FACTORS INFLUENCING CONSUMERS’ INTENTION TO USE McDONALD’S SELF-SERVICE KIOSKS IN KLANG VALLEY

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ABSTRACT

This research aims to investigate consumers’ intention to use McDonald’s self-service kiosks in Klang Valley. The researcher tries to understand consumer buying behavior as well as perceived benefit factor that lead to their intention of using self-service kiosks in McDonald’s. The scope of research is targeting to the young adults as well as working adult in which they have the spending and self-earning power to pay their bills via bankcard or smartphone transaction. A total of 385 samples were collected from the Klang Valley areas including Berjaya University College campus as well as from outside through online questionnaires. From this study, three major factors lead to consumer intention to use self-ordering kiosk, which are perceived usefulness, perceived ease of use and perceived enjoyment. The findings could potentially contribute to the development and management of McDonald’s and any other fast food restaurant adapt self-service kiosks in their restaurant to increase customer dining experience and loyalty.

Keywords: Perceived usefulness, perceived ease of use, perceived enjoyment, intension to use.

INTRODUCTION

This study is to examine the factors influencing consumers’ intention to use Mc Donald’s self-service kiosks in Klang Valley. According to Hamacher (2017), there was a research poll showing that 93% of the consumer did not like to use self-checkout and the self-service technology. Hence, there is a need to understand what makes people intend to use McDonalds self-ordering kiosks rather than the traditional way of buying their food through cashier counter. Therefore, it is good to have a deeper understanding of the determinants of factor that lead to customer intention to use self-service kiosk in Klang Valley.
At a practical level, having the understanding on why Malaysians’ intention to use self-service kiosk provides a valuable lesson for different stakeholders. After knowing the point of view from customers, fast-food restaurants would be able to think of creative ideas to fulfill customer needs and wants significantly in order to stay competitiveness within a business world. In other words, the fast food restaurant would have their competitive advantage over the competitors such as KFC, Wendy’s and so on. It can sustain with the internal strategies to win over the competitor as they understand why people intend to use self-service kiosk and from there further improve their service to the customers to keep them satisfy.

Not only that, this study helps McDonald’s organization to understand the reason why people intend to use self-ordering kiosk from customers’ perspective. This is because; McDonald was the one who first came out the new technology in fast-food industry. They have the power and rights to change or modifier, and make some amendment according to customer preference. After reading through this study, they know what exactly consumers think and from there further improve so that they would stay longer with them. Additionally, for other fast-food restaurants who try to adopt the new technology, this study serves as a guideline for them to review the customer and understand their perception.

Moreover, this study provides another critical significance to the theoretical level. However, there were very few studies focused on consumer intention to use self-ordering kiosk in McDonalds which specifically in Malaysia. Thus, it can help the future researcher to use this research study to further investigate a deeper understanding of the consumer intention to use self-service kiosk. From this study, three major factors lead to consumer intention to use self-ordering kiosk, which are perceived usefulness, perceived ease of use and perceived enjoyment. From there, the future researcher could add on the latest factor to the relevant title from time to time and further strengthen the research content to deliver to the readers.

In addition, by understanding the consumer intention to use self-ordering kiosk, it serves as an education learning material to the college or university students. It would help the students to know about latest technology and consumers’ perception. Students can learn what are the latest consumers’ needs, wants, and their behaviours towards technology, instead of learning the old things in fast-food restaurants. Finally yet importantly, this study also provides contributions to the public. This study helps to generate better understanding of McDonald’s self-service kiosks. Companies like media, magazines or news may write information related in their publication to educate people in social platforms. For example, Business Times or BuzzFeed can make videos on “Reasons for using McDonalds’ self-service kioks” to help in the adoption.

Research Background

The evolution of technology delivers enormous advantage to a company, business, retailer, consumer, student, teacher, homemaker, elderly people, and teacher and so on. From the business perspective, advanced technology enable them to operate their business more efficiency and effectiveness through a systematic workflow (Pfano & Beharry, 2016). From there the business could create competitive advantage, compared to those businesses without the help of technology seems having some human errors in between delivering the service to their customers (Abdullah, Wahab & Shamsuddin, 2013). While consumers would prefer
error-free services, they would find technology helps (Al-Smadi, 2012). Technology creates a win-win situation where it provides the benefits in all aspect to everyone. For instance, technology enlightens human lifestyle such as Artificial Intelligent, Internet of Things, Service Robotic, Blockchain Technology, M-Wallet, Mobile Application, Self-Ordering Kiosks and so on (Cag, 2018). In this study, self-service kiosks are the main point that is focused. The term “self-service kiosks” is a stand-alone touch screen machine that enables customers to produce a service independently without employee involvement (Yang et al., 2014).

The objective of self-service kiosk is to provide usefulness to consumer when using the machine. However, technology based service is not always perceived useful at all the time in consumer perspective. According to Dabholkar & Spaid (2012), technology errors reduce the intention to use of self-service kiosks again. Because of the technical problem in the self-service kiosk, consumers find that the self-service kiosk is not useful and prefer having a human contact with the service crew (Cho & Fiorito, 2010). Self-service kiosk always provides ease of use features to the customer in order for them to easily adapt to use the technology. However, people see this statement differently as they always face difficulties when using it. According to Maugeri (2018), consumers always find it difficult to use because of lacking the knowledge in operating the system and without a clear understanding on using the technology. Besides, consumers may not find it easy to learn or easy to use as well (Jeong & Yoon, 2013).

