

Kiosks of McDonald's in Cavite towards Friendly Order Taking Process for Persons with Deaf Disability

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Abstract: The experience of deaf customers in using McDonald's self-service kiosks in Cavite will focus on this study. This study used Technology Acceptance Model (TAM) to determine perceived ease of use, perceived usefulness, and to identify the behavioral intention of the respondent after using the kiosks. The study's design is quantitative that used purposive sampling in determining 110 respondents from the Federation of the Deaf-Cavite Province, Inc. The result showed for the perceived usefulness are the respondents strongly agree that the kiosk provides clear images of different menu items and helps them easily see what they want to order. Regarding perceived ease of use, the respondents agree that they find it easy to use the self-service kiosk, and the instructions provided are easy to understand. Lastly, the behavioral intentions of the respondents agree that they plan to use kiosks more in the future.

Keywords: self-service kiosk, McDonald's, perceived usefulness, perceived ease of use, behavioral intention, deaf, technology acceptance model.

I. INTRODUCTION

Technology has made an enormous improvement in the restaurant industry and has become reliant on technology to run their business, from the cashier to the kitchen. Restaurants have innovated with the use of technology, enabling faster and more efficient customer service. Restaurant owners can use digital innovations to improve their operations and stay in touch with what their customers need by moving away from outdated paper-based operations *Surapur, Bhagyashree, C., & Om, C. Prakash (2018)*. With this innovative technology transformation, restaurants will more profitable, run faster and easier. As a result of a technology revolution, once-imagined solutions have become necessities for the foodservice industry *Keane, N. (2018)*.

However, good business and food service mean accepting what the customers need and want, including the needs of disabled customers. According to the World Federation of the Deaf, there are 360 million people with a hearing impairment around the world, including 32 million children and 328 million adults. Hearing loss impacts their speech, language, and communication development. So, the typical way of their communication is using sign language. Customers with disabilities are more easily satisfied with the assistance of an in-person attendant in service establishments like restaurants. Though, deaf persons are often left out of the interactive experience due to the misguided judgment of others *(Miller, L. 2019)*. Given their circumstances, they have difficulty communicating with others, thus giving them a huge disadvantage in any industry, especially in service industries. Relaying what they want to say is difficult. Therefore, a working conversation cannot be constructed *(Hummadi, 2017)*.

Furthermore, the consideration of deafness being able to express and communicate with any other employee in the service industry is a meaningful addition to digital progress. For these people, it mainly aims to know how much impact the minor consideration of digital ordering kiosks has for the deaf and mute. Some are not tech-wise, *(Joshi, S., Stubbe, D.,*

Li, S.T. et al. 2019) said that most of the youth of this generation are more knowledgeable on devices than adults, some of these people with disabilities face this kind of problem as well. Difficulty understanding verbal help is another problem since not everyone knows how to use sign language. The most common way people would explain is through oral communication; however, since these people have problems with verbal communication, there are existing problems that must solve. For this reason, the researchers conducted this study to know if the McDonald's kiosk can fill this gap and help people with deaf disabilities in their order-taking process.

A kiosk is one of the technology innovations to better connect restaurants with customers. NXTGEN is McDonald's modernization program for their fast-food restaurants. These kiosks are the newest in point-of-sale technology here in the Philippines. Customers can browse the menu, suggest cross-sells and upsells, and encourage diners to order more. Just click through the options on the screen, and then make your selection in the kiosks. By using this feature, customization orders become much more accessible since you won't need to strain your eyes to read the overhead display menu. It was beneficial for people with poor eyesight and deaf customers to lessen their communication to the employee.

To cut out human error and get precisely what they ordered Speer, M. (2018). It is designed to allow customers to pay for their meal entirely independently and accept Visa card payment and MasterCard. But, customers can still pay at the counter with cash to communicate with employees face-to-face. McDonald's expects to have 10 percent of its restaurants follow the NXTGEN store format by 2019 and 70 percent by 2021, according to the company's president, Kenneth Yang, and managing director, Margot Torres (Rapple.com, 2018). Cavite McDonald's NXTGEN store is currently found at McDonald's Antlers, Vermosa, Bahayang Pag-asa, Tagaytay Calamba, Tagaytay Olivares, Kawit Centennial, Lancaster, and Primark Noveleta (mcdonalds.com.ph).

