection) or -1 (perfect negative relationship), demonstrating the

square. The closer the correlation coefficient, r, is to zero (0), the greater the deviation in data from the best-fit line. The closer the correlation coefficient, r, is to 1 /-1, the less the variance data from the best fit line. The Pearson Correlation Coefficient Range is shown in Table 3.8. As a result, in this study, the researcher will utilise Pearson Correlation Analysis to analyse the strength of four variables with the element of Bingobox technology on customer behavioural intention in Malaysia during epidemic of Covid-19.

Table 3.6 : Pearson Correlation Coefficient Range

Coefficient Range	Strength of Correlation
± 0.00 to ± 0.30	Weak
± 0.40 to ± 0.60	Moderate
More than ± 0.70	Strong

3.4.4 Multiple Regression Analysis

If you've ever wondered about the link between two variables, you can use multiple regression analysis to figure it out. A relationship's trajectory, research intensity, and overall strength may all be examined using this method. " If the relationship is low, Guilford's rule of thumb may be utilised to determine the level of intimacy between the two parties. In addition, multiple regression analysis uses more than one independent variable to anticipate and compute the regression equation and correlation of numerous determinations (Saunders et al., 2013). In terms of quantitative research, it will be one of the most useful tools to analyse data. Using a collection of independent factors on the dependent variable, we may estimate the results of outcomes.

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

$$\boldsymbol{Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7}$$

Where:

Table 3.7 : Equation of Multiple Linear Regression Analysis

Y	Dependent variable (Consumer Purchase Intention during COVID-19 pandemic)
A	Constant
b_1	Influence of X_1 (Performance Expectancy)
b_2	Influence of X_2 (Effort Expectancy)
b_3	Influence of X_3 (Social Influence)
b_4	Influence of X_4 (Facilitating Conditions)
b_5	Influence of X_5 (Hedomic Motivation)
b_6	Influence of X_6 (Price Value)
b_7	Influence of X_7 (Habit)
X_1, X_2, X_3, X_4, X_5, X_6, X_7	Independent variables

3.5 Summary

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

Research Question	Research Objective	Research Hypothesis	Data Analysis
RQ1: What are the level factor of bingobox technology adoption towards consumers behavioral intention in malaysia during covid-19 pandemic?	RO1: To measure the level factor of bingobox technology adoption towards consumers behavioral intention in malaysia during covid-19 pandemic?		Descriptive Analysis, Mean, Standard Deviation, Crosstabulation, Cronbach's alpha
RQ2: What are the relationships between the factor of bingobox technology adoption and consumers' purchase intentions during the pandemic of COVID-19?	RO2: To examine the relationship between the factor of bingobox technology adoption and consumers' purchase intentions during the pandemic of COVID-19?.		Correlation Coefficient

RQ3: What is the most significant factor of bingobox technology adoption that affecting the consumers' purchase intentions during the pandemic of COVID-19?	RO3: To determine the most significant factor of bingobox technology adoption that affecting the consumers' purchase intentions during the pandemic of COVID-19?	H1: There is a positive relationship between performance expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic. H2: There is a positive relationship between effort expectancy towards towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic. H3: There is a positive relationship between social influence towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic.	Multiple Regression

		H4: There is a positive relationship between facilitating conditions towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic. H5: There is a positive relationship between hedonic motivation towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic. H6: There is a positive relationship between price value towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic.	

		H7: There is a positive relationship between habit towards bingobox technology adoption consumers behavioral intention in malaysia during covid-19 pandemic.	

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

This chapter will be presenting the discussion and results of the study. The findings were analysed according to the objectives in this research which include to investigate the factor of BingoBox technology adoption towards consumers behavioral intention in malaysia during epidemic of Covid-19, to examine the relationship between the factor of BingoBox technology adoption and consumers' purchase intentions during the epidemic of Covid-19, to determine the most significant factor of BingoBox technology adoption that affecting the consumers' purchase intentions during the epidemic of Covid-19. All of these objectives will be achieved and obtained elated results from the responses of respondents.

As discussed earlier, the researcher will utilize quantitative method of research by distributing online questionnaires to the users of BingoBox store. By doing so, the data for a total of 150 respondents have been collected by the researcher in this study. Moreover, SPSS Version 26 will used to analyse the total 150 responses collected. Researcher will discuss on the descriptive analysis, reliability analysis and validity test, Pearson correlation analysis, regression analysis and hypothesis test in this chapter.

4.1 Descriptive Analysis

Descriptive analysis is the process of using current and historical data to identify trends and relationships, it is sometimes called the simple from the data analysis because it describes trends and relationships but does not dig deeper. Additionally, each data sample was evaluated, along with a graphical analysis of the sample. One sort of descriptive analysis is the preliminary analysis, which gathers information via surveys. The analysis explains the sample's operation and the data that are shown. Tables, diagrams and summaries are used in the descriptive analysis approach to characteristic, describe, and explain the data gathered. The online survey questionnaire by via google form method was used in this study by the researcher to explain the questionnaire.

4.1.1 General Information Of Respondents

General information of respondents refers to the demographic profile which including gender, race, educational level, occupation, did they use the technology and also how often they use the technology at BingoBox store during this epidemic. A total of 150 respondents (BingoBox store users) as demographic sample profiles have been gathered by the researcher in this study. All these respondents intend of BingoBox technology during Endemic of Covid-19.

4.1.1.1 Profiling of Gender

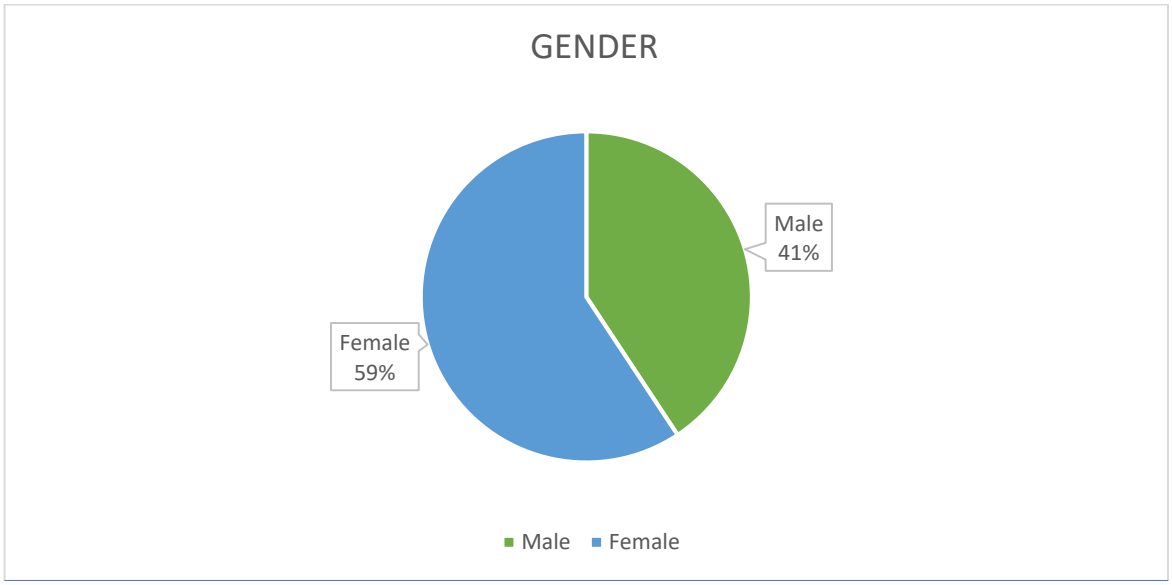

Figure 4.1: Profiling of Gender

Figure 4.1 above is related to the information of genders which were obtained from the survey among 150 respondents. The findings show that 41% (n=61) were male and 59% (n=89) were female respondents.

4.1.1.2 Profiling of Educational Level

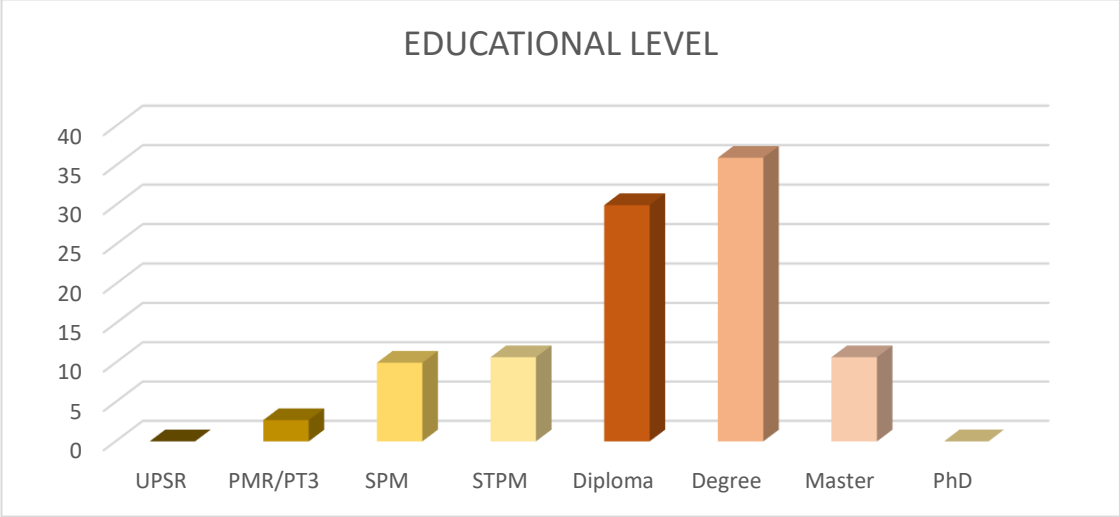

Figure 4.2: Profiling of Educational Level

Figure 4.2 refers to the educational level of respondents from a total of 150 BingoBox users. Based on the bar chart above, there were 2.7% (n=4) of the PMR or PT3 respondent while 10% (n=15) were SPM respondents. For STPM and Diploma, there were 16 (10.7%) and 45 respondent (30%) them whom participated in this survey. There was 54 respondent for Degree (36%) and 16 Master respondent (10.7%) from the survey.