Moreover, self-service kiosk provides enjoyment to consumers when processing their orders by the machine. However, people might not support this statement positively. According to Demoulin & Souad (2016), getting the service from the service crew and having communication, interaction, smile, eye contact, body language also considers as a kind of enjoyment, instead of looking at the machine without any facial emotion.

Research Objectives

1. To investigate the perceived usefulness of influence on consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

2. To examine the perceived ease of use of influence on consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

3. To identify the perceived enjoyment of influence on consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

Research Questions

1. How does perceived usefulness influence consumers’ intention to use McDonald’s self-service kiosks in Klang Valley?

2. How does perceived ease of use influence consumers’ intention to use McDonald’s self-service kiosks in Klang Valley?
3. How does perceived enjoyment influence consumers’ intention to use McDonald’s self-service kiosks in Klang Valley?

Research Hypothesis

H1: There is a positive influence between perceived usefulness and consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

H2: There is a positive influence between perceived ease of use and consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

H3: There is a positive influence between perceived enjoyment and consumers’ intention to use McDonald’s self-service kiosks in Klang Valley.

Figure 1: Conceptual Framework

LITERATURE REVIEW

McDonald Development and Evolution

A pair of brothers name Richard and Maurice McDonald founded McDonald’s in the year 1940 (Neate, 2015). The brother started up a McDonald’s Bar-B-Q restaurant in San Bernardino, which located in the city of California. Later on, the brothers decided to close down the restaurant for three month durations in order to renovate and redesign their menu and service so that, they can serve customers better. They reopened the restaurant with a new brand image that was McDonald self-service drive-in restaurant together with the new menu focused on only nine dishes which were hamburger as their brand core dishes, cheeseburger, soft drinks, milkshakes, coffee, and french fried in the year of 1948. Because of selling through milkshake to the customer, the brother bought 8 Multimixers from Roy Kroc which was a salesman in selling Multimixers in a supermarket. However, Roy Kroc felt happy of earning a good commission from McDonald’s brother and he thought that if he
could sell more Multimixer to them, he might earn an extra food commission. Therefore, he visited McDonald’s in San Bernardino and he got shock by their fast and simple operation that could produce a huge amount of burger with an affordable price. This was why they were successful in winning customer as they were able to serve customer in a short time period as the burger were cooked, wrapped and keep in under a heat lamps in the year of 1954. A year later, Roy Kroc joined McDonald’s as a franchise agent, brought over the restaurant chain from McDonald’s brothers in the year of 1955, and opened up his first restaurant in Des Plaines, which located in Illinois. During 1958, there were 100 types of burger sold by McDonald’s. As the sales were good and he decided to buy over McDonald’s equity with 2.7 million dollar from the brother and come out with new brand design with a Golden Arches at the year of 1961 (Our History, 2018). As to meet the consumer demand from all over the place, he opened more and more fast food restaurants all over the place and later the company was listed on the public stock exchange in order to promote their expansion through the worldwide (Sawe, 2018). With the success of McDonald’s, it now becomes a globalize restaurant in many countries include north and South America, Europe, Asia and Oceania as well (All around the world, 2018).

Back to Malaysia, the very first McDonald’s restaurant opened up at Jalan Bukit Bintang located in the heart of the city center of Kuala Lumpur in the year of 1982. Five year later, McDonald has started the drive-thru service at Jalan Pahang, which located in the area of Titiwangsa in the year of 1988 and this service slowly adapted to other McDonald’s franchise outlet in Malaysia. Later on, McDonald has introduced its delivery service by ordering through phone call in the year of 1994. In the year of 2001, McDonald has had form alliances with Mobil, which was an oil company at Seremban highway. When McDonald’s noticed that the changing trend in Malaysia consumer preference, and they found that Malaysian nowadays like to sit in a café and order a cup of coffee with their friends which was why McDonald introduced their McCafe in Kota Damansara, Malaysia in the year of 2012. Additionally, McDonald always keeps their eye on the changing demand from the consumers and due to noticing long queues every time, this is where McDonald wants to adopt cashless facilities in which they can pay through via their Debit or Credit card in self-ordering kiosks in the year of 2016 (History MCD Malaysia, 2018). According to Nokman (2017), there were a total of 265 McDonald’s outlets in Malaysia. However, not every MCD outlet was having self-service kiosk and only just 17 outlets had adopted the new technology (Locate Us, 2018).

**Intention to Use**

Intention to use as known as Behavioral Intention to use (BI) is a critical module where it constructs the two variables, which are perceived usefulness (PU) and perceived ease of use (PEOU), and this module derives from the technology acceptance model (TAM) which mainly focused on study the consumer intention to adopt the new technology currently (Dillon, Morris & Wlliam, 1996). According to Teo, Zhou & Noyes (2016), intention becomes an indication when people pack his or herself with readiness to perform a given behavior. Besides, human behavior normally preceded from one’s intention, meaning that intention is formed based on one’s attitude towards the behavior (Fishbein & Ajzen, 1975). According to Wong et al. (2013), a person will perform in such a specific behavior, it’s all determined by that person behavioral intention to carry out the behavior. Moreover, intention can be defined as a person’s inclination to pursue a particular behavior, showing a person commitment headed for a target behavior (Krueger &Brazil, 1994). In other words,
a person’s behavioral intention to use will trigger them to perform in a certain behavior in order to fulfil their desire outcome (Iqab, Hassan & Habibah, 2018).

According to Fishbein & Ajzen (1975), the researcher further defined intention as a measuring of strength to one’s intention to carry out a certain behavior. Therefore, a person with strength to explore more on technology, the intention tends to be higher in that sense. In short, behavioral intention means the degree of a person’s inclination to adopt a new technology (Tsai, 2012). It can be concluded that, behavioral intention (BI) always refer to an individual perceived chances or the subjective norms that a person plan to engage in to a given behavior.