II. CONCEPTUAL FRAMEWORK

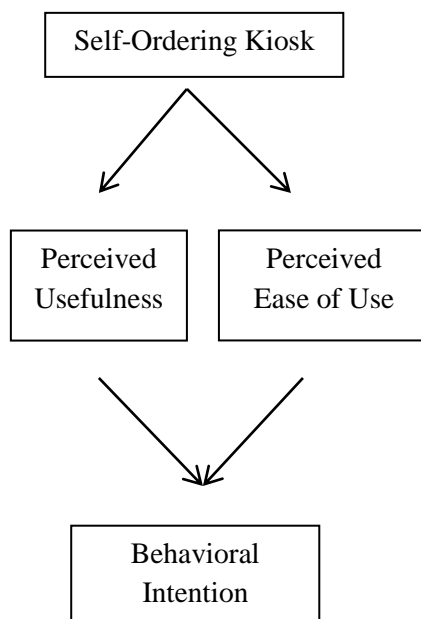


Fig. 1# Technology Acceptance Model

Figure #1 indicates the model that researchers would follow in conducting the study.

In this study, the researchers used selected components of the Technology Acceptance Model from Venkatesh and Davis (2000), specifically the measurement of perceived ease of use, perceived usefulness of the kiosk, as well as the behavioral intention of persons with deaf disabilities using the self-service kiosk. Technology Acceptance Models are meant to help researchers and practitioners to understand why a specific innovation or framework might be acceptable or unacceptable, and take appropriate measures based on explanation instead of prediction. A variety of samples and situations have been extensively tested through the Technology Acceptance Model. The model has proven to be valid and reliable in explaining the use of information systems and acceptance.

Statement of the Problem

The following are the objectives of this study:

1. To determine the demographic profile of the respondents in terms of
 - Gender
 - Age
 - Degree of impairment
 - Frequency of Visits in McDonald's with kiosk
 - Educational Attainment
2. To determine the respondent's experience in using kiosks in terms of
 - Perceived usefulness
 - Perceived ease of use
3. To identify the behavioral intention of the respondents after using the kiosk.
4. To know if there is a significant relationship between the respondent's experiences of perceived usefulness and perceived ease of use with their behavioral intention?

Statement of Hypothesis

"There is no significant relationship between the respondent's experience in terms of perceived usefulness and perceived ease of use with their behavioral intention."

Review of Related Literature

Technology Acceptance Model (TAM)

Davis (1989) establish the Technology Acceptance Model, which assumes that people will be willing to use technology if they believe it is simple to use and worthwhile. Thus, the more consumers are aware that the new technology will make their lives easier, the more likely they will be to use and accept the technology (Dillon & Morris, 1996). The Technology Acceptance model measures perceived usefulness, ease of use, and intention to use.

Perceived Usefulness

Individuals' acceptance or belief that utilizing a given method will improve their performance is referred to as perceived usefulness. It is usually the result of a benefit analysis of the value of the technology. It reinforces the action of using the system because it is viewed as useful in obtaining desirable objectives (Davis *et al.*, 1989). In studies of technology services, research has shown that perceived usefulness influences technology adoption in a significant way (Childers *et al.*, 2001; Kleijnen *et al.*, 2004). The perceived usefulness of technology-based self-service kiosks is relevant in this study. If disabled consumers believe that self-service kiosks assist them in completing their orders, they are more likely to rate the quality of their service favourably.

Perceived Ease of Use

The perceived ease of use is the most important aspect that influences information system acceptability. A person's belief and acceptance that a particular strategy will save them time and effort (Davis, 1989). Perceived ease of use is impacted by the technology in turn, measured by convenience, freeness, and unobstructed. As well as the cognitive, social, and behavioral skills required to use it (Robichaux & Cooper, 1989). If a customer finds it easier to interact with a system that system will be considered more valuable and it is viewed as the process that leads to the outcome. Several studies on different data technologies have noted that perceived ease of use influences perceived usefulness in a positive way (Kleijnen, Wetzels, & Ruyter, 2004; Porter & Donthu, 2006).