4.1.1.3 Profiling of Occupation

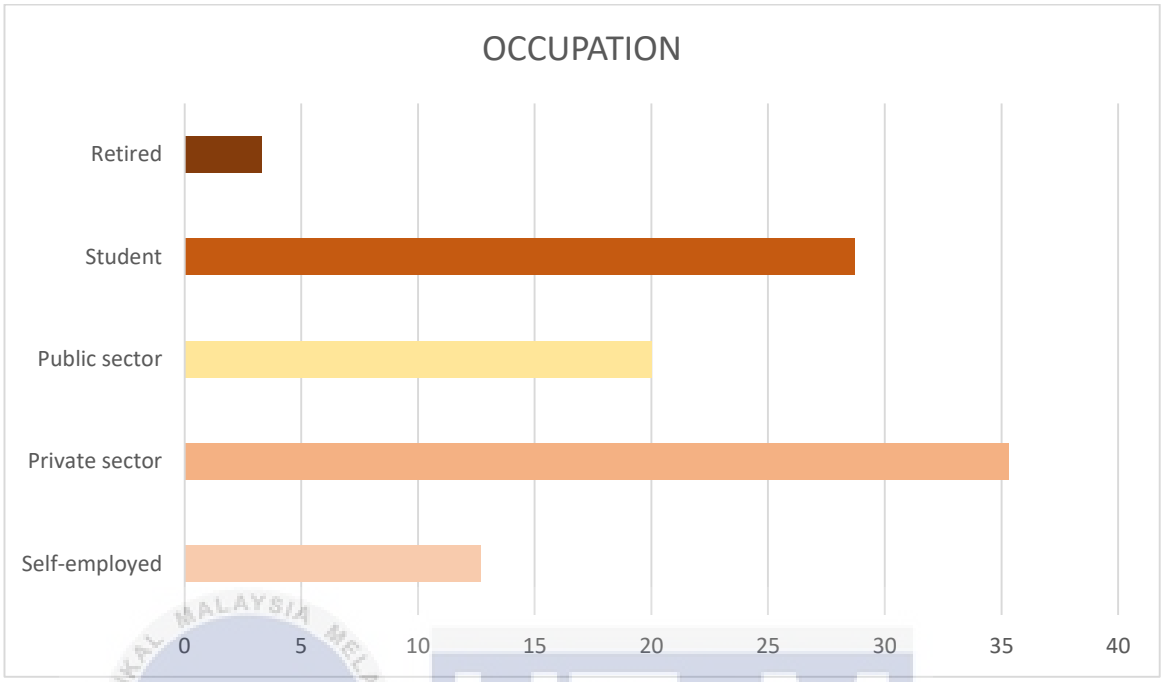

Figure 4.3: Profiling of Occupation

Figure 4.3 illustrates profiling of occupation by the respondents during Epidemic of COVID-19. Based on the data, most of the retired respondents which is total 5 person (3.3%). After that, among the total of 150 respondents, there were 43 (28.7%) respondents are from student, followed by 30 (20%) of public sector respondents. Besides, there were 53 (35.3%) respondents who in public sector. At last, there were only 19 (12.7%) self-employed respondents .

4.1.1.4 Frequency of Use Technology at BingoBox Store

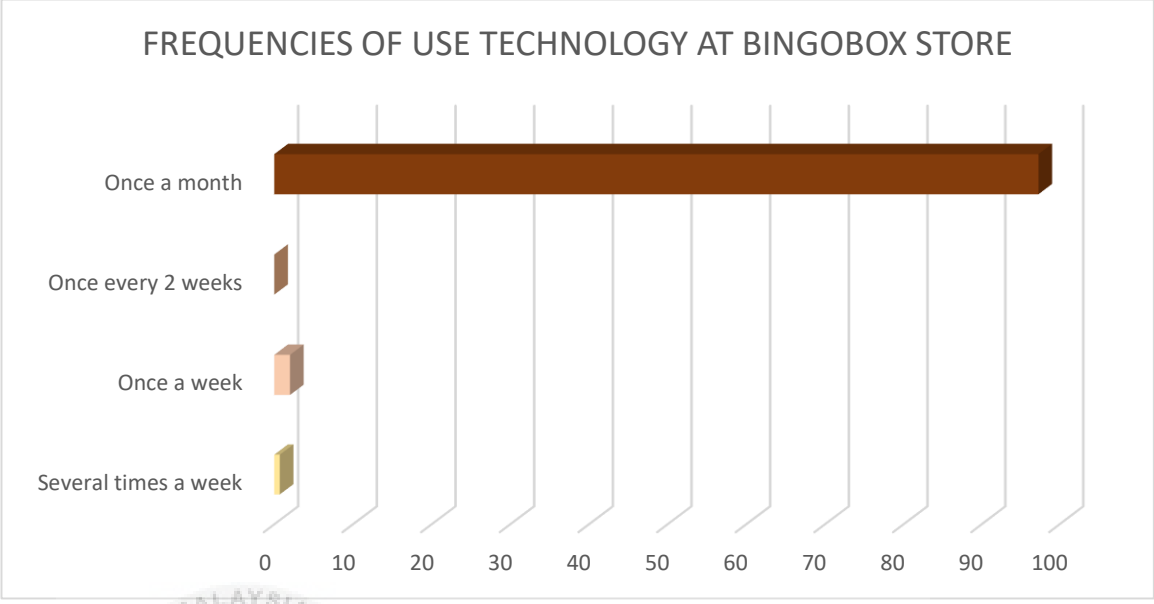

Figure 4.4: Frequency of Use Technology at BingoBox Store

Based on the figure above, it defines on how often the respondents use technology at BingoBox during epidemic. The result show that a total of 146 respondents (97.3%) will use technology of BingoBox store once a month while 1 (0.7%) out of the total 150 respondents order food online several times a week. Besides, it follows by 3 respondents (2%) that will use technology of BingoBox once a week during the epidemic of Covid-19.

4.1.2 Mean Score Analysis for Variables

Mean score analysis used to identify and receive the information related to the characteristics of specific problems. The results will show on all variables such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hendonic Motivation (HM), Price Value (PV), Habit (HB) and Behaviorial Intention (BI) that used for the study the factor of BingoBox Technology adoption towards consumer behaviorial intention during endemic of Covid-19. The data will be determined through minimum, maximum, mean, and

standard deviation. Besides that, the researcher utilizes a 5-point Likert Scale for measuring total 40 items that related to the study of research.

4.1.2.1 Performance Expectancy

Table 4.1: Descriptive Statistics for Performance Expectancy

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
PE1	The technology improves the quality of my life.	150	1	5	**4.09**	.634
PE2	Can increase my shopping effectiveness.	150	1	5	**3.97**	.601
PE3	Its helps me to get what I need more quickly.	150	1	5	**4.11**	.671
PE4	Technical functions and service allow people to control their daily lives better.	150	1	5	**3.99**	.665
PE5	The technology enables me to get and pay with minimal effort.	150	1	5	**3.99**	.714

Table 4.1 describes the descriptive statistics of the independent variable which is Performance Expectancy (PE). It illustrates that the scale of minimum rating for each item is 1 while the maximum rating is 5. According to the table, the results revealed that the item "The menu provides a good description of the food being offered" scored the highest mean value (4.09) and its standard deviation value is 0.634. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "Can increase my shopping effectiveness." had the mean value of 3.97 with standard deviation of 0.601 while the item of "Its helps me to get what I need more quickly" had the mean value of 4.11

with standard deviation of 0.671. The item of "Technical functions and service allow people to control their daily lives better." showed a mean value of 3.99 and standard deviation of 0.665. Lastly, the item of "The technology enables me to get and pay with minimal effort." had the least mean value which was 3.99 with standard deviation of 0.714.

4.1.2.2 Effort Expectancy

Table 4.2: Descriptive Statistics for Effort Expectancy

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
EE1	Its easy for me to become skilful when using the technology.	150	1	5	**4.01**	.723
EE2	I find the technology is easy to use.	150	1	5	**3.95**	.663
EE3	Its beneficial for me.	150	1	5	**4.10**	.721
EE4	Its make transaction more efficient..	150	1	5	**4.11**	.770
EE5	It is easy to use smartphone mobile payment.	150	1	5	**4.11**	.697

Table 4.2 refers to the descriptive statistics of Effort Expectancy (EE). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item "Its make transaction more efficient.. (4.11) with standard deviation 0.770 and "It is easy to use smartphone mobile payment" (4.11) with standard deviation 0.697. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "Its easy for me to become skilful when using the technology" had the mean value of 4.01 with standard deviation of 0.723 while the item of "I find the technology is easy to use." had the mean value of 3.93 with standard deviation of 0.663. Lastly,

the item of “Its beneficial for me.” had the least mean value which was 4.10 with standard deviation of 0.721.

4.1.2.3 Social Influence

Table 4.3: Descriptive Statistics for Social Influence

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
SI1	My family memners suggest to me.	150	1	5	**3.91**	.659
SI2	Some celebrities recommend.	150	1	5	**4.03**	.772
SI3	People I consider important approach me to use the technology.	150	1	5	**3.99**	.723
SI4	People serounding influential me.	150	1	5	**3.95**	.736
SI5	People I deem important push me use the technology.	150	1	5	**3.97**	.806

Table 4.3 refers to the descriptive statistics of Social Influence (SI). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item “People I deem important push me use the technology (3.97) and its standard deviation value is 0.806. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of “My family memners suggest to me.” had the mean value of 3.91 with standard deviation of 0.659 while the item of “Some celebrities recommend.” had the mean value of 4.03 with standard deviation of 0.722. The item of “People I consider important approach me to use the technology.” showed a mean value of 3.99 and standard deviation of 0.723. Lastly, the item of “People serounding influential me.” had the least mean value which was 3.97 with standard deviation of 0.736

4.1.2.4 Facilitating Conditions

Table 4.4: Descriptive Statistics for Facilitating Conditions

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
FC1	I know how to use a service technology.	150	1	5	**4.06**	.697
FC2	I know how to use a technology.	150	1	5	**3.96**	.644
FC3	The store is compatible with other technology.	150	1	5	**4.01**	.660
FC4	I have no more difficulty than others in using new technologies and improved function.	150	1	5	**4.10**	.632
FC5	I can figure out new technology service in this store without any help.	150	1	5	**4.35**	.811

Table 4.4 refers to the descriptive statistics of Facilitating Conditions (FC). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item "I know how to use a service technology (4.35) and its standard deviation value is 0.811. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "I know how to use a technology" had the mean value of 3.96 with standard deviation of 0.644 while the item of "I know how to use a service technology." had the mean value of 4.06 with standard deviation of 0.697. The item of "The store is compatible with other technology" showed a mean value of 4.01 and standard deviation of 0.660. Lastly, the item of "I have no more difficulty than others in using new technologies and improved function" had the least mean value which was 4.35 with standard deviation of 0.811.