In this research, the independent variables are perceived usefulness, perceived ease of use and perceived enjoyment. These three variables provide an answer of the reason to use new technology embedded by McDonald.

Perceived Usefulness and Intention to Use

According to Collier & Collier (2013), it has found that perceived usefulness has positive relationship with intention to use. While Wang (2012) further explained that perceived usefulness initially is influenced by perceived convenience and then affects customer satisfaction, which in turn has an impact on customer intention to use. Perceived usefulness is a significant factor towards consumers’ intention to use because the main reason for human to use technology is to leverage it to help us and minimize our effort and time. In other words, a technology that is not useful, it will not be likely to use. Therefore, perceived usefulness is a critical element that determines a person to adopt a technology system. There are also various studies that point towards perceived usefulness have positive influence on intention to use such as Lee et al. (2013)’s study on Self-Service Check-In (SSCI) booths in Singapore Changi Airport. He has found perceived usefulness positively influences the passengers’ intention to use SSCI.

In another study by Lee, Kim & Noh (2017), they also examined the influence factors on consumer intention to use mobile banking and the research figured out that perceived usefulness had positive influence on the intention to use mobile banking. The study was conducted structural equation model on 7-point likert scale with a sample of 328 respondents. The researchers further explained intention to use was influenced because of the convenience advantage, for example, consumer can check the amount balanced in their bank account through self-service and save time. Additionally, Jeong & Yoon (2013) found similar findings in study on mobile banking service that used descriptive study on 165 respondents. They double confirmed the validity of Lee, Kim & Noh (2017)’s research and proved that the results were consistent. Perceived usefulness was the most important factor that influenced consumers’ intention to use mobile banking service.

Moreover, according to Kabir, Saidin & Ahmi (2017), they studied on factors influence consumers intention to use electronic collection self-service system. The study was conducted on 55 employees of Nigerian federal hospitals. The study has extended TAM with facilitating conditions construct and the results have found that perceived usefulness positively influenced the employees to use e-collection self-service system. The respondents mentioned that the system was productivity and effective in helping them to work, which was why useful.
Furthermore, according to Daneji et al. (2017), they studied factors influence students’ intention to use MOOC (Massive Open Online Course) in a public university. The study was done in a multiple regression approach with a sample of 447 students in Malaysian Public Universities. The results have found that perceived usefulness have a significant strong relationship and positively influence the students’ intention to use MOOC as a preferred way to study.

In an addition, according to Herlina & Wibowo (2011), they studied factors influence consumers’ intention to use SST ticketing in cinemas. The study was conducted in multiple regression analysis, the method was non-probability sampling, and the selection of the sample was using purposive sampling on consumers in 21 cinemas. The study’s results have found that perceived usefulness had positive influence with consumers’ intention to use and the factor was among the greatest significance and influence. The researcher further explained that the speed of service delivered to consumer was useful as it helped to improve efficiency and effectiveness in buying ticket. Lastly, according to Iqbal, Hassan & Habibah (2017), they studied factors influence consumers’ intention to use SST in general. Respondents were selected as long as they have used SST before regardless in airports, shopping, banking or any. The study was conducted in non-probability sampling with purposively sampling on a sample size of 238. The results were then analysed with structural equation modelling by using LISREL. The results have concluded that perceived usefulness had positive influence to consumers’ intention to use in general terms.

**Perceived Ease of Use and Intention to Use**

According to Aboelmaged & Gebba (2013), consumers are concerned of the effort needed to pay when use the technology as well as the complexity level of using new technology. Therefore, perceived ease of use become one of a critical factor towards intention to use because of the technology is simple to use with clear instruction, the higher intention to use the technology in their life (Gunawardana, Kulathunga & Perera, 2015). According to Kattara & Said (2014), perceived ease of use shows a strong relationship with customer’s intention to use technology. This is because, when the technology or system are easy to use to all people such as self-service Laundromat, the step for consumer are tends to be easier to understand and operate in which to helps consumer to cut short in many process and straightforward system enable people to understand directly (Collier & Kimer, 2013).

There are several researches done that point towards the relationship such as the study by Mensah (2016). He studied perceived ease of use on intention to use e-government service in Ghana. The study was conducted in qualitative and quantitative approach and administered to 700 respondents. The results have found that perceived ease of use positively influenced the respondents’ intention to use the service. This is because; people ease of use helped them minimize their time. People also believed that self-service technology enable them to get their service within a short time period as it is easy to use and little effort needed to operate the technology (Considine & Cormican, 2016). Moreover, according to Raza, Umer & Shah (2017), they studied perceived ease of use for mobile banking adoption. The research was conducted in structural equation modeling with a sample size of 300 users. The researcher found that perceived ease of use had significant positive relationship and positively influenced consumers’ intention to use mobile banking services. The research findings were similar to Abdullah et al. (2017), a study on hotel online booking intention and the researcher concluded that perceived ease of use positively
influenced consumer intention to use hotel website to book for their accommodation. The researcher further explained that more people would book a room with the hotel due to the perceived ease of use of the hotel website deliver to consumer.