Behavioral Intention

The behavioural intention of an individual defines the quality and strength of their intention to engage in a specific behavior (Davis, Bagozzi, & Warshaw, 1989, p.984). According to Ajzen (2002), "behavioral intention is the "antecedent

of behavior”, and a satisfactory extends of actual control over behaviors is described by the original inventor of the technology acceptance model based on reasoned action theory”. When the opportunity arises, individuals are expected to perform their intentions. *Davis (1986)* proposed behavioral intention as an attitude toward using and later branded it as an attitude for multiple uses. But attitudes did not fully reconcile perceptions of usefulness and ease of use. In this way, Davis and his collaborators suggest that there may be cases when the framework is considered useful. It is possible to form a firm intention without forming an attitude towards the framework (*Granic & Marangunic, 2015 p. 85*).

Disability Law (Batas Pambansa Blg. 344)

his Act requires certain institutions, buildings, and public services to install other equipment and facilities. SECTION 1. To spread the belief that people with disabilities have the right to actively be a part of society and to enjoy the opportunities available to other citizens. To construct, renovate, or repair public and private facilities for them without requiring a permit or license. SECTION 2. Promote the public about the needs of people with disabilities through the use of well-known posters and stickers. SECTION 4. Violations of this Act or its regulations shall be punishable by imprisonment for not less than one month and not more than one year, or by fines of between 2,000 and 5,000 pesos, or by both. (*National Council on Disability Affairs, 2012*).

Discrimination based on Disability

Any person owning, leasing, or running a public establishment who discriminates against a disabled person by not allowing that person to use the goods, facilities, services, and privileges of that establishment equally. According to discrimination of the use of public accommodation constitutes acts, section 36. (1) Denying an impaired individual, straightforwardly through licensing, contractual or other arrangements, because of his disability, there is an opportunity for him to participate in or receive service, privileges, goods, facilities, accommodations, or advantages. (2) Integrated setting goods should be managed by people with disabilities in the most integrated environment that best suits their needs. (3) Inability to adopt policies, practices, or procedures in a reasonable manner such as modifications are necessary to ensure the accessibility of services, privileges, facilities, goods, accommodations, or advantages to people with disabilities. (4) A failure to the people with disabilities cannot be avoided, denied services, isolated, or otherwise treated differently. In the event of non-compliance, the services, privileges, facilities, goods, or living conditions will be drastically altered or adversely impacted. (5) Failure to remove the structural boundaries and communication barriers that exist in facilities and structural can easily be accomplished. (*Senate Bill No. 1286 and House Bill 35091, 1992*)

Discrimination can be direct when a disabled is treated less positively or not given the same opportunities as others in a comparative circumstance because of their disability. It can also be indirect disability discrimination when conditions or requirements are put in place that shows up to treat everybody the same (*Australian Human Rights Commission, 2016*).

The kiosk is available for the hard of hearing and deaf presents a problem for kiosk software developers and hardware manufacturers. However, Juke Slot released a unique kiosk named “OubliE”, its android-based software that can function as ordinary self-ordering kiosks and cater to the hard of hearing, and deaf (*Lorden, A. 2017*). This self-ordering kiosk features sign language, foreign language translations, and a virtual avatar translating all customer selections in American Sign Language. It allows individuals with conversational difficulties to communicate more effectively, represent solutions that strengthen the customer experience, and minimize ordering errors. It requires restaurants to accommodate deaf, blind, in wheelchairs, or have other physical handicaps, to fully comply with the Americans with Disability Act (ADA). A restaurant’s facilities ought to be accessible to all, as well as the ability to purchase, order, and consume meals freely by anyone with the ability to do so (*Stroud, J. 2017*).

About the sale of goods and services provided by hotels, restaurants, and recreation centers, at least a 20% discount for persons with disabilities should be entitled and an exception from the value-added tax (VAT) according to *Republic Act no. 10754*.

Giving everyone the right and fair treatment is a moral duty and a legal one. The Americans with Disabilities Act (ADA, Disability Discrimination act 1992, and Republic Act no. 10754 are some laws to explain that we need to make suitable adjustments to accommodate the proper treatment and give discounts in every purchase for those with disabilities *Taylor, S. (2020)*. There are different degrees of the deaf; deaf-blindness, deaf with a physical disability, deaf with muscular dystrophy, and deaf with intellectual disability.