4.1.2.5 Hendonic Motivation

Table 4.5: Descriptive Statistics for Hendonic Motivation

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
HM1	Using smartphone mobile payment provides pleasure.	150	1	5	**4.33**	.766
HM2	Optional services of a smartphones mobile payment provide interest and statisfaction.	150	1	5	**3.96**	.663
HM3	Its enjoyable.	150	1	5	**4.00**	.721
HM4	Its entertaining.	150	1	5	**4.06**	.687
HM5	It very interesting	150	1	5	**4.09**	.697

Table 4.5 refers to the descriptive statistics of Hendonic Motivation (HM). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item "Using smartphone mobile payment provides pleasure" scored the highest mean value (4.33) and its standard deviation value is 0.766. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "Optional services of a smartphones mobile payment provide interest and statisfaction." had the mean value of 3.96 with standard deviation of 0.663 while the item of "Its enjoyable." had the mean value of 4.00 with standard deviation of 0.0.721. The item of "Its entertaining." showed a mean value of 4.06 and standard deviation of 0.687. Lastly, the item of "It very interesting" had the least mean value which was 4.09 with standard deviation of 0.697

4.1.2.6 Price Value

Table 4.6: Descriptive Statistics for Price Value

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
PV1	Items are reasonable price.	150	1	5	**4.11**	.723
PV2	Is worth the current item price.	150	1	5	**4.03**	.663
PV3	The items are good value for the money.	150	1	5	**4.05**	.721
PV4	The items has a good within the current price.	150	1	5	**3.95**	.770
PV5	I can save my money by shopping.	150	1	5	**4.09**	.697

Table 4.6 refers to the descriptive statistics of Price Value (PV). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item "Items are reasonable price. (4.11) and its standard deviation value is 0.723. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "Is worth the current item price" had the mean value of 4.03 with standard deviation of 0.663 while the item of "The items are good value for the money" had the mean value of 4.05 with standard deviation of 0.721. The item of "The items has a good within the current price" showed a mean value of 3.95 and standard deviation of 0.770. Lastly, the item of "I can save my money by shopping" had the least mean value which was 4.09 with standard deviation of 0.697.

4.1.2.7 Habit

Table 4.7: Descriptive Statistics for Habit

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
HB1	Using a service technology in this store has become natural to me.	150	1	5	**4.06**	.678
HB2	I am well accustomed to the use of service technology in this store.	150	1	5	**4.00**	.685
HB3	I am addicted to using the service technology in this store.	150	1	5	**4.03**	.704
HB4	I must use the service technology in this store at least once in a week/ month.	150	1	5	**4.07**	.609
HB5	I like the service technology in this store more than traditional one.	150	1	5	**4.28**	.804

Table 4.7 refers to the descriptive statistics of Habit (HB). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item I like the service technology in this store more than traditional one (4.28) and its standard deviation value is 0.804. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "Using a service technology in this store has become natural to me." had the mean value of 4.06 with standard deviation of 0.678 while the item of "I am well accustomed to the use of service technology in this store" had the mean value of 4.00 with standard deviation of 0.685. The item of "I am addicted to using the service technology in this store" showed a mean value of 4.01 and standard deviation of 0.634. Lastly, the item of "I must use the service technology in this store

at least once in a week/ month" had the least mean value which was 4.07 with standard deviation of 0.609.

4.1.2.8 Behavioral Intention

Table 4.8: Descriptive Statistics for Behaviorail Intention

Measurement Items		N	Minimum	Maximum	Mean	Std. Deviation
BI1	The shopping experience provided by BingoBox store will increase my willingness to make purchase.	150	1	5	**4.07**	.675
BI2	I may use BingoBox frequently in the future.	150	1	5	**4.01**	.700
BI3	If I have opportunity, I will use BingoBox store.	150	1	5	**4.31**	.716
BI4	I would recommend BingoBox store to others.	150	1	5	**4.33**	.766
BI5	I would like revisit to BingoBox.	150	1	5	**4.04**	.612

Table 4.8 refers to the descriptive statistics of Behavioral Intention (BI). From the table, it shows the scale of minimum rating for each item is 1 while the scale of maximum rating is 5. The results revealed that the item "I would recommend BingoBox store to others" scored the highest mean value (4.33) and its standard deviation value is 0.766. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of "The shopping experience provided by BingoBox store will increase my willingness to make purchase" had the mean value of 4.07 with standard deviation of 0.657 while the item

of “I may use BingoBox frequently in the future” had the mean value of 4.01 with standard deviation of 0.700. The item of “I have opportunity, I will use BingoBox store” showed a mean value of 4.31 and standard deviation of 0.761. Lastly, the item of “I would like revisit to BingoBox” had the least mean value which was 4.04 with standard deviation of 0.612.

4.2 Reliability Analysis and Validity Test

Table 4.9 above shows the reliability analysis of the data collected on all independent variables and dependent variable in this study. As refer the above table, it shows reliability value of total 40 items in the online survey with 150 respondents. The result of Cronbach’s Alpha shows 0.947 which is significantly higher than 0.70. Based on the Malhotra (2012), the measurement of Cronbach’s Alpha in reliability analysis indicate the value $\leqslant$ 0.60 considers as not reliable and poor. However, if the reliability value more than $\geqslant$ 0.70, it considers as highly and excellent for acceptable. Overall, the reliability analysis of this study is highly acceptable.

Table 4.9: Reliability Analysis of All Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.947	.950	40

Table 4.10 illustrates on the reliability analysis of Cronbach’s Alpha for each variable in the study included independent and dependent. The range of all variables is situated between 0.765 to 0.898. These high reliability values prove that the whole alpha coefficient value for each variable is acceptable and good condition. As refer to the table above, the Cronbach’s Alpha value for Performance Expectancy (α=0.809), Effort Expectancy (α=0.838), Social Influence (α=0.858), Facilitating Conditions (α=0.865), Hendonic Motivation (α=0.765), Price Value (α=0.785), Habit (α=0.830) and Behaviorial Intention (α=0.898).

Table 4.10: Reliability Analysis of Each Variable

	Variables	Cronbach's Alpha	No. of Items	Result
Independent Variables	Performance Expectancy	.809	5	Good
	Effort Expectancy	.838	5	Good
	Social Influence	.858	5	Good
	Facilitating Conditions	.865	5	Good
	Hendonic Motivations	.765	5	Acceptable
	Price Value	.785	5	Acceptable
	Habit	.830	5	Good
Dependent Variable	Behavioral Intention	.898	5	Good

4.3 Pearson Correlation Analysis

Pearson correlation analysis is a method that applied to analyse the relationship between one dependent variable and one independent variable. This technique can also be utilized to identify the effectiveness or strength relationship between dependent variable in this study which is Behavioral Intention and independent variables which include Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Condition, Hendonic Motivation, Price Value, and Habit. In relates the strength of relationship, the value of correlation coefficient is varying between +1 and -1. Besides, the value that closer to +1 or -1 indicate that the strength of relationship which is strong among two variables whereas the relationship is weak when the value is closer to 0.

Table 4.11: Pearson Correlation Coefficient for Each Variable

Correlations									
		PE	**EE**	**SI**	**FC**	**PV**	**HM**	**HB**	**BI**
PE	Pearson Correlation	1							
	Sig. (2-tailed)								
	N	150							

EE	Pearson Correlation	.825**	1						
	Sig. (2-tailed)	.000							
	N	150	150						
SI	Pearson Correlation	.668**	.500**	1					
	Sig. (2-tailed)	.000	.003						
	N	150	150	150					
FC	Pearson Correlation	.626**	.609**	.546**	1				
	Sig. (2-tailed)	.000	.000	.000					
	N	150	150	150	150				
PV	Pearson Correlation	.623**	.675**	.702**	.529**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	N	150	150	150	150	150			
HM	Pearson Correlation	.672**	.647**	.508**	.589**	.485**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	N	150	150	150	150	150	150		
HB	Pearson Correlation	.605**	.535**	.455**	.564**	.472**	.602**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
	N	150	150	150	150	150	150	150	
BI	Pearson Correlation	.723**	.653**	.513**	.519**	.692**	.696**	.749**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	150	150	150	150	150	150	150	150
**. Correlation is significant at the 0.01 level (2-tailed).									

Table 4.11 above illustrates the correlation result of all independent variables which include performance expectancy, effort expectancy, social influences, facilitating conditions, hendonic motivation, price value, and habit toward dependent variable which is behaviorial intention during epidemic of Covid-19. The above results

clearly stated that all independent variables record a positive and significant relationship toward dependent variable as the correlation coefficient (r) values are higher than or in the range of 0.5 to 0.8. From the table, the correlation result of first variable which performance expectancy toward dependent variable, the test is significant as stated with the significant r = 0.769 while p-value = 0.000, $p < 0.001$. Thus, these two variables have a strong relationship.

Next, for the second independent variable which is effort expectancy, the correlation relation result toward behaviorial intention during epidemic stated that they have a significant relationship. This is because the value of test correlation coefficient, r = 0.724 while p-value = 0.000 where $p < 0.001$. Hence, these two variables illustrate a strong relationship.

Apart from that, followed by the independent variable that is social influence towards dependent variable, which is behaviorial intention during epidemic, the results indicate that the test is significant where, r = 0.713 whereas p-value = 0.000, $p < 0.001$. Therefore, both variables have a moderate relationship.