Furthermore, according to Wong (2017), he studied factors influencing staff acceptance and intention to use lecture capture system (LCS) using TAM model. It was conducted on 86 responses on lecturers and concluded that perceived ease of use has positive influence on intention to use. Lecturers having more intention to use lecture capture technology as it free them from effort to set-up the devices and shorten the time to start with lecture capture system. The lecture do not see to set-up with the technology as a burden rather than easy to use that assist them in record every student behavior. In an addition, according to Tanduklangi (2017), he studied on intention in adopting e-learning technology in Indonesia. The research was done using structural equation model of Smartpls 2.0 and on 368 respondents. The results figured out that perceived ease of use had strong influence on students’ intention to use. The researcher further explained that the easier of the e-learning programme, the more intention that they use as part of their learning process. Besides that, according to Cho (2015), he studied on purchase intention in online platform and the researcher figure out that perceived ease of use of online store positively influences consumer intention to purchase online. The research was done in multiple regression model and structural equation model with 260 respondents. The research explained that consumer would like to search for their favourite item via internet, and from there, the simplified purchase step to buy the item trigger them to buy online rather than a physical store with petrol and troll fees additionally. Lastly, according to Setiawan, Setyohadi & Pranowo (2018), they studied on customer intention to use social media as a complaint platform. The study was done in structural equation modelling using AMOS and the sample size was 222 and the researcher concluded that perceived ease of use having positive influence towards consumer intention to use social media as a complaint platform. However, according to Kurkinen (2014), a study shows that there is a weak positive relationship between perceived ease of use and intention to use. He further explained that although self-check-in machine at the airport that enable people to print the boarding pass in just a few simple step and yet people might not see this an important factor that using self-service kiosk as their first choice as sometimes they might encounter technology errors.

Perceived Enjoyment and Intention to Use

Perceived enjoyment leads people to using the technology due to feeling more interesting and satisfying of completing the process. Consumers tend to use a technology if it is look more enjoyable and attractiveness (Dabholkar, 1996). Perceived enjoyment in technology based application having a direct positive effect on consumer intention to use. When a technology in service based purposes deliver the enjoyment element to the user, more likely people will feel excited towards using the new technology (Ulaan, Pangemanan & Lambey, 2016). A self-service technology equip with enjoyment element for consumer to try, more likely people will feel satisfy and will repeat the behavior (Norazah & Norbayah, 2011). Perceived enjoyment towards technology having a positive effect on intention to use technology based self-service system (Dabholkar & Bagozzi, 2002). A consumer feel interesting and good of using the technology as it show the attractive picture and content looks more interesting thus, perceived enjoyment arise and trigger them to experience again (Iqbal, Hassan & Habibah, 2017). According to Kim, Christodoulidou & Choo (2013), the researcher found that intrinsic motivation showing weak positive relationship towards
intention to use self-service kiosk at quick service restaurant. It is not always the intrinsic motivation having positive effect on intention to use self-service kiosk instead of technical error. According to Zhu et al. (2013), self-service technology will fail sometimes because of technical problem that cannot be predict when will happened thus, consumer facing with this kind of issue will having lesser intention to use self-service kiosk rather than cashier counter.

According to Praveena & Thomas (2014), the researchers explained that a consumer feeling kind of enjoyment would have a significant impact on intention to use it again. It goes to SST, if a consumer is feeling enjoyable while using the technology to food ordering, the chances to reuse the technology are higher. Whenever consumers feel good of using the technology, they find it interesting rather than employee without any facial expression. They are intended to deal with animation and colourful stuff that enlighten their food ordering process (Chang, 2018). There are also other researches that have been done towards the relationship such as Chin & Ahmad (2015)'s study on perceived enjoyment on consumer intention to use e-payment in Malaysia. The research was conducted on structural equation modelling with a sample size of 389 respondents and the researcher figured out that there was a significant relationship and positively influence between perceived enjoyment and consumer intention to use. The research finding mentioned that the e-payment system was interesting and deliver enjoyable to the consumer, they are more likely to adopt e-payment in the next purchase in any retail store if the e-payment service is available.

Moreover, the research findings similar to Lee, Fiore & Kim (2006)’s study on image interactivity technology and the researcher found that perceived enjoyment strongly influence on consumer intention towards an online retailer. The data was collected from 206 respondents using a between-subject experimental design. The researcher further explained that hedonic online shopping experience affects the factor of perceived enjoyment whenever shop in the website, consumer feeling differently. Furthermore, according to Yang et al. (2016), they studied TAM model on wearable device technology. The research was conducted on descriptive statistics with a sample of 201. The researchers found that perceived enjoyment had strong influence to consumer intention to use. The researcher further explained the technology should be fun enough and makes people feel pleasure whenever use it, therefore, people will continue use it for many times. Lastly, according to Balog & Pribeanu (2016), they studied on augmented reality educational system. The research was done on 186 students and analysed using structural and measurements models and the researcher found that perceived enjoyment had significant positive influence towards the intention to use of augmented reality educational system. Perceived enjoyment in terms of pleasure, it is a determinant for people intention to use a technology. If a technology is bored without much of feeling enjoyable, they are no longer to use the technology in future time. The same goes to SST, the pleasure element must be included in order to ensure consumers enjoy of using the technology and continuance to reuse was high.

RESEARCH METHODOLOGY

Research Design

A research design serves as a scheme for collecting, measuring and analysing of data, based on the research questions of this research. In this study, quantitative research was used. The objective of using quantitative research was to create and utilize the mathematical models,
theories and hypotheses based on the study conducted. Using quantitative research enabled the researcher to measure and analyse data easier where the researcher could test the hypotheses by using statistics. The nature of this study was a causal study. It was a scientific research approach where researcher could examine the cause and effect relationship between variables. The causal study tested whether one variable sparked another variable to change. By using this method, the researcher could investigate on controlling the hypothesized independent variables and dependent variable. In this study, the researcher would like to find the extent and nature of cause and effect relationship between the factors (perceived usefulness, perceived ease of use and perceived enjoyment) and intention to use.