It considers many factors acting as barriers or facilitators of a disabled person. (1) Equipment barriers (2) psychological and emotional barriers (3) barriers related to the interpretation and use of regulations, guidelines, codes, and laws (4) information-related barriers (5) professional education, knowledge, and training issues (6) availability of resources (Tabuga, A. 2013).

Degree of Impairment

An individual with severe hearing impairment, whether they use amplification or not, is not able to process linguistic information. Therefore, hearing loss is considered a condition in which a person cannot perceive all or most forms of sound. In contrast, a person with a hearing loss can generally respond to speech, including auditory stimuli (Center for Parent Information & Resources, 2015). There are different degrees of deaf impairment; deaf-blindness, deaf with intellectual disability, deaf with muscular dystrophy, and deaf with a physical disability.

Deaf-blindness is a specific disability, and it is combined with hearing impairment and vision of such seriousness that it is difficult for the impaired senses to compensate for each other. Deaf-blindness restricts full participation and limits activities in society. It affects their communication, social life, and the ability to move around freely and securely (Nordic Centre for Welfare and Social Issues, 2018). Deaf with a physical disability is a neuromotor, musculoskeletal, or orthopedic impairment with a combined hearing impairment that has difficulty communicating. Muscular dystrophy with sensorineural hearing loss might imply genetic heterogeneity. It is an autosomal dominant condition marked by muscle weakness within the legs, face, and shoulder girdle. Intelligence and life span are average, and the range of disability is wide (Meyerson, M. 1984).

There is also evidence that hearing loss is more common among people with intellectual disabilities than among the general population. Hearing loss and intellectual disability need to be identified early to ensure their social, cognitive, and well-being. It also reflects undertreated and not served experiences once hearing loss is recognized (Herer, G. 2013)

Frequency of Visit

According to (Park, C. 2004), customers dine out because they like food and establishments' advantages. The value customers acquire from food can be defined as consumer values of eating out. When eating out, consider service and establishments. Consumers seek these values to satisfy their need for comfort, enjoyment, amusement, social contact, and mood shifts. Consumers gain experiential value when they eat out. The restaurant is a location where people can have fun, enjoy, and feel good about themselves. Customer expectations are reliability, consistency, and control, which are becoming increasingly important due to changes in lifestyle, demographic variables, and restaurant technology consumption.

III. METHODOLOGY

A. Research Design

The quantitative research design was used to conduct this study. Statistical, logical, and mathematical techniques are employed in quantitative research to generate numerical data and hard facts. It enabled the researchers to quantify the different kiosk features that can affect the respondent's behavior in using it.

B. Research Sampling Method

The purposive sampling method was used in this study, is selecting a specific participant for the study. Each chosen representative of the population is selected in an unbiased way to provide the needed data. This technique is likewise referred to as either selective or subjective sampling, is essential in our process of selecting participants with certain characteristics that meet our research needs. The 110 sample size was chosen from the targeted 600 population.

C. Research Locale

The study will be conducted in the province of Cavite through the Federation of Deaf Province of Cavite Inc. To gathered the needed data, the researchers preferred the specific organization for this study.

D. Participants of the Study

The respondents in this study were deaf, deaf with intellectual disability, deaf with muscular dystrophy, and deaf with physical disabilities. A member of the Federation of Deaf Province of Cavite Inc. has already experienced the self-ordering kiosk of McDonald's.

E. Instrumentation

The questionnaire that will be used for this study is adopted from Rastegar, N. (2018) and Lee, H.J. (2008). The researchers will submit it to the thesis adviser and statistician for approval. The result of the survey will be treated and revised according to experts’ recommendations. The revised and tested questionnaire will be used as an instrument for this study. And it will present the approved questionnaire to the interpretation, which will create a sign language video interpreting the questionnaire for easy understanding of the participants.

F. Data Gathering

The researchers will send an informed consent form to the selected participants, informing them of the study’s objective and the importance of their participation. Approval will be sought after the survey forms are sent through Google survey forms.

G. Data Treatment and Analysis

The data gathered will be analyzed using descriptive statistics, which contains statistical tools such as frequency, percentage, variability, mean, standard deviation, and ANOVA.