Additionally, the independent variable which is facilitating conditions toward dependent variable that is behaviorial intention during this epidemic. According to the Table 4.11, the factor of method payment was significantly correlated to consumer purchase intention in positive correlation, where r = 0.491 and p-value = 0.000, $p < 0.001$. Thus, both variables indicate a moderate relationship.

Other than that, the independent variable which is hendonic motivation toward dependent variable that is behaviorial intention during this epidemic. According to the Table 4.11, the factor of method payment was significantly correlated to consumer purchase intention in positive correlation, where r = 0.686 and p-value = 0.000, $p < 0.001$. Thus, both variables indicate a moderate relationship.

Beside that, followed by the independent variable that is price value towards dependent variable, which is behaviorial intention during this epidemic, the results indicate that the test is significant where, r = 0.792 whereas p-value = 0.000, $p < 0.001$. Therefore, both variables have a moderate relationship.

Likewise, the independent variable which is habit toward dependent variable that is behaviorial intention during this epidemic. According to the Table 4.11, the factor of method payment was significantly correlated to consumer purchase intention in positive correlation, where r = 0.749 and p-value = 0.000, p < 0.001. Thus, both variables indicate a moderate relationship.

4.4 Inferential Statistics

Inferential statistics been identified as a method that used random sample of data that gathered from population and make analysation on them. Inferential statistics are significant and can assist in the analysis process when the evaluation on population is not conducive. Additionally, inferential statistics also vital in interpretations of either variations among samples are dependable or have likelihood to arise by chance. Hence, inferential statistics help to provide references associate to the more general state of data collection.

4.4.1 Multiple Regression Analysis

Multiple regression analysis is a technique that used to forecast the value of a variable according to a value of two or more variables. This method can use to analyse correlation among the independent and dependent variables. Furthermore, multiple regression analysis helps to explain the relationship among all independent variables (Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Conditions, Hendonic Motivation, Price Value, And Habit), and dependent variable (Behaviorial Intention during epidemic of Covid-19). The outcomes of the regression analysis will be shown in an equation.

4.4.1.1 Multiple Regression Analysis Between DV and IV

Table 4.12: Model Summary of Multiple Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822[a]	.676	.665	.28969
a. Predictors: (Constant), PE, EE, SI, FC, HM, PV, HB				

Table 4.12 revealed the results of regression analysis of relationship among independent variables and dependent variable. The independent variables that included for measurement are performance expectancy, effort expectancy, social influences, facilitating condition, hendonic motivation, price value, habit while the dependent variable is behaviorial intention during this epidemic. Based on the table above, the correlation coefficient (R) shows the value 0.822 and indicates as a strong degree of correlation. Hence, there is a positive and strong relationship been identified since the R value is more than 0.70. Moreover, the R square value in this model is 0.676 which indicates that dependent variable (behaviorial intention during epidemic) is affected 65.9% by the independent variables (performance expectancy, effort expectancy, social influences, facilitating condition, hendonic motivation, price value, habit). While the remaining (100% - 65.9% = 34.1%) are influenced by other factors that are not included in this research.

Table 4.13: ANOVA Analysis

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	**F**	**Sig.**
1	Regression	48.831	4	12.208	**70.173**	**.000[b]**
	Residual	20.225	145	.174		
	Total	74.056	149			
a. Dependent Variable: BI						
b. Predictors: (Constant), PE, EE, SI, FC, HM, PV, HB						

Table 4.13 below shows the ANOVA analysis of this study of research. Refer to the table, F-test is used to determine the data from survey that demonstrate a good

fit in the model. The results show F value is 70.173 while the significant value, p is 0.000 which is lower than significance level 0.01. Thus, it is clearly showed that all independent variables (performance expectancy, effort expectancy, social influences, facilitating condition, hendonic motivation, price value, habit) are significantly influencing on the dependent variable (behavioral intention during this epidemic).

Table 4.14: Regression Analysis on Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	-.152	.285		-.534	.594
	PE	.348	.093	.328	3.754	.000
	EE	.171	.085	.187	2.011	.046
	SI	.138	.061	.166	2.251	.026
	FC	.178	.060	.172	2.973	.256
	HM	**.422**	**.067**	**.487**	**6.323**	**.000**
	PV	.124	.058	.166	2.142	.034
	HB	.322	.074	.285	4.330	.000

a. Dependent Variable: BI

The relationship can be revealed as mathematically analysis equation below which according to the Table 4.14 above: -

$$\boldsymbol{Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7}$$

Where:

$\boldsymbol{Y}$ = Dependent variable (Behavioral Intention)

a = Constant term

$\mathbf{b_1, b_2, b_3, b_4, b_5, b_6, b_7}$ = Coefficient

$\boldsymbol{X_1}$ = Independent variable (Performance Expectancy)

$\boldsymbol{X_2}$ = Independent variable (Effort Expectancy)

$\boldsymbol{X_3}$ = Independent variable (Social Influences)

X_5 = Independent variable (Facilitating Condition)

X_6 = Independent variable (Price Value)

X_7 = Independent variable (Habit)

Y (Dependent Variable) = -0.152 (Constant) + 0.348 (Performance Expectancy) + 0.138 (Social Influence) + 0.178 (Facilitating Conditions) + 0.422 (Hendonic Motivation) + 0.124 (Price Value) + 0.322 (Habit)

Table 4.11 illustrates that the degree of coefficient beta values for each of the independent variables that have effect on the dependent variable. The results in the above table reveal that B1 = 0.348, B2 = 0.171, B3 = 0.138, B4 = 0.178, B5 = 0.422, B6 = 0.124 and B7 = 0.322 respectively to all independent variables. According to the table, hendonic motivation (HM) has the highest coefficient beta value where B = 0.422 with t = 6.323 and $p < 0.05$ as compared to other variables. It indicates that hendonic motivation factor has the strongest influence on the behaviorial intention during epidemic of Covid-19 (dependent variable). Additionally, this explores that there are 42.2% variation in dependent variable cause due to hendonic motivation.

Moreover, performance expectancy (PE) is the second largest predictor of dependent variable as it has beta value of B = 0.348, t = 3.754 and $p < 0.05$. This shows that 34.8% variation in behaviorial intention during epidemic cause due to performance expectancy. After that, follow by effort expectancy (EE) which recorded beta value of B = 0.171, t = 2.011 and $p < 0.05$ with the variation of 17.1% while social influences (SI) which recorded beta value of B = 0.138, t = 2.251 and $p < 0.05$ with a variation of 13.8%. Next, Facilitating Conditions (FC) has the lowest impact towards dependent variable as its B = 0.178, t = 2.973, $p > 0.05$ with a variation of 17.8% while price value (PV) recorded beta value of B = 0.124, t = 2.142, $p < 0.05$ with a variant of 12.4% and the last one is habit (HB) recorded beta value of B = 0.322, t = 4.330 $p < 0.05$ with a variation of 32.2%. Hence, the outcome marked that the independent variables which are performance expectancy, effort expectancy, social influences, facilitating condition, hendonic motivation, price value, habit act as important inputs for the prediction model.

4.5 Hypothesis Testing

The researcher measured significant values where to interpret the results that based on the proposed hypotheses been established in Chapter 3 previously. Hypothesis testing often used in statistics to identify the results of hypothesis that performed based on the sample data. The results of hypothesis testing will used to test the statistical sample for knowing whether the null hypothesis is accepting or rejecting. In this study of research, hypothesis test has been done to measure all variables using the data figure out through regression analysis. The outcomes that presented in Table 4.14 will be used to examine by measuring the significant value whether the value was lower or bigger than 0.05.

Hypothesis for Performance Expectancy

$H1_1$: There is a positive relationship between performance expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

$H1_0$: There is no relationship between performance expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between performance expectancy and behaviour intention during epidemic of Covid-19. The result marked significant value of performance expectancy factor, p = 0.000 which is lower than 0.05. This shown that performance expectancy has a significant relationship on behaviorial intention. Thus, $H1_1$ is accepted in this study of research. There is a positive relationship between performance expectancy and behaviorial intention during epidemic of Covid-19.

Hypothesis for Effort Expectancy

$H2_1$: There is a positive relationship between effort expectancy towards towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.
$H2_0$: There is no relationship between effort expectancy towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between effort expectancy and behaviour intention during epidemic of Covid-19. The result marked significant value of effort expectancy factor, p = 0.046 which is lower than 0.05. This shown that effort expectancy has a significant relationship on behaviorial intention. Thus, $H1_1$ is accepted in this study of research. There is a positive relationship between effort expectancy and behaviorial intention during epidemic of Covid-19.

Hypothesis for Social Influence

$H3_1$: There is a positive relationship between social influence towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.
$H3_0$: There is no relationship between social influence towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between social influence and behaviour intention during epidemic of Covid-19. The result marked significant value of social influence factor, p = 0.026 which is lower than 0.05. This shown that social influence has a significant relationship on behaviorial intention. Thus, $H1_1$ is accepted in this study of research. There is a positive relationship between social influence and behaviorial intention during epidemic of Covid-19.

Hypothesis for Facilitating Conditions

$H4_1$: There is a positive relationship between facilitating conditions towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

$H4_0$: There is no relationship between facilitating conditions towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Reject $H1_1$**

Table 4.14 revealed the relationship between facilitating conditions and behaviour intention during epidemic of Covid-19. The result marked significant value of facilitating conditions factor, p = 0.256 which is higher than 0.05. This shown that facilitating condition has a no significant relationship on behaviorial intention. Thus, $H1_1$ is rejected in this study of research. There is a no relationship between facilitating condition and behaviorial intention during epidemic of Covid-19.

Hypothesis for Hendonic Motivation

$H5_1$: There is a positive relationship between hedonic motivation towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

$H5_0$: There is no relationship between hedonic motivation towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between hendonic motivation and behaviour intention during epidemic of Covid-19. The result marked significant value of hendonic motivation factor, p = 0.000 which is lower than 0.05. This shown that hendonic motivation has a significant relationship on behaviorial intention. Thus, $H1_1$

is accepted in this study of research. There is a positive relationship between hedonic motivation and behaviorial intention during epidemic of Covid-19.