**Sample and Sampling Method**

Probability sampling technique was used in this study. It means that each sample had an equal chance to be selected (Walliman, 2011). The reasons for using this technique were due to large and diverse population size and aimed to create an accurate unfair representation samples. While the benefits for using this were that, they are cost-effective and timesaving especially when the researcher had a limited timeframe to conduct the research.

The target population of this research was the consumers living in Klang Valley. Consumers in any gender or status could be one of the respondents as demographic characteristics were disregarded in this study as it would be biased to one social category where in actual consumers can be at all social groups, in fact, this research aimed to target at a variety types of consumers for data integrity. However, the population was still narrowed down to Malaysians that were 18 years old and above for presenting a better quality of data as children might not have the qualification to answer the question such as phones and mentality readiness to answer.

According to The Malaysian Reserve (2017), statistics estimated that Klang Valley had a population of approximately 7.2 million. Therefore, choosing the right sample size was crucial here in order to avoid resources wastage when the size was huge (Sekaran & Bougie, 2013). Using a sample size calculator (Survey System, 2012), a minimum of 385 respondents are needed at:

- 7,200,000 population
- 95% confidence level
- 5 confidence interval (margin of error)

**Data Collection Method**

Primary data source is the original data that the researcher collects first hand data for a certain purpose of the study. Therefore, 385 samples were collected from online questionnaire. In this research, secondary data was collected mainly based on government publications, case studies, journal articles, company websites, e-news and so on. The core instrument that was adopted in this research was questionnaire and the questions were created in both close-ended and open-ended form. This was because it would be much easier for respondents to answer and at the same time, to make it clear of their responses. Moreover, it created an advantage to the researcher to analyze the data more accurately and gained the insight information from researcher. The variables in the study such as perceived
usefulness, perceived ease of use and perceived enjoyment were measured by using 5-point Likert Scales to ask the respondent with a series of statement within the topic in which they feel agree or disagree with the statement (Kumar, 2011).

**Data Processing Method**

Data processing is a way to transform raw data into useful information. In between the data processing method, it consists of data input, data sorting, processing data, analyse the data and the final step is making into a summary and show as data presentation (Saunders, Lewis & Thornhill, 2012). The researcher used this method would get an in-depth information that described the current situation and helped them to make a correct decision to revise it back to the right track. Data processing was done through using Statistical Package for the Social Sciences (SPSS) and it was a software that used by researcher in calculating complicated statistical data analysis in the study (Cooper & Schindler, 2014). The statistical data analysis helped to produce descriptive statistics such as frequencies, charts, plots and list and also inferential statistics such as variance, factor analysis, cluster analysis, categorical statistics and so on (Williamson & Johanson, 2017). It was a user-friendly tool for the researcher to manipulate their data into useful information and helped them in making a better decision. Data analysis is a process to analyse the primary data and identify whether the hypotheses have been supported by the result itself. In this phase, SPSS was fully utilised in order to calculate the complicated data that had been collected (Sekaran & Bougie, 2009).

**Validity and Reliability**

**Table 1: Reliability Test**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>No of Items</th>
<th>Cronbach's Alpha</th>
<th>Level of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All Variables</td>
<td>19</td>
<td>0.973</td>
<td>Excellent</td>
</tr>
<tr>
<td>2</td>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Intention to use</td>
<td>4</td>
<td>0.947</td>
<td>Excellent</td>
</tr>
<tr>
<td>3</td>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Perceived Usefulness</td>
<td>5</td>
<td>0.947</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>• Perceived Ease of Use</td>
<td>5</td>
<td>0.961</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>• Perceived Enjoyment</td>
<td>5</td>
<td>0.945</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

According to Saunders et al. (2012), Cronbach’s Alpha will be adopted to test the internal data consistency. Based on Table 4.10, the Cronbach’s Alpha for all variables is 0.973, which it shows that there is a high level of internal consistency in this study. The highest alpha value among the independent variable is Perceived Ease of Use (0.961), followed by Perceived Usefulness (0.947) and Perceived Enjoyment (0.945). Furthermore, Intention to use, the dependent variable, has the moderate high alpha value (0.947) among all variables. Hence, the entire variables are reliable and acceptable in this study because the coefficient alpha value for all variables has over 0.7.
RESULTS AND FINDINGS

Descriptive Analysis

In this survey, the number of male respondents is more than female respondents. The frequency of male respondents is 221 (57.6%), whereas female respondents are 163 (42.4%).

Majority of the respondents are the age group between 18 to 24 years old which it represents 180 of them with 46.9 percent. The following group falls under the age group of 25 to 31 years old with it represent 93 of them with 24.2 percent. Next, the age group between 32 to 38 years old which it represent 57 of them with 14.8 percent. The age group between 39 to 45 years old which it represent 27 of them with 7.0 percent. Moreover, the age group between 46 to 52 years old, which represents 18 of them with 4.7 percent. Lastly, the age group between 53 years old and above which it represent 9 of them with only 2.3 percent.

There are 331 respondents is Malaysian with the percentage of 86.2, whereas there are 53 of the respondents is Non-Malaysian with the percentage of 13.8.

There are 168 respondents in the employment status with the highest percentage is ‘Student’ at 43.8 percent. There are 141 respondents with the second highest percentage of employment status is ‘Employed’, which is at 36.7 percent. There are 40 respondents with the third highest percentage of employment status is ‘Self-Employed’, which is at 10.4 percent. ‘Unemployed’ follow this, which only has 7.6 percent with 29 respondents. The lowest percentage of employment status is ‘Retired’, which has 1.6 percent with only 6 respondents.