The first part of the survey questionnaire is the demographic information, which will use the percentage and frequency. While the variability and mean use for the evaluation of the respondents regarding the kiosk features. And lastly, ANOVA will be used to test the hypothesis.

Mean and interpretation of the five-point Likert-type scale:

Strongly Agree equivalent to 3.51 – 4.00

Agree equivalent to 2.51 – 3.50

Disagree equivalent to 1.51 – 2.50

Strongly Disagree equivalent to 1.00 – 1.50

IV. RESULTS AND DISCUSSIONS

1. Demographic Profile of the respondents

1.1 Age

Table 1.1: Age according to Demographic Profile of the respondents

Age	Frequency	Percent
21-30	43	39.1
31-40	33	30.0
41-50	15	13.6
51-60	4	3.6
Above 60	4	3.6
Below 20	11	10.0
Total	110	100.0

The table 1 shows that most of the respondents’ age falls in the range of 21-30 years old, corresponding to 39.1% of the total number. On the other hand, the least number is from 51-60 above 60 years old, which corresponds to only 3.6%. It means that people aged 30 years old and younger prefer to use kiosks rather than order at the counter. According to (Pendrell, 2020) millennials are not simply looking for a dining experience when they dine outside but for other experiences as well, and they also found that all ages were eager to learn using the self-ordering kiosk.

1.2 Gender

Table 1.2: Gender according to Demographic Profile of the respondents

Gender	Frequency	Percent
Female	63	57.3
Male	47	42.7
Total	110	100

Table 1.2 reveals that the majority of the respondents are females, corresponding to 57.3%. On the other hand, male respondents reached 42.7% of the total number. The self-ordering kiosk has no gender discrimination. It can be used by females and males, and even LGBTQ+. Although, according to Frankel (1990), females have more ability to utilize self-service kiosks than males.

1.3 Degree of Impairment

Table 1.3: Degree of Impairment according to Demographic Profile of the respondents

Degree of impairment	Frequency	Percent
Deaf	61	55.5
Deaf with intellectual disability	10	9.1
Deaf with muscular dystrophy	8	7.3
Deaf with a physical disability	31	28.2
Total	110	100.0

Table 1.3 reveals that the highest numbers of the respondents are deaf, at 55.5%. Next is deaf with a physical disability, corresponding to 28.2%, while deaf with an intellectual disability is 9.1%. On the other hand, the least common are those who have deaf muscular dystrophy, with 8%. Individuals with impairments may have significant difficulties using digital self-service kiosks because the study (Vu, et al. 2016) found that deaf people cannot understand the auditory content of videos without captions.

1.4 Frequency of visits

Table 1.4 Frequency of visits in Mcdonald's with digital ordering kiosk facility in the last 12 months.

Frequency of visits	Frequency	Percent
Once a month	27	24.5
Once a week	23	20.9
Once to thrice in the last 12 months	20	18.2
Twice to thrice a month	15	13.6
Twice to thrice a week	25	22.7
Total	110	100.0

Table 1.4 reveals that most of the respondents visit the establishment once a month, representing 24.5%. The lowest is those who visit twice or thrice a month, corresponding to only 13.6%. According to new Tillster data, 25% of restaurant guests using a self-ordering kiosk has a 7% increase annually. Furthermore, more than 65% of consumers indicated that they will return to a fast-food chain more frequently if kiosks are available and 30% would choose to purchase through a self-service kiosk rather than to the cashier lane. (Kelso, 2019).

1.5 Education Attainment

Table 1.5: Demographic Profile according to their Education Attainment

Education Attainment	Frequency	Percent
College graduate	24	21.8
College undergraduate	26	23.6
High school graduate	41	37.3
High school undergraduate	19	17.3
Total	110	100.0

The table above reveals the distribution of Education Attainment of the respondents. The most of the respondents are high school graduates, corresponding to 37.3%. The college undergraduate student is 23.6%. Next is a college graduate, corresponding to 21.8%. And the least is the high school undergraduate, corresponding to 17.3%. According to Deaf Education Council Philippines, many Deaf high school graduates cannot attend higher education institutions due to the lack of public universities available to deaf people each year. Many parents of hearing-impaired children cannot afford to send their children to college. To compound the problem, they have to pay for their sign language interpreter. Poverty and lack of access to education prevent deaf people from achieving independence and economic stability.