Hypothesis of Price Value

$H5_1$: There is a positive relationship between price value towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.
$H5_0$: There is no relationship between price value towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between price value and behaviour intention during epidemic of Covid-19. The result marked significant value of price value factor, p = 0.034 which is lower than 0.05. This shown that price value has a significant relationship on behaviorial intention. Thus, $H1_1$ is accepted in this study of research. There is a positive relationship between price value and behaviorial intention during epidemic of Covid-19.

Hypothesis of Habit

$H5_1$: There is a positive relationship between habit towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.
$H5_0$: There is no relationship between habit towards bingobox technology adoption consumers behavioral intention in malaysia during epidemic of covid-19.

- **Accept $H1_1$**

Table 4.14 revealed the relationship between habit and behaviour intention during epidemic of Covid-19. The result marked significant value of social influence factor, p = 0.000 which is lower than 0.05. This shown that habit has a significant relationship on behaviorial intention. Thus, $H1_1$ is accepted in this study of research.

There is a positive relationship between habit and behaviorial intention during epidemic of Covid-19.

4.6 Summary

As conclude, this chapter explains all the outcomes and data collected in this study. The data gathered were used to analyse quantitatively on total 150 respondents through Statistical Package for Social Science (SPSS Version 26). The analysis methods that used for analysing data gathered are descriptive analysis, correlation analysis, reliability analysis and multiple regression analysis. The researcher interprets and analyse the results for achieving research objectives been setup previously. Other than that, this chapter also reveals the results of hypotheses that have formed in Chapter 3. For the hypothesis testing, there are six hypotheses had been accepted in this research as the significant value, p is lower than 0.05. However, there is one hypothesis had been rejected as its significant value, p is larger than 0.05.

Table 4.15: Research Objective, Research Questions, Research Hypothesis and Result.

No.	Research Question	Research Objective	Research Hypothesis	Result
1.	RQ1: What are the level factor of bingobox technology adoption towards consumers behavioral intention in malaysia during	RO1: To measure the level factors of online restaurant menu order that will affecting consumers' purchase intentions during the		Descriptive Analysis, Mean, Standard Deviation, Crosstabulation, Cronbach's alpha

	covid-19 pandemic?	pandemic of COVID-19 among UTeM students.		
2.	RQ2: What are the relationships between the factor of bingobox technology adoption and consumers' purchase intentions during the pandemic of COVID-19?	RO2: To examine the relationship between the factors of online restaurant menu order and consumers' purchase intentions during the pandemic of COVID-19 among UTeM students.		Correlation Coefficient
3.	RQ3: What is the most significant factor of bingobox technology adoption that affecting the consumers' purchase intentions during the pandemic of COVID-19?	RO3: To determine the most significant factors of online restaurant menu order that affecting consumers' purchase intentions during the pandemic of COVID-19	H1: Performance expectancy appeal positively consumers behavioral intention. H2: Effort expectancy appeal positively consumers behavioral intention.	Supported Supported

		among UTeM students.	H3: Social influence appeal positively consumers behavioral intention in malaysia during covid-19 pandemic.	Significant
			H4: Facilitating conditions appeal positively consumers behavioral intention.	No significant
			H5: Hedonic motivation appeal negatively consumers behavioral intention.	Significant
			H6: Price value appeal positively consumers behavioral intention.	Significant
			H7: Habit appeal positively consumers	

			behavioral intention.	

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter will conclude all the findings of this study according to the data analysis outcomes in Chapter 4. The researcher will also conclude on whether the research questions meet the research objectives that have been formed previously. Besides, a discussion on the justification no matter the proposed hypotheses are accepted or rejected will be illustrated in this chapter. The researcher will also construct and present the limitation of this study. Lastly, the significant implications and the recommendations of this research will also be discussed in this chapter.

5.1 Discussion of Findings

5.1.1 Relationship Between Performance Expectancy and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Ogunsola and Olojo (2021), Performance Expectancy has been defined as an the belief that the use of particular technology or method will, to some extent, be advantageous or performance enchancing to the individual. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value performance expectancy is 0.769 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of performance expectancy factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.348$, $p = 0.000$). As a result, the hypothetical relation between performance expectancy and behavioral intention was accepted. This also proven that the predictor of performance expectancy significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Wyer et al. (2008) where the performance expectancy provide an important stimulus to pique customers' curiosity and intention to purchase. In addition, given that BingoBox technology can provide more benefits than traditional store to customers in terms of quick transactions, flexibility, efficiency and increased control (Ives et al., 2019; Polacco and Backers ,2018) . As referred to the data analysis of performance expectancy factor in Chapter 4, the item on 'Its helps me to get what I need more quickly' had the highest mean among all the items in performance expectancy. This shows that degree of behaviorial intention is influenced by the experience on quick transactions, flexibility, efficiency and increased control. Of BingoBox technology. Besides, the item 'The technology improves the quality of my life' was the second significant item that affects behaviorial intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed performance expectancy had a significant impact towards consumer behaviorial intention during the epidemic of COVID-19.

Furthermore, the expected increase in performance resulting form the users (Venkatesh et al., 2013), which therefore makes adoption of technology of BingoBox more favourable for people as long as it results in higher level performance according to Alshare et al.(2004). Consumers in this developing country believe that performance expectancy to be the element in BingoBox technology in behaviorial intention (Yang, 2010; Hongxia et al., 2014). BingoBox technology are the retail that has systems that easy to use means its involve less hassles, thus making it more user-friendly for the others (Venkatesh et al., 2013). Hence, performance expectency is a component that play a significant role to affect consumer behaviour intentions during the time of epidemic when they buying something in this store.

5.1.2 Relationship Between Effort Expectancy and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Venkatesh et al., 2003, Effort Expectancy has been introduced as the degree of ease asscociated wirh the use of the systems. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value effort expectancy is 0.724 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of effort expectancy factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.171$, $p = 0.046$). As a result, the hypothetical relation between effort expectancy and behavioral intention was accepted. This also proven that the predictor of effort expectancy significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Venkatesh et al., 2013; Kim et al., 2010; Tan et al., 2013 where the effort expectancy is established as one the factors for the consumer behaviorial intentions that influencing the consumer by mobile payment in the BingoBox store. In addition, the users would be more inclined towards mobile shopping services store because the technology of BingobOx is okay and user-friendly to everyone according to Alalwan et al., 2017; Preeti Talk,

2017; Ghazali et al., 2018. As referred to the data analysis of effort expectancy factor in Chapter 4, the item on 'Its make transaction more efficiant' and 'Its easy to use smartphone mobile payment' had the highest mean among all the items in effort expectancy. This shows that degree of behavioral intention is influenced by the experience on transaction by online payment. Besides, the item 'Its beneficial for me' was the second significant item that affects behavioral intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed effort expectancy had a significant impact towards consumer behavioral intention during the epidemic of COVID-19.

Furthermore, the in earlier people was considered mobile-based payments as a medium of convenien, but this status quo change due to the outbreak of COVID-19. According to Al-Saedi et al. (2020) and Hussain et al. (2019), the effect of effort expectancy on behavioral intention has been both supported. Next, Shin and Lee (2021) demonstrated that consumer can complete using BingoBox technology easily by using smartphone mobile e-wallet apps that making the transaction more efficient and also make consumer pay without any pain. Hence, effort expectency is a component that play a significant role to affect consumer behaviour intentions during the time of epidemic when they using smartphone e-wallet payment in this store.

5.1.3 Relationship Between Social Influence and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Venkatesh et al.(2003); Alraja (2015), Social influences defined as the degree to which that others (family, friends, peers and so on) believes either this believe are positive and negative will affect somone to use the new systems. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value social influence is 0.713 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of social influence factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.138$, $p = 0.026$). As a result, the hypothetical relation

between social influence and behavioral intention was accepted. This also proven that the predictor of social influence significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Venkatesh et al. (2003) where the social influence is people who close to an individual tend to affect that individual's technology usage trough their opinions which are considered to influential in form of construct. In addition, Social influence, Hongxia et al. (2011); Teo et al. (2012); Leong et al. (2013); Lu et al. (2017) discovered has positively impacts the behavioral intentions of users towards BingoBox technology. As referred to the data analysis of social influence factor in Chapter 4, the item on 'Some celebrities recommed' had the highest mean among all the items in social influence. This shows that degree of behavioral intention is influenced by the willing to use the BingoBox technology that has suggested to someone. Besides, the item 'People I consider important approach me to use the technology' was the second significant item that affects behavioral intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed social influence had a significant impact towards consumer behaviorial intention during the epidemic of COVID-19.

Furthermore, in context of BingoBox technology, recent studies has provided evidence that social influence positively affects behavioral intention to use (Hussain et el., 2019; Lee et al., 2019; Al-Saedi et al., 2020). According to Sinha et al. (2019), people in collectivist cultures are more concerned with others' attitudes towards new technology. BingoBox store has gained high popularity in China since several dominant mobile-based payment service like AliPay, Boost and WeChat Pay. In contrast, Alshare and Mousa (2014) demonstrated that people in Malaysia are influences to using the BingoBox technology by the celebrities or influencer regarding to use this technology store. Hence, social influence is a component that play a significant role to affect consumer behaviour intentions during the time of epidemic when someone or celebrities influencing their behaviour to use this technology in this store.

5.1.4 Relationship Between Facilitating Conditions and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Venkatesh et al. (2003, Facilitating conditions has been defined as extent people believes that an organizational and technical infrastructure exists to support the systems. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value facilitating conditions is 0.724 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of facilitating conditions factor with behavioral intention. This revealed that there was no significant and negative relationship among both variables ($\beta = 0.178$, $p = 0.256$). As a result, the hypothetical relation between facilitating conditions and behavioral intention was accepted. This also proven that the predictor of facilitating conditions has no significant effect the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

Based on the previous research studies, a strong and positive relationship between facilitating condition toward behavioral intention were stated (Venkatesh et al., 2003). As referred to the data analysis of facilitating conditions factor in Chapter 4, the item on 'I can figure out new technology service in this store without any help' had the highest mean among all the items in menu visual appeal. This shows that degree of behavioral intentions is influenced by the experience on the technology use that user-friendly to the consumer. Besides, the item 'I have no difficulty than others in using new technologies and improved functions' was the second significant item that affects consumer purchase intentions towards online restaurant. However, this study does not support the previous argument of positive relationship among facilitating condition and significant impact towards consumer behavioral intention during the epidemic of COVID-19.