There are 135 respondents with the highest frequency of education level is ‘Undergraduate’ at 35.2 percent. Followed by the category of ‘secondary school’, there are 105 respondents fall under this category with 27.3 percent. Next, there are 79 of the respondents under Foundation/Diploma with 20.6 percent. Lastly would be Postgraduate, as they are 65 respondents who is under this category with 16.9 percent.

Respondents’ monthly income less than RM1000 have the highest frequency whereby there are 162 of the respondents fall under this category with 42.2 percent. Secondly, there are 72 of the respondents fall under this category of RM 4001 and above is the second highest in frequency as it occupies 18.8 percent. Followed by RM 2001- RM 3000, there are 54 respondents fall under this category with 14.1 percent. Next will be the category of RM 3001- RM 4000 as they are 51 respondents with 13.3 percent. Lastly, would be RM 1001-RM 2000, as there are 45 of the respondents with 11.7 percent.

Frequency of visiting McDonald’s in a month. At 37.5 percent, which it represent 144 of the respondents, have visit McDonald’s for 2-3 times in a month. At 27.9 percent, which it represent 107 of the respondent, have visited McDonald’s for 4-5 times in a month. At 21.9 percent, which it represent 84 of the respondent, have visited McDonald’s for 0-1 times in a month. At 11.5 percent, which it represent 44 of the respondents, have visited McDonald’s for 6-7 times in a month. At 1.3 percent, which it represent 5 of the respondent, have visited McDonald’s more than 7 times in a months.
Respondents’ frequency of using McDonald’s SST in a month shows the proportion of how frequent the respondent used McDonald’s SST in a month. At 54.4 percent, which it represent 209 of the respondents, have used McDonald’s SST for 0-1 times in a month. At 35.4 percent, which it represents 136 of the respondents, have used McDonald’s SST for 2-3 times in a month. At 7.8 percent, which it represent 30 of the respondents, have used McDonald’s SST for 4-5 times in a month. At 2.3 percent, which it represent 9 of the respondents, have used McDonald’s SST for 6-7 times in a month.

Normality Test

According to Hair et al. (2007), the skewness value have fall within the range of -3 < skewness < 3, as for the kurtosis values, it has to within the range of -10 < kurtosis < 10. Based on Table 4.11, the lowest skewness value was -0.788 and the highest skewness value was -0.303, meanwhile, the lowest kurtosis value was -1.293 and the highest kurtosis value were -0.451. Based on the results, we can state that the data was normally distributed.

Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Perceived Usefulness</th>
<th>Perceived Ease of Use</th>
<th>Perceived Enjoyment</th>
<th>Intention To Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Usefulness</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>384</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Ease of Use</td>
<td>Pearson Correlation</td>
<td>.728**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>384</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>Pearson Correlation</td>
<td>.649**</td>
<td>.656**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>384</td>
<td>384</td>
<td>384</td>
</tr>
<tr>
<td>Intention To Use</td>
<td>Pearson Correlation</td>
<td>.814**</td>
<td>.775**</td>
<td>.780**</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>384</td>
<td>384</td>
<td>384</td>
</tr>
</tbody>
</table>

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

Pearson’s correlation was carried out to discover the relationship between consumer intention to use McDonald’s SST and the independent variable included perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment. According to Saunders et al. (2012), the result was considered as statistically significant when p-value is less than or equal to 0.05. The p-value (sig.) of the correlation between independent variables (perceived
usefulness, perceived ease of use and perceived enjoyment) and the dependent variable (Intention to use) is less than 0.05. This result shows that there is a significant relationship between the variable. From the result, it has shown that the positive value of correlation coefficient indicates the relationship between each independent variable with dependent variable is positively related. All the correlation coefficient has shown greater than 0.7, which is proven that the relationship is strong.

It shows that there was a positive linear relationship between perceived usefulness and intention to use ($r=0.814$, $n=384$, $p<0.05$). The result was supported with the study done by Wang (2012) as they have concluded that perceived usefulness was one of the critical factors that trigger consumer intention to use the technology as consumer perceived usefulness of the food application brings the convenience to them, increase customer satisfaction indirectly and hence their intention to use the ordering application will be relatively higher. The result is also similar to Renny (2013); Redzuan et al. (2016); and Kian et al. (2017), which all these studies concluded that perceived usefulness has positive relationship with intention to use as it will influence consumer continue using McDonald’s SST in every single order.

Followed by the second variable, the table has shown that there was a positive linear relationship between perceived ease of use with intention to use ($r=0.775$, $n=384$, $p<0.05$). The result is similar to the results by Mensah (2016); Abdullah et al. (2017); Raza, Umer & Shah (2017); Wong (2017), which these studies concluded that perceived ease of use has direct and positive relationship with intention to use as it can affect the consumer reusing SST in the next transaction with McDonald’s.

Comes to the third variable, it has shown in the table above to states that there was a positive linear relationship between perceived enjoyment and intention to use ($r=0.780$, $n=384$, $p<0.05$). The results can be supported by the similar studies that done by Chin & Ahmad (2015); Lee, Fiore & Kim (2006); Chang (2018), which these studies concluded that perceived enjoyment has a direct and positive relationship with intention to use as consumer tends to see a colourful picture menu rather than facing a staff without facial expression will further trigger them to continue using McDonald’s SST in every order.