To determine the respondent's experience in using the kiosk in terms of the following:

Mean and interpretation of the five-point Likert-type scale	
3.51 – 4.00	Strongly Agree
2.51 – 3.50	Agree
1.51 – 2.50	Disagree
1.00 – 1.50	Strongly Disagree

2.1 Perceived Usefulness

Table 2.1: Respondent's experience in using kiosks in terms of Perceived Usefulness

Perceived Usefulness	Mean	Standard Deviation	Interpretation	Rank
1. The kiosk gives complete information like meal choices and prices.	3.445	0.5681	Agree	2
2. The kiosk delivers clear images of the different menu items.	3.573	0.5820	Strongly Agree	1
3. Using the kiosk makes my purchase more accurate than ordering through the cashiers.	3.409	0.6538	Agree	3
4. The use of the kiosk is faster than going through cashiers.	3.309	0.7869	Agree	4
5. The use of the kiosk lets me get my food in a timely manner.	3.300	0.6847	Agree	5
Overall	3.407	0.5505	Accepted	

The perceived usefulness, item number 2 obtained the highest rank with a mean of 3.573, a standard deviation of 0.5820, and a verbal interpretation of strongly agree. It means that the respondents strongly agree that the kiosk provides clear images of different menu items. On the other hand, the lowest mean was obtained by item number 5 with a mean of 3.300, a standard deviation of 0.6847, and a verbal interpretation of agree. It means that the respondents agree that using a kiosk lets them get their food on time.

Regarding standard deviation, the item with the highest value is item number 4 with 0.7869, which means that the respondents have different opinions if the kiosk is faster than going through cashiers. On the other hand, the lowest standard deviation by item number 1. It means that the respondents agree that the kiosk indicates complete information, like meal choices and prices. The overall mean of 3.407 implies that the respondents accepted the usefulness of the kiosk.

Customers' intention to use is influenced by perceived usefulness since it helps limit both time and work (Yang, & Geetha, 2019). Further, it appears that the information kiosk has the greatest effect on service quality. Information kiosks are primarily used by consumers to help them make better purchasing decisions. When customers think that using the kiosk is easy to understand and clear, they may see that the kiosk is useful (Lee, 2008). This finding also suggests that the kiosk designer should focus more on improving self-service kiosk practical performance features since these lead to happiness, ultimately leading to continued use (Rastegar, 2018).

2.2 Perceived Ease of Use

Table 2.2: Respondent's experience in using the kiosk in terms of Perceived Ease of Use

Perceived Ease of Use	Mean	Standard Deviation	Interpretation	Rank
1. Understanding to use the kiosk is simple and easy.	3.391	.6222	Agree	3
2. The self-service kiosk is easy to use.	3.491	.6317	Agree	1
3. The instructions on the kiosk are clear and understandable.	3.373	.6888	Agree	4
4. I feel convenience in using the kiosk.	3.273	.7771	Agree	5
5. The kiosk allows me to browse the menu conveniently.	3.400	.6088	Agree	2
Overall	3.385	.5616	Accepted	

For perceived ease of use, item number 2 obtained the highest rank with a mean of 3.491, a standard deviation of 0.6317, and a verbal interpretation of agree. This means that the respondents agree that they find it easy to use a self-service kiosk.

On the other hand, the lowest mean was obtained by item number 4 with a mean of 3.273, a standard deviation of 0.7771, and with a verbal interpretation of agree. This means the respondents agree that kiosks can be used conveniently.

In terms of standard deviation, the item with the highest value is item number 4 with 0.771 which means that the respondents are inconsistent with their idea that the kiosk can be used conveniently. On the other hand, the lowest standard deviation of 0.6088 was obtained by item number 5. It means that the respondents agree with their idea that the kiosk allows them to browse the menu conveniently. The overall mean of 3.385 implies that the respondents accepted the ease of use of the kiosk.

As stated by *Lee Hyun-Joo (2008)*, self-service technologies knowledge was tested for correlations with perceived ease of use. Consumers perceive kiosks as much more convenient when they are familiar and knowledgeable with the technologies, such as ATMs, internet shopping, or automated airline ticketing, which tends to help them quickly make inferences about how kiosks will work based on their experience, allowing them to perceive kiosks as readily usable.