Furthermore, as referred to the previous studies, they support the outcomes of this study which demonstrate the non-significant influence between facilitating condition factor and BingoBox technology of behavioral intention during epidemic (Chatterjee & Kumar Kar., 2020a; Syaifullah et al., 2021). As the uncertainty epidemic happened, financial considerations play an important role. According to Marcus and

Severin (2020), the influencing of missing cashier on store design will make people difficult to using the new technology of BingoBox store because of they cannot do the service without any helper inside there. Not only than that, this is does not automatically address all customer needs of BingoBox store. Hence, facilitating conditions is a component that play a not significant role to affect consumer behaviour intentions during the time of epidemic when they use the technology in this store.

5.1.5 Relationship Between Hendonic Motivation and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to venkatesh et al. (2003), Hendonic motivation is defined as the enjoyment or pleasure resulting form usage. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value hendonic motivation is 0.686 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of hendonic motivation factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.422$, $p = 0.000$). As a result, the hypothetical relation between hendonic motivation and behavioral intention was accepted. This also proven that the predictor of hendonic motivation significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Wyer et al. (2008) where the hendonic motivation has been found to influences technology acceptance and was used as a predictor of a consumer behavioral intentions. As referred to the data analysis of hendonic motivation factor in Chapter 4, the item on 'Using smartphone mobile payment provides pleasure' had the highest mean among all the items in hendonic motivation. This shows that degree of behavioral intention is influenced by the experience on mobile payment and interesting on using the technology of BingoBox. Besides, the item 'Its very interesting' was the second significant item that affects behavioral intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed

hendonic motivation had a significant impact towards consumer behavioral intention during the epidemic of COVID-19.

Furthermore, if the consumers feel happy or gain pleasure while using new technology, it possibility of continuing to use that technology is higher (Lin et al., 2022). According to Alalwan et al. (2017) and Baptista and Oliveira (2015), in consumers context, prior research has confirmed the positive effect of hendonic motivation on behavioral intention to use this BingoBox technology. Lin et al. (2022) demonstrated that when consumers experiences such enjoyable features of BingoBox technology, their intention to use this store can be stronger. Hence, hendonic motivation is a component of that make consumers feel addicted and consumers make goods experinces when they use this BingoBox technology.

5.1.6 Relationship Between Price Value and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Venkatesh et al. (2012), Price value has been defined as positive predictor of consumer behaviorial intention to use a technology in UTAUT 2 such that perceived benefits of using technology is greater than the perceived monetary cost incurred to use the technology. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value price value is 0.792 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of price value factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.124$, $p = 0.034$). As a result, the hypothetical relation between price value and behavioral intention was accepted. This also proven that the predictor of price value significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Wyer et al. (2008) where the price value provide an important stimulus to pique customers' curiosity and

intention to purchase. In addition, if the perceived advantages outweigh the monetary cost of the price in BingoBox technology store, consumers are more likely to be attracted to using this technology mobile payment on pleasure. As referred to the data analysis of price value factor in Chapter 4, the item on 'Items are reasonable price' had the highest mean among all the items in price value. This shows that degree of behavioral intention is influenced by the experience on mobile payment. Besides, the item 'I can save my money by shopping' was the second significant item that affects behavioral intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed price value had a significant impact towards consumer behavioral intention during the epidemic of COVID-19.

Furthermore, according to Venkatesh et al. (2012), in UTAUT 2 model, price value has been proposed to positively affect behavioural intention to use the mobile payment. Next, Baptista and Oliveira (2015), demonstrated that prior research has also found that price value was not factor determining behavioural intention to use new technologies such as mobile banking and BingoBox technology (Hussain et al. 2019). Given, the widespread use of this technology store in our daily life which is has affordable price of the items in there. Hence, price value is a component of the BingoBox store and play a significant role to affect consumer behavioral intentions during the epidemic of COVID-19 when they use this technology.

5.1.7 Relationship Between Habit and Behavioral Intention Towards Bingobox Technology Adoption During Epidemic of COVID-19.

According to Limayem et al. (2007), Habit has been defined as the tendency to perform certain behaviours automatically. Based on the findings obtained in Chapter 4 (Data Analysis), the researcher found out that the correlation value habit is 0.749 which shows a strong relationship toward dependent variable that is behavioral intentions. Moreover, the researcher also found out that there was a significant value ($p < 0.05$) of habit factor with behavioral intention. This revealed that there was a significant positive relationship between both variables ($\beta = 0.322$, $p = 0.000$). As a

result, the hypothetical relation between habit and behavioral intention was accepted. This also proven that the predictor of habit significantly affects the consumers' behavioral intention towards BingoBox technology during epidemic of COVID-19.

The findings were associated with the previous research by Limayem et al. (2007) where the habit several responden has been pointed out that the shopping technology store is necessity for them, than using the traditional one. As referred to the data analysis of habit factor in Chapter 4, the item on 'I like the service technology in this store more than traditional one' had the highest mean among all the items in habit. This shows that degree of behaviorial intention is influenced by the experience on using technology store of BingoBox. Besides, the item 'I must use the service technology in this store at least once in a week/month' was the second significant item that affects behavioral intention towards BingoBox technology. This was supported by the research from P. Brewer & A.G. Sebby (2021) that proposed habit had a significant impact towards consumer behavioral intention during the epidemic of COVID-19.

Furthermore, as the result of previous experinces , Lin et al. (2022) demonstrated that compared to traditional store methods, BingoBox store can provide consumers with a smoother, fresher and more diverse experiences to make them addicted to use the service technology. According to Pal et al. (2021), in line with UTAUT 2 model, habit can predict not only behavioral intention, but also actual use behaviour of BingoBox technology adoption which has been confirmed in a recent study. Hence, habit is a component of the BingoBox technology and play a significant role to affect consumer behaviour intentions during epidemic when they use BingoBox store technology.

5.2 Significant Implication of The Research

Based on the findings in Chapter 4, the implication of the study will discuss on the different implications which comprises of implication theoretical, implication managerial and implication government.

5.2.1 Implication of Theoretical Contribution

The findings of this study of research had successfully examined the dimensions of conceptual model by Brewer and Sebby in year of 2021. The constructs that discussed in this study were performance expectancy, effort expectancy, social influence, facilitating conditions, hendonic motivation, price value, and habit. The concurrent examination of these framework also helped to the understanding of how customers or consumers process information and formation of behavioral intentions, especially when they were in a circumstance that uncommon.

Based on the results, most of all the independent variables had shown significant positive relationship with behavioral intentions and only one independent virable was not significant relationship. Hence, mot of all the proposed alternative hypotheses were accepted in this study. The discussions and outcomes of this research were based on the study done by P. Brewer & A.G. Sebby (2021) where the author apply S-O-R model (Stimulus-Organism-Response) with is influencing the individual and this is external force that effect the mental state of individual to assess the behavioral intentions of consumers during epidemic of COVID-19. This study had contributed to enhance the literature knowledge regarding BingoBox technology adoption in Malaysia as this factor is still in emerging phase and lack of research.

5.2.2 Implication of Managerial Level

The findings of this studies in this research are helpful to understand and improve shopping experiences of consumer in BingoBox store. In particular, BingoBox store have to focused on creating a new integrated customer experience that depends on statisfying customer expectations. Specially, this store needs to properly define not only technologies they will invest in but also how they encourage the acceptance of the new technology. Hence, this is acceptance is an important predictor of behavioral intention.

As a result of this study, it can be said that BingoBox store should be carefull analyses consumers needs and expectations from this store to provide the best technology and expectations to consumers. The findings of this study cab support this store to aiming to implement an BingoBox store strategy. This strategy should be based on the consumer's viewpoint, provide an integrated shopping experience and increase customer statisfaction, and design an effective shopping model. Moreover, it is necessary design a systems that involves consumers. As a consumers learn to use this sytems and reap its benefits, it will become natural behaviour when the system's infrastructure problems are solved. It is essential to develop technical infrastructure to update and track product data regularly, ensure their consistency and match in-store data with the data by the other channels by integrated inventory systems. The BingoBox should raise awareness of their innovation through all channels and should work towards creating a positive brand image since organising campaigns is not sufficient alone. The critical implementation of BingoBox store is to ensure sustainable across to interacting with customers.

5.3 Limitation of The Study

There are some limitations that exist when the researcher conducts this research study. The first limitation identified is the researcher finds it difficult to conduct research as impacted by epidemic of COVID-19. This is undeniable that epidemic of COVID-19 relatively influences on the ordinary way for the researcher to carry out study of research. The MCO implementation by the Government had restricted the movement of the public and caused to the temporary shutdown of business operations except for essential services. According to the measurements been taken by the Government, it had caused the researcher's movement restricted for distributing questionnaires on site. Thus, the researcher had chosen to use online survey for distributing questionnaires to target respondents. Additionally, the researcher is difficult to obtain responses from target respondents for filling up questionnaire as the email been sent might often be ignored by them.

Apart from that, the second limitation of this study is the researcher assumes that all respondents have adequate knowledge for understanding the topic of BingoBox technology adoption towards consumer behaviorial intentions, thereby answering on this questionnaire. This is because the researcher did not know whether the respondents are clearly understanding on the questions and make responses in an honest way. Some of the respondents might simply fill up the questionnaire in rush time or some might answer without fully understanding the questions. Thus, this will affect the accuracy and reliability of data obtained from those respondents, thereby influence the whole data results of the study where it might not be comprehensive to represent the overall behaviorial intentions towards BingoBox technology during epidemic of COVID-19.