### Multiple Regression Analysis

**Table 3: Multiple Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.903 $^a$.798 .796 .58533 .798 499.427 3 380 .000 1.770</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Perceived Enjoyment, Perceived Usefulness, Perceived Ease of Use  
b. Dependent Variable: Intention To Use

According to Table 3, the R square value is 0.798 that it indicated that 79.8% of the variance in factor influencing intention to use. At the same time, the remaining 20.2 % of the variance in factor influencing intention to use are explained by unknown factors.
Table 4: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>513.326</td>
<td>3</td>
<td>171.109</td>
<td>499.427</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>130.192</td>
<td>380</td>
<td>.343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>643.518</td>
<td>383</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intention To Use
b. Predictors: (Constant), Perceived Enjoyment, Perceived Usefulness, Perceived Ease of Use

Referring to Table 4, it has shown that a significant regression equation was constructed as [F (3,380) = 499.427, P<0.05]. Since the significance level is less than 0.05, this shows the conceptual framework can be used and it was considered good-fit to the analysis.

Table 5: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.065</td>
<td>.100</td>
<td>.401</td>
</tr>
<tr>
<td></td>
<td>Perceived Usefulness</td>
<td>.409</td>
<td>.036</td>
<td>.249</td>
</tr>
<tr>
<td></td>
<td>Perceived Ease of Use</td>
<td>.253</td>
<td>.036</td>
<td>.356</td>
</tr>
<tr>
<td></td>
<td>Perceived Enjoyment</td>
<td>.392</td>
<td>.036</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intention To Use

As shown in Table 5, there is influence between the three independent variables to the dependent variable. Perceived usefulness has a positive significant impact towards Consumer Intention to Use McDonald’s SST (β=0.409, n=384, p<0.05). Thus, H1 is not rejected. This result findings is similar to Lee at al. (2013); Gunawardana, Kulathunga & Perera (2015); Iqbal, Hassan & Habibah (2017), they analysed that there is an influence of perceived usefulness toward consumer intention to use, for example, consumer perceived usefulness where they believe that using self-service technology will brings the convenience to them as they can order the food at any time without waiting the other staff to serve them, therefore, it is somehow perceived usefulness of a technology (Lee at al., 2013; Gunawardana, Kulathunga & Perera, 2015), in other words, if the SST can customize the food according to consumer demand which is consider as technology perceived usefulness to them (Iqbal, Hassan & Habibah, 2017). Besides, the result finding has also support the studies done by Lee, Kim & Noh (2017); Kabir, Saidin & Ahmi (2017); Daneji et al. (2017), they found that aside from convenience, system effectiveness and efficiency will enhance consumer ordering process directly.

As for the beta value of perceived usefulness is 0.409, it is the highest compared to the beta value of perceived ease of use (β=0.253) and perceived enjoyment (β=0.392). This indicated perceived usefulness has the highest influence among the three factors toward
Consumer Intention to Use SST in McDonald’s. The studies of Jeong & Yoon (2013); Herlina & Wibowo (2011) have proved that the perceived usefulness is the most important determinant to the consumer intention to use, which it is similar to the result finding as it indicated that perceived usefulness has the strong influence towards consumer intention to use as compared to perceived ease of use and perceived enjoyment.

Besides, perceived ease of use has a slightly positive significant impact towards Consumer Intention to Use McDonald’s SST ($\beta=0.253$, $n=384$, $p<0.05$). Thus, H2 is not rejected. The result finding is similar to the studies done by Gunawardana, Kulathunga & Perera (2015); Aboelmaged & Gebba (2013); Kattara & Said (2014), they analysed that there is an influence of perceived ease of use towards consumer intention to use, for example, the more easy to use a technology, the more consumer intention to reuse the technology whenever it is available (Gunawardana, Kulathunga & Perera, 2015; Aboelmaged & Gebba, 2013), in another words, the more easier to understand on how to use the ordering application, it will simplify the ordering process to be more faster (Kattara & Said, 2014). Besides, the result finding has also support the studies done by Tanduklangi (2017); Cho (2015); Setiawan, Setyohadi & Pranowo (2018); Mensah (2016), they found that perceived ease of use positively influence consumer intention to use as they see the simple step in using the technology and less depends on others helps, consumer having much more intention to use the technology again.

Perceived enjoyment has a moderate positive significant impact towards Consumer Intention to Use McDonald’s SST ($\beta=0.392$, $n=384$, $p<0.05$). Thus, H3 is not rejected. The result is similar to the studies done by Dabholkar (1996); Ulaan, Pangemanan & Lambey (2016); Marandi, Chudry & Kancharla (2014), they discovered that the perceived enjoyment can influenced the consumers’ intention to use in terms of feeling enjoyable to order the food and having the intention to reuse the technology. In addition, various research such as Norazah & Norbayah (2011); Dabholkar & Bagozzi (2002); (Iqbal, Hassan & Habibah, 2017); Yang et al. (2016); Balog & Priebeanu (2016), their studies have shown the engagement of the technology application, they will learn more enjoyable during the adoption process of a technology as they discover more colourful and interesting image or function that makes them feeling a kind of fun.

CONCLUSION AND RECOMMENDATION

The competitive environment makes people feel nervous surround them, slowly they influenced by the society and become a part of them live in the fast track lifestyle every day. To them, time is money and they do not have much time to wait in a long queue rather than just using food-ordering kiosk to order the food by them as they have full control of the time using the technology to food ordering. As the consumer service is become more demanding, they are no longer with much time to wait in a long queue just for a meal, rather than search for other restaurant, which can fulfil their stomach within a short time. At the same time, customer swift their favour to use SST rather than waiting for the staff to serve because of the technology change. However, not much restaurant adopted the new SST to serve customer and yet they leave customer wait in a long queue. As time goes by, customer no longer patient to wait for the food, and loyalty are no longer there. The business sales are drop because of running out of customer. In others words, if a business can serve customer quickly in a short time period, it had met the operation efficiency and maximise customer satisfaction. Hence, it is significance for the restaurant owner to understand which factor can
influence in customer’s intention to use SST and provide a better solution to prevent customer dissatisfaction occur. Although the study emphasized in food and beverage industry, the results of the findings can benefit any business to understand which factors may influence the customer running to other restaurant.