To identify the behavioural intention of the respondents after using the kiosk

2.3 Behavioral Intention

Table 2.3: Behavioural intention of the respondents after using the kiosk

Behavioral Intention	Mean	Standard Deviation	Interpretation	Rank
1. I would like to use the kiosk whenever it is available.	3.336	.6944	Agree	5
2. I will recommend the kiosk to my colleagues, friends, and/or family.	3.436	.6570	Agree	2
3. I will continue visiting food establishments with kiosks.	3.4	.6800	Agree	3
4. I plan to use the kiosk more in the future.	3.491	.6317	Agree	1
5. I will use the kiosk despite the existence of cashiers.	3.345	.6832	Agree	4
Overall	3.402	.5858	Accepted	

For the behavioural intention, item number 4 obtained the highest rank with a mean of 3.491, a standard deviation of 0.6317, and a verbal interpretation of agree. It means the respondents agree that they plan to use the kiosk more in the future. On the other hand, the lowest mean was obtained by item number 1 with a mean of 3.336, a standard deviation of 0.6944, and a verbal interpretation of agree. It means the respondents agree to use the kiosk whenever available. The overall mean of 3.3402 implies that the respondents accepted the behavioural intention. Customers’ satisfaction affects the customer’s behavioural intention to repeat using the kiosk. Usually, if regular customers like the service, they will attract their friends or families through word-of-mouth marketing (*Noradzhar, et al, 2019*).

Table 3. Correlations

		Perceived Usefulness	Perceived Ease of Use	Behavioral Intention
Perceived Usefulness	Pearson Correlation	1	.781**	.670**
	Sig. (2-tailed)		.000	.000
	N	110	110	110
Perceived Ease of Use	Pearson Correlation	.781**	1	.778**
	Sig. (2-tailed)	.000		.000
	N	110	110	110
Behavioral Intention	Pearson Correlation	.670**	.778**	1
	Sig. (2-tailed)	.000	.000	
	N	110	110	110

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

The table shows the correlation between the variables. It shows that the perceived usefulness and perceived ease of use are significantly correlated to their behavioral intention. The significance values are both 0.00. It means that the null hypothesis that no significant relationship was rejected, implying a substantial correlation between the variables. Since the correlations are positive (0.670 and 0.778). These can be interpreted as a direct relationship. The higher the perception, the higher the behavioral intention of accepting the technology and vice versa.

V. CONCLUSION

Based on the study results the researchers have drawn the following conclusions. Most of the respondents with deaf disabilities were female, with ages ranging from 21-30 years old. The highest educational attainment of the respondents is high school graduates. For the last 12 months once a month is the most frequent visit of the majority of respondents in McDonald's with a digital ordering kiosk facility.

The respondents strongly agree that the kiosk provides clear images of different menu items. Overall, the McDonald's kiosk has a good quality of technology that helps their marketing strategy to catch more customers. The respondents agree that they find it easy to use the self-service kiosk regarding perceived ease of use. They are knowledgeable, or quickly catch up with the instructions given by the self-service kiosk. The perceived ease of use is enormously influential since most respondents are ages 21-30. They are more likely comfortable with innovation because ordering their food through the self-service kiosk is not difficult for them to use.

Customer satisfaction affects the customer's behavioural intention to repeat using the kiosk. Almost all respondents agree that they plan to use the self-ordering kiosk more in the future.

The Technology Acceptance Model played a crucial role in determining kiosk acceptance by people with hearing disabilities. Thus, the research results have reinforced and validated the chosen framework model in evaluating the effectiveness of the self-ordering kiosk, especially for persons with disabilities, specifically those with deaf disabilities.

Therefore, the null hypothesis, which means that there is no significant relationship, was rejected in terms of perceived usefulness, and ease of use with their behavioural intention. Since the correlations are positive, it is interpreted as a direct relationship. The higher perception, the higher the behavioral intention of accepting the self-service kiosks and vice versa.

VI. RECOMMENDATION

Restaurants especially fast-food chains should have several self-ordering kiosks for faster service.

The kiosks should be equipped with sound or Braille for customers with different types of disabilities.

Kiosks should not be too high to accommodate people in wheelchairs.

For future researchers, to extend this study to other customers with different types of disability.

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