5.4 Recommendation for the Future Research

This study was limited to focus group interviews held by the consumers of BingoBox store in Malaysia. The findings obtained form this study are thus only valid for this store only and also this is lack of research about this BingoBox store in Malaysia. However, these findings can be used for future studies and enrich through other variables and statements by means of futher qualitative method study. This paper suggests some research concepts and themes to investigated behavioral intention of consumers in Malaysia as an emerging country. The findings provide a framework that composed of themes. These themes can be taken as a variable while developing in a new model in the future. Futher studies may include quantitative methods with a model in which moderating variable are used and may investigate this BingoBox store such as financial services and many more. As a result, future researchers may either add more variables into the current model in order to explore deeply about the decision-making process of consumers or adapt the model to different scenario in management of technology.

5.5 Summary

As conclude, this study of research has discussed the outcomes related to the factors of BingoBox technology adoption towards consumer behaviorial intentions in Malaysia during epidemic of COVID-19 by using the constructs from Brewer & Sebby's conceptual model. The findings concluded that the constructs used as independent variables such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influences (SI), Hendonic Motivation (HM), Price Value (PV), Habit (HB) and Facilitating Condition (FC) supported both correlation value and have a significant relationship toward dependent variable which is behavioral intentions during epidemic. The methods used in this study are for the aim to answer the research questions and achieve research objectives through conducting data analysis such as descriptive analysis, Pearson correlation analysis, reliability analysis, multiple regression analysis and hypothesis testing.

The discussion in this chapter reveals that the Performance Expectancy (PE), Effort Expectancy (EE), Social Influences (SI), Hendonic Motivation (HM), Price Value (PV), and Habit (HB) constructs have a positive yet significant, just only one independent (Facilitating Condition (FC)) was negative yet significant relationship toward behavioral intention of consumers during epidemic of COVID-19. Besides, this discussion also stated that the price value has a highly significant relationship towards behavioral intentions during this epidemic. Therefore, it was demonstrated that educating target consumers on items price of these technology store increased the likelihood of purchase. In a nutshell, the BingoBox should always keep updated with the technology features system as to increase the consumer behavioral intentions during the crisis of epidemic.

REFERENCES

42Gears Mobility Systems. (2019). *IoT in Retail | Beacons | Smart Shelves | Automated Checkout | Robots |*. [online] Available at: https://www.google.com/amp/s/www.42gears.com/blog/how-iot-is-changing-retail-industry/ [Accessed 14 Jun. 2022].

Ahuja, S. and Potti, P. (2010). An Introduction to RFID Technology. *Communications and Network*, 02(03), pp.183–186. doi:10.4236/cn.2010.23026.

Ajzen. (1991). Thetheory of planned behavior. *Organizational Behavior and Human DecisionProcesses*, 179-211.

Ajzen I, &Madden T J. (1986). Prediction of goal directed behaviors: Attitudes,intentions, and perceived behavioral control. *Journal of Experimental SocialPsychology*, 453-474.

Aladejebi, O. (2020). *Managing Small Businesses in Nigeriaduring Covid-19 Crisis?: Impact and Survival Strategies*. *22*(8),24–34. https://doi.org/10.9790/487X-2208012434

Bandura, A. (1977).Self-efficacy: toward a unifying theory of behavioral change. *PsychologicalReview*, 191–215.

Behera, R.K., Bala, P.K., Tata, S.V. and Rana, N.P. (2021). Retail atmospherics effect on store performance and personalised shopper behaviour: a cognitive computing approach. *International Journal of Emerging Markets*, ahead-of-print(ahead-of-print). doi:10.1108/ijoem-03-2021-0433.

Benbasat, Izak ,& Barki. (2007). Quo vadis, TAM? *Journal of the Association forInformation Systems*, 211-218.

Bro Framestone (2018). *BingoBox - First Humanless Retail Technology in Malaysia*. [online] BingoBox – First Humanless Retail Technology Launched in Malaysia. Available at: https://www.gabra.my/bingobox-first-humanless-retail-technology-launched-in-malaysia/ [Accessed 17 Jun. 2022].

Chang, A. (2012). UTAUT and UTAUT 2: A Review and Agenda for Future Research. *The Winners*, [online] 13(2), p.10. doi:10.21512/tw.v13i2.656.

Chang, Y.-W. and Chen, J. (2021). What motivates customers to shop in smart shops? The impacts of smart technology and technology readiness. *Journal of Retailing and Consumer Services*, 58, p.102325. doi:10.1016/j.jretconser.2020.102325.

Department of Statistics Malaysia. (2020). Report of SpecialSurvey on Effects ofCOVID-19 on Companies and Business Firms - Round 1. *Departmentof Statistics Malaysia*, *Round 1*, 5.https://www.dosm.gov.my/v1/index.php?r=column/cone&menu_id=RkJtOThJSlBJStOV1liM1JsKzdZUT09#

@dkshgroup. (n.d.). *Smaller convenience stores going big during COVID-19 pandemic*. [online] Available at: https://www.dksh.com/global-en/insights/smaller-convenience-stores-going-big-during-covid-19-pandemic.

Eva Yoo (2017). *Video: We tested one of China's unmanned stores and this is what we found . TechNode*. [online] TechNode. Available at: https://technode.com/2017/07/31/we-tested-china-unmanned-convenience-stores-bingobox/ [Accessed 17 Jun. 2022].

Field, A. (2013). *Discoveringstatistics using IBM SPSS Statistics.* CA: Sage Publications.

Field, A. (2013). *Discoveringstatistics using IBM SPSS Statistics.* CA: Sage Publications.

Heil, K. (2018). *Self Checkout: The Pros and Cons of Giving the Customer Control*. [online] Palmerretailsolutions.com. Available at: https://www.palmerretailsolutions.com/blog/self-checkout.

Hinkin,T. R. (1995). A Review of Scale Development Practices in the Study ofOrganizations. *Journal of Management, 21(5),* 967–

988.https://doi.org/10.1177/014920639502100509

Hoque, Siddiqui, B. A., Awang, Z.,& Baharu, S. M. A. (2018). Exploratory factor analysis of entrepreneurialorientation in the context of Bangladeshi Small and Medium Enterprise (SMES).*European Journal of Management and Marketing Studies*, *3*(2),81–94. https://doi.org/10.5281/zenodo.1292331

Hussain, M., Mollik, A.T., Johns, R. and Rahman, M.S. (2019), "M-payment adoption for bottom of pyramid segment: an empirical investigation", International Journal of Bank Marketing, Vol. 37 No. 1, pp. 362-381, doi: 10.1108/IJBM-01-2018-0013.

Lee, J. (2017). *BingoBox's AI-powered convenience store raises .7M in funding | Biometric Update*. [online] www.biometricupdate.com. Available at: https://www.biometricupdate.com/201707/bingoboxs-ai-powered-convenience-store-raises-14-7m-in-funding [Accessed 17 Jun. 2022].

Lee, J.-M., Lee, B. and Rha, J.-Y. (2019), "Determinants of mobile payment usage and the moderating effect of gender: extending the UTAUT model with privacy risk", International Journal of Electronic Commerce Studies, Vol. 10 No. 1, pp. 43-64, doi: 10.7903/ijecs.1644.

Lin, X., Suanpong, K., Ruangkanjanases, A., Lim, Y.T. and Chen, S.C. (2022), "Improving the sustainable usage intention of mobile payments: extended unified theory of acceptance and use of technology model combined with the information system success model and initial trust model", Frontiers in Psychology, Vol. 12, January, pp. 1-17, doi: 10.3389/fpsyg.2021.634911.

Na, T.K., Yang, J.Y. and Lee, S.H. (2021). Determinants of Behavioral Intention of the Use of Self-Order Kiosks in Fast-Food Restaurants: Focus on the Moderating Effect of Difference Age. *SAGE Open*, 11(3), p.215824402110319. doi:10.1177/21582440211031907.

Ogunsola, K. and Olojo, T.P. (2021). Towards Connected Governance. *Web 2.0 and Cloud Technologies for Implementing Connected Government*, pp.68–94. doi:10.4018/978-1-7998-4570-6.ch004.

Osong Public Health and Research Perspectives. (2012). *Osong Public Health and Research Perspectives*, 3(1), p.62. doi:10.1016/j.phrp.2012.03.003.

Park, H.J. and Zhang, Y. (2021). Technology readiness and technology paradox of unmanned convenience store users. *Journal of Retailing and Consumer Services*, p.102523. doi:10.1016/j.jretconser.2021.102523.

Porter et al.(2006). Using the technology acceptance model. *Journal of Business*,999-1007.

Rahah Hamidi, S., Muhamad Yusof, M.A., Mohamed Shuhidan, S. and Abd Kadir, S. (2020). IR4.0: unmanned store apps. *Indonesian Journal of Electrical Engineering and Computer Science*, 17(3), p.1540. doi:10.11591/ijeecs.v17.i3.pp1540-1547.

Rahah Hamidi, S., MuhamadYusof, M.A., Mohamed Shuhidan, S. and Abd Kadir, S. (2020). IR4.0: unmannedstore apps. *Indonesian Journal of Electrical Engineering and ComputerScience*, 17(3), p.1540. doi:10.11591/ijeecs.v17.i3.pp1540-1547.

Rahman,M., Ismail, I. and Bahri, S. (2021). Analysing consumer adoption of cashlesspayment in Malaysia. *Digital Business*, 1(1), p.100004.doi:10.1016/j.digbus.2021.100004.

Retail Insight Network. (2019). *BingoBox leads the space race in cashierless convenience retail*. [online] Available at: https://www.retail-insight-network.com/comment/bingobox-cashierless-stores/ [Accessed 14 Jun. 2022].

Retail News Asia. (2018). *First humanless retail store launched in Malaysia*. [online] Available at: https://www.retailnews.asia/first-humanless-retail-store-launched-in-malaysia/.

Rogers et al.(1995). *Hollis Harvard*. Retrieved from Diffusion of innovations:https://hollis.harvard.edu/primo-explore/search?vid=HVD2&sortby=rank&lang=en_US

SafetyCulture. (2022). *RetailTheft: How to Prevent Theft in Retail Stores*. [online] Available at: https://safetyculture.com/topics/retail-theft/ [Accessed 14 Jun. 2022].