In this research, there were a total of three research objectives to be met. Through the data analysis and findings, all the three research objectives have been met. The first research objective was to study the influence between perceived usefulness towards intention to use. Throughout the findings, we get to understand that independent variable – perceived usefulness; has positive influence towards consumer intention to use as the results of findings has shown earlier in the previous chapter. The findings show that perceived usefulness has direct and positive influence towards consumer intention to use as perceived usefulness is recognized as a necessary foundation that positively increase or enhance consumer intention to use SST.

The second research objective was to study the influence between perceived ease of use towards consumer intention to use. Throughout the result from the findings in the chapter earlier, the researcher has met the second research objective by knowing the independent variable - perceived ease of use; has positive influence towards consumer intention to use. Therefore, this research has concluded that perceived ease of use was the major factor that influences consumer intention to use SST.

The last research objective was to study the influence between perceived enjoyment towards consumer intention to use. From the result of the findings, the researcher has met the third research objective as it shown that the independent variable – perceived enjoyment; has positive influence towards consumer intention to use. Therefore, the findings of this research obtained that perceived enjoyment has a direct influence towards consumer intention to use.

The finding of this research are advantageous to the related industry as it can help the food and beverage industry to further strengthen in these area, from there to attract more consumer to use SST in their restaurant. This research beneficial a few parties which it includes kiosk companies, restaurant owner who have the intention to adopt SST in their business. According to the research finding, the entire variable has positive influence towards consumer intention to use and all the independent variable (perceived usefulness, perceived ease of use and perceived enjoyment) has positive relationship towards consumer intention to use. Therefore, these are the area that kiosk manufacturers need further enhance in order to attract more consumers to use and retain loyal customer.

Firstly, the results findings suggest that the kiosk companies should focus on the usefulness in SST as a key factor. Consumer are much more concern on the quality of SST deliver to them such as effectiveness in ordering food process, customization of the food menu design by the customer, save time to make order and reduce the queuing time to make order. Therefore, the engineering team in kiosk companies should always look into all these area to further improve SST performance. Moreover, usefulness of SST in terms of the speed to response to customer enquiries, the system design should always find a way to speed up the internal process of the system to make sure it is fast response to customer demand. Therefore, the customer can order the food in short time and let them feel satisfy. Besides, restaurant owner should always monitor the SST daily operation to ensure the it is function at all the time in order to prevent system downtime that will slower down the food
ordering process and in the worst situation, service breakdown that blocks customer from using SST to make food order, it will make customer dissatisfy indirectly.

Secondly, the factor of ease of use showed a significant influence on the consumer intention to use SST. Ease of use of SST always been a concern for consumer to decide whether use or not to use the technology when food ordering. A technology is easy to use when a customer orders the food within a short time period, the customer more likely to reuse again in future time. Therefore, in term of ease of use, the kiosk programming team should add in new features such as learning guide to shows customer on how to use SST, so that consumer are familiar to use the this technology and assist them in food ordering process. Besides, designation team should add in new arrows in the digital menu to lead consumer from beginning until the end of ordering the food. Moreover, the simplify system use to food ordering should be simple rather than a complex step to order the food. It will make the customer with zero effort to learn to use the technology. Hence, consumer will not feel burden whenever purchase their food by themselves.

Thirdly, the factor of enjoyment also showed a significant influence on the consumer intention to use SST. Enjoyment becomes one of the factors that trigger consumer intention to use SST as well. Since people tend to see things with colourful image, dislike the menu full with the word description itself, they are more likely feeling a sense of interesting while interacting with SST. Unlike to the traditional way of making food order, a staff will serve the customer with the menu and make order via communication, rather than seeing a colourful image and the interesting menu design and more likely to make food order more enjoyable. Hence, the design system team should always constantly updated the new design menu to makes customer feel a somewhat interesting. Besides, kiosk companies can consider to add in new feature like an audio system to play some happy music while order the food at the same time, it can always guide customer from every touch point. It is beneficial for those people who are not good in eyesight; audio system will guide them to order the food as well.

Last but not the least, despite of the three variable mentioned above, the kiosk companies have to look into other area that makes consumer feel good for instance, the self-service kiosk that enable consumer to print digital photo at their own time. With the mixed of marketing strategy to promote more people to use McDonald’s SST to order the food, at the same time to promote McDonald’s to those people to eat in rather than the competitor such as Wendy’s.

Based on this research, there are several recommendations for the future researcher to make improvement of the limitation of this study. The very first limitation of this research was that the researcher only focus into the respondent had been using McDonald’s SST in Klang Valley. In other words, future researchers are recommended to broaden into a larger sample size of the respondents. Moreover, it is also recommended to carry out survey in few fast-changing economic city in Malaysia, for example, Brickfields therefore, the results will be more accurately when future researcher topic are related or familiar with the technology devices.

This study shows only 79.8 percent of the factors has influence on consumer intention to use. There is 0.202 (20.2 percent) of the factors are yet to be discovered, and as far from now, it is explained by an unknown factor. Therefore, the future researcher has an
opportunity to look into the unknown factors such as confidentiality, technology experience and service quality.

REFERENCES


