The Impact of Self-Order Kiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta

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Abstract. The COVID-19 pandemic has accelerated the adoption of many kinds of technology in the food service industry. One of the commonly encountered technologies is Self-Order Kiosk (SOK). This study aims to determine the impact of self-order kiosks related to their service quality on customer experiences, whether it is satisfied or not. The research focuses on McDonald's as the fast-food category, which implemented SOK in 2018 to improve its services. The study's research method was quantitative, with data collection through a questionnaire to 117 respondents. The research object was McDonald's Citra Garden 6, with their customers as the population. The result of this study indicates that there are significant impacts between the self-order kiosk and customer experience, service quality to the customer experiences, and a significant impact between the self-order kiosk and service quality to the customer experience of McDonald's Citra Garden 6.

1 Introduction

COVID-19 was defined as an epidemic in March 2020 after a growing number of countries reported confirmed cases and fatalities [1], as they have adapted to COVID-19 by creating regulations to prevent the spread of the virus. As one of the countries hit by COVID-19, Indonesia has enforced widespread societal restrictions or temporary lockdowns [2]. It was designed to establish physical separation [3]. This regulation is forcing people to learn new ways to connect with their loved ones by replacing face-to-face and online services through technology [4].

People's behaviours and routines have changed, affecting almost every aspect of life [5]. They are more concerned about healthcare, shifting to online activities, reducing the number of people in one space because of the restriction, and creating the habit of working from home [6-7]. As many industrial sectors have been affected by COVID-19, the food service industry is the worst affected sector [8]. The regulation has dramatically affected the food service business because it produces essential needs such as food and beverage for people [9-11]. Many restaurants are closed, but others are also shifting from conventional service systems to technology [11] that does adapt to regulations implemented by the government during the pandemic, even though the technology was used before the emergence of COVID-19.

As a result of government regulations restricting people from dining at the restaurant, several restaurants have begun to offer food delivery over the internet, and the number of food delivery services has increased rapidly. Many smaller companies have phased out their physical stores in favour of a cloud kitchen network model. At the same time, larger chains will adopt a hybrid of traditional kitchens, online preparation, and delivery [12-13]. One of the most important ways to get through the epidemic is to use the connectivity provided by Information and Communication Technology (ICT) [5]. Online ordering and delivery apps, contactless payment, online table reservation systems, digital menu boards for kitchen staff, automated inventory management software, QR code menu access, and air purification technology are all examples of technological solutions for online and in-person services [11].

Technology improvements in food processing, preparation, and service were implemented as the restaurant industry struggled to cope with the COVID-19 pandemic [14]. Newton [14]also stated that technologies such as robotics, mobile apps, the Internet of Things (IoT), and self-service kiosks were the most applicable to the business and had the most impact on it. Every restaurant, especially fast-food chains, needs technology that keeps up with current trends to operate appropriately [15]. One of the biggest fast-food chains, McDonald's, implemented electronic payment, digital menu display, and artificial intelligence before the COVID-19 pandemic [16-21]. McDonald's Indonesia is an example of a fast-food chain that has adopted new technology to better serve its patrons [22]. In 2018, McDonald's Indonesia installed a touchscreen self-order kiosk system to eliminate the need to buy and pay at the cashier, this touchscreen device is increasingly installable [19].

McDonald's considers by providing the menu in digital form and allowing customers to select their own

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option via touching the display of the device, self-order kiosk will make customers feel more convenient when placing orders. These kinds of technological advancements are affecting the customer experience by altering the capabilities of service departments and systems [23]. The researchers have chosen McDonald's because, based on GoodStats' culinary preference analysis found that 46,6% of Indonesians favour McDonald's over other fast-food establishments [24]. But when compared to the Top Brand Index survey in the fast-food category, McDonald's service is still in second place [25-26]. The McDonald's at Citra Garden 6 in Jakarta is one of the several McDonald's chains that has adopted the self-order kiosk to better serve the customers. Regrettably, there were several challenges that customers faced when using the self-order kiosk's system.

The large number of customers at McDonald's Citra Garden 6's self-order kiosk necessitates the presence of personnel to help them navigate the menu. Customers who choose to pay in cash must go to the cashier, which gives an extra step in the transaction. McDonald's delivers dine-in orders directly to customers' tables to encourage them to spend more time dining and less time in line [27]. However, in crowded times, this slows down all the processes from ordering to meal delivery due to a lack of available staff. Customers experience dissatisfaction because of extended amounts of time for waiting. Those statements are based on researcher observation and supported by Yesika's study [28]. It could be determined that it was the opposite of the expectations set by McDonald's regarding customer experiences.

The researchers were interested in analysing **The Impacts of Self-Order Kiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta.** The research problems of this study are:
a. How does the self-order kiosk at McDonald's Citra Garden 6 help the customer in order?
b. How is the service quality at McDonald's Citra Garden 6?
c. How about the customer experience who have been visiting McDonald's Citra Garden 6?
d. Do the self-order kiosk and service quality have an impact on customer experience at McDonald's Citra Garden 6?

The purpose of data information can be used to inform policy and considerations regarding the evolution of the self-order kiosk and service quality to enhance McDonald's service performance.

2 Literature Review

2.1 Self-Order Kiosk (SOK)

A self-order kiosk is the most recent innovative technology restaurants offer to enhance the customer experience, particularly in quick-service establishments [29]. It is also known as Self-Service Technology (SST) that has gained popularity in the food service business in recent years [18]. Meanwhile, according to Yesika [30], Self-Order Kiosk (SOK) known as interface technology

that enables consumers to create a service without the involvement of company employees independently. By using a self-order kiosk, it is possible to provide a service that is more effective in attracting consumers [31]. Tsai & Gheeta [32] stated that the idea of a self-service kiosk refers to a touchscreen machine that enables customers to privately deliver services without personnel intervention. Self-Order Kiosks (SOK) are replacing the traditional interaction between the service provider and the customers[33] which the customers can submit orders independently [22]. According to Akcam [34], self-order kiosks are computerized touchscreens devices that simplify the ordering process by showing menu options which customer can choose the items they want, offering deals based on the customers' choices, and processing transactions. Abdul Hamid [35] stated that a self-service kiosk, commonly called an interactive kiosk, is a compact, self-contained structure used to display information or facilitate operations. According to Park [36], there are seven dimensions of self-order kiosk quality as self-service technologies that create a significant effect on customers' expectations, those are:
1. Functionality is the features, skills, and benefits of a product or service, such as a computer software program.
2. Enjoyment is considered a sense of pleasure regarding service experiences.
3. Security is the processes, resources, and people that protect an organization's digital assets from unauthorized access or use.
4. Assurance is the reflection of how confident a technology or system can protect itself and the people and systems that depend on it from the variety of external and nearby access risks it will face throughout its lifecycle.
5. Design is the process of creating and identifying the physical and functional characteristics of an electronic product.
6. Convenience is the effort and time required by customers to access and use a service provided by a business as a result customers do not need to expend excessive effort and invest a significant amount of time.
7. Customization is the process of modifying a product or service to meet the preferences of an individual or organization.

2.2 Service Quality

Parasuraman in Afthanorhan [37] defines service quality as the difference between customer expectations and supplier delivery. Service quality is the extent to which a business exceeds consumer expectations in terms of goods and services and delivery efficiency [38]. A business's service quality standard may be described when the expectation of consumers in terms of additional services achieve their satisfaction [39].

However, according to Juliana [40], service quality is the process of meeting the demands and goals of customers in a way that is consistent with their expectations of service. One definition of service quality

in the service business is the capacity of a company to prioritize client satisfaction above any other object [41]. In another view, service quality is seen as a complicated predictor of customer happiness and as an indicator of the recognized good or poor dimensional frameworks of perspectives [42]. According to the statement made by Özkan [43], service quality is a method by which customers evaluate whether or not the provided service meets their standards. Service quality has been comprehensively discussed as a determinant of customer happiness and actions [44]. There are five dimensions of service quality stated by Pasuraman in Yesika [30]:

1. Reliability is the quality of being dependable and trustworthy.
2. Assurance is the staff's skill at making the client feel safe and cared for.
3. Tangibles refer to the equipment and people involved in the activity.
4. Empathy is the staff's genuine desire to help their clients.
5. Responsiveness is being ready to assist customers and give them the focus they deserve.

2.3 Customer Experience

The customer experience is the cumulative result of several interactions that take place between a customer and a service supplier [23], which can affect the success of a company and influence customer outcomes [45-46]. The physical and emotional reactions of customers to a company's products and services create the customer experience [47]. Each product or service has the potential to evoke a unique emotional response from the customer due to the use of encounters. From a company's point of view, customer experience has become an important marketing idea that aims to give customers something unique, enjoyable, and memorable [48-49]. This has to do with how brand knowledge affects a good customer experience and how that affects customer retention and income [50].

According to Septian's study [51], customer experience is an internal and subjective customer response as a result of direct or indirect interaction with the company. The direct interaction, for example, when we do purchase or use the services, and the indirect, more like recommendations, criticisms, ads, or reviews. Customer experience refers to people's impression of a product or service from the first interaction until resuming transactions and giving feedback or even switching platforms [52-53]. In the buying process, a customer not only buys the products or services but also buys the experiences. These experiences can be divided into several types, according to Robinnete dan Brand [50, 54,55], there are five kinds of experiences:

a. Experience in Product
   Customers' memories will be made by the usage of the product. Businesses should design their goods with the end user in mind.
b. Experience in Environment

Focused on how the company's atmosphere is perceived by its customers. The setting plays an essential part in shaping the purchasing experience.
c. Experience in Loyalty Communication
   Offering the finest possible service to win over the satisfaction of customers.
d. Experience in Customer Service and Social Exchanged
   Customers are more likely to have loyalty to a company if they feel they can trust its employees through the manner.
e. Experience in Events
   Consumers will attend to learn about goods and services.

There are five dimensions of customer experience, pursuant to Schmitt in Septian [51], as a basis for overall experience marketing analysis that is: sense, feel, think, act, and relate.
a. Sense
   Sense experience creates five-sense encounters through sight, sound, touch, taste, and smell.
b. Feel
   Feel Experience uses communication (advertising), goods (packaging and content), and product identity to affect consumers.
c. Think
   This includes prospective, valuable, and expanding elements. This facet was developed to attract the curiosity of customers in the product.
d. Act
   The dimension of act experience refers to aspects that affect lifestyle, behaviour patterns, and the experiences of social interaction.
e. Relate
   Relate experience connects customers to the culture and social environment of a product's brand.

The dimension of customer experiences, according to Schmitt in Septian [51]:
1. Sensory Experience
   To make five-sense experiences: sight, sound, smell, taste, and touch. Sensory experience comes from a product and the environment, that included.
   1) Unique design and product appearance that attract customers with a taste that excites customers.
   2) Interior, lighting, sound, and scent of the store, such as
      a. Restaurant interior decor and furniture.
      b. Lighting, natural and artificial, can make a room feel bright and open.
      c. Sound should help consumers to talk.
      d. The restaurant smells that impact customers' sense