Sarmah,R., Dhiman, N., & Kanojia, H. (2021). Understanding intentions and actualuse of mobile wallets by millennial: An extended TAM model perspective. Journalof Indian Business Research.

Saunders,M. N. K., Lewis, P., & Thornhill, A. (2016). *Research Methods forBusiness Students (7th Edition).* Pearson.

Sekaran, U. (2003). *Research Methods for Business.*Wiley

Shin, D. H. (2009). Towardsan understanding of the consumer acceptance of mobile wallet. Computers inHuman Behavior, 25(6), 1343–1354.

Shishah, W., &Alhelaly, S. (2021). User experience of utilising contactless paymenttechnology in Saudi Arabia during the COVID-19 pandemic. Journal of DecisionSystems, 1–18.

Skene. (2017). *Writinga Literature Review.* Retrieved from University of Toronto Scarborough:https://www.utsc.utoronto.ca/twc/sites/utsc.utoronto.ca.twc/files/resource-files/LitReview.pdf

Slade, E.L., Dwivedi, Y.K., Piercy, N.C. and Williams, M.D. (2015), "Modeling consumers' adoption intentions of remote mobile payments in the United Kingdom: extending UTAUT with innovativeness, risk, and trust", Psychology and Marketing, Vol. 32 No. 8, pp. 860-873, doi: 10.1002/ mar.20823.

Soodan, V., & Rana, A.(2020). Modeling Customers' Intention to Use E-Wallet in a Developing Nation:Extending UTAUT2 with Security, Privacy and Savings. Journal of ElectronicCommerce in Organizations (JECO), 18(1), 89–114.

Sun, W., Zhao, Y., Liu, W., Liu, Y., Yang, R. and Han, C. (2022). Internet of things enabled the control and optimization of supply chain cost for unmanned convenience stores. *Alexandria Engineering Journal*, 61(11), pp.9149–9159. doi:10.1016/j.aej.2022.02.053.

Surin Murugiah / theedgemarkets com (2018). *Scientific Retail eyes 500 retailers using humanless technology by end-2019*. [online] The Edge Markets. Available at: https://www.theedgemarkets.com/article/scientific-retail-eyes-500-retailers-using-humanless-technology-end2019 [Accessed 6 Jun. 2022].

Tan Heng Hong (2018). *A visit to BingoBox unmanned convenience store in KL | Mini Me Insights*. [online] Minimeinsights.com. Available at: https://www.minimeinsights.com/2018/11/02/a-visit-to-bingobox-unmanned-convenience-store-in-the-heart-of-kuala-lumpur/.

Thakur, R. and Srivastava, M. (2014), "Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India", Internet Research, Vol. 24 No. 3, pp. 369-392, doi: 10.1108/IntR-12-2012-0244.

Timmy Shen (2017). *BingoBox unveils new AI tech for its unmanned stores · TechNode*. [online] TechNode. Available at: https://technode.com/2017/09/28/bingobox-unveils-new-ai-tech-for-its-unmanned-stores/ [Accessed 17 Jun. 2022].

Triandis, H.C. (1995), Individualism and Collectivism, Routledge, New York, doi: 10.4324/9780429499845.

Un.org. (2011). *UN Office for Sustainable Development* |. [online] Available at: https://unosd.un.org/.

Venkatesh, V., Morris, M.G., Davis, G.B.and Davis, F.D. (2003), "User acceptance of information technology: toward aunified view", *MIS Quarterly*, Vol. 27 No. 3, pp. 425-478.

Venkatesh, V., Thong, J.Y.L. and Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), pp.157–178. doi:10.2307/41410412.

Visionify. (2021). *Facial Recognition Use Cases in Retail*. [online] Available at: https://www.google.com/amp/s/visionify.ai/facial-recognition-use-cases-in-retail/ [Accessed 14 Jun. 2022].

Viswanath Venkatesh,James Y. L, Thong , & Xin Xu . (2012). Consumer Acceptance and Use ofInformation Technology: Extending the Unified Theory of Acceptance and Use ofTechnology. *MIS Quaterly*, 151-178.

Wang, I-Chi., Liao, C.-W., Lin, K.-P., Wang, C.-H. and Tsai, C.-L. (2021). Evaluate the Consumer Acceptance of AIoT-Based Unmanned Convenience Stores Based on Perceived Risks and Technological Acceptance Models. *Mathematical Problems in Engineering*, 2021, pp.1–12. doi:10.1155/2021/4416270.

WHO. (2020). *NovelCoronavirus(2019-nCoV) Situation Report – 22.* WHO.World HealthOrganization. (2020). *Novel Coronavirus(2019-nCoV) Situation Report – 22.*WHO.

World Economic Forum. (2020). *TheGlobal Risks Report 2020.* https://www.weforum.org.

Xu, N., Hsu, P.-Y., Chang, Y.-W. and Kan, B.-L. (2021). Determinants of Unmanned Store Usage Intention Based on Situational Theory and the Technology Readiness Index. *SSRN Electronic Journal*. doi:10.2139/ssrn.3929828.

YourCash. (2018). *3 steps to reduce shop lifting and reduce employee theft in your store*. [online] Available at: https://www.yourcash.com/reduce-employee-theft-and-shop-lifting/ [Accessed 14 Jun. 2022].

APPENDIX 1: GANTT CHART FOR FINAL YEAR PROJECT 1

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

APPENDIX 2 : GANTT CHART FOR FINAL YEAR PROJECT 2

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

APPENDIX 3: QUESTIONNAIRE

THE FACTOR OF BINGOBOX TECHNOLOGY ADOPTION TOWARDS CONSUMER BEHAVIORAL INTENTION IN MALAYSIA DURING OF EPIDEMIC COVID-19.

Purpose of Survey:

The main purpose of this study is to analyzing the the factor of BingoBox technology adoption towards consumers behaviorial intention in Malaysia during epidemic of Covid-19. Result from this study will be used to build and improve the technology of BingoBox store.

Intructions:

This questionnaire consists of three (3) main sections. Please read the questions carefully and answer them with tick or in the space provided. The survey will take approximately 10 minutes to be completed and your participation is highly appreciated. Your response is important as it will contribute towards the behaviorial intention of BingoBox technology during of epidemic Covid-19.

For further clarification and/ or instruction, please contact:

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STATEMENT OF CONFIDENTIALITY

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

INVESTIGATE THE FACTOR OF BINGOBOX TECHNOLOGY ADOPTION TOWARDS CONSUMER BEHAVIORAL INTENTION IN MALAYSIA DURING OF EPIDEMIC COVID-19

SECTION A: DEMOGRAPHIC PROFILE

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

Please tick (✓) on the space provided.

1. Gender:

	Male
	Female

2. Education Level

	UPSR
	PMR
	SPM
	STPM
	Diploma
	Degree
	Master
	PhD

3. Occupation

	Self-employed
	Work at private sector
	Work at public sector

4. On average, how often did you use technology at BingoBox store during this epidemic?

	Several times a week
	Once a week
	Once every 2 weeks
	Once a month
	I did not use it

SECTION B: THE FACTOR OF BINGOBOX TECHNOLOGY ADOPTION TOWARDS CONSUMER BEHAVIORAL INTENTION DURING OF EPIDEMIC COVID-19

This section shows the questions that related to your experience when using BingoBox store during of epidemic Covid-19. Please rank your statement by using the appropriate scale. Please tick (✓) on the space provided.

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

Performance Expectancy						
Label	**I prefer to adopt BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
PE 1	The technology improves the quality of my life.					
PE 2	Can increases my shopping effectiveness.					
PE 3	Its helps me to get what I need more quickly.					
PE 4	Technical functions and service allow people to control their daily lives better.					
PE 5	The technology in bingobox enables me to get and pay with minimal effort.					

Effort Expectancy						
Label	**I use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
EE 1	Its easy for me to become skilful at using the technology.					
EE 2	I find technology is easy to use.					

EE 3	Its beneficial for me.					
EE 4	Its make transaction more efficient.					
EE 5	It is easy to use smartphone mobile payment.					

Social Influence						
Label	**I willing to use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
SI 1	My family members suggest to me.					
SI 2	Some celebrities recommend.					
SI 3	People I consider important approach to use the technology.					
SI 4	People serounding influential me.					
SI 5	People I deem important push me use the service technology.					

Facilitating Conditions						
Lable	**I use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
FC 1	I know how to use a service technology.					
FC 2	I already know how to use a technology					
FC 3	The store is compatible with other technology.					
FC 4	I have no more difficulty than others in using new technologies and improved function.					
F C 5	I can figure out new technology service in this store without any help.					

Hendonic Motivation						
Lable	**I use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
HM 1	Using smartphone mobile payment provides pleasure.					

HM 2	Optional services of a smartphone mobile payment company provide interest and satisfaction.					
HM 3	Its enjoyable.					
HM 4	Its entertaining.					
HM 5	Its very interesting.					

Price Value						
Lable	**I use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
PV 1	Items are reasonably priced.					
PV 2	Is worth the current item price.					
PV 3	The items are good value for the money.					
PV 4	The items has a good value within the current price.					
PV 5	I can save money by using shopping.					

Habit						
Lable	**I use BingoBox technology because;**	**1**	**2**	**3**	**4**	**5**
HB 1	Using a service technology in this store has become natural to me.					
HB 2	I am well accustomed to the use of service technology in this store.					
HB 3	I am addicted to using the service technology in this store.					
HB 4	I must use the service technology in this store.					
HB 5	I like service technology in this store more than traditional one.					

SECTION C: CONSUMERS BEHAVIOURAL INTENTIONS IN MALAYSIA DURING EPIDEMIC COVID-19

This section provides statements that reflect your behavioral intention to BingoBox Technology. Please rank your statement by using the appropriate scale. Please tick (/) on your answer.

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

Behavioral Intention						
Lable	**In my opinion,**	**1**	**2**	**3**	**4**	**5**
BI 1	The shopping experience provided by BingoBox store will increase my willingness to make purchases.					
BI 2	I may use BingoBox frequently in the future.					
BI 3	If I have opportunity, I will use BingoBox store.					
BI 4	I would recommend BingoBox store to others.					

BI 5	I would like to revisit BingoBox store.					

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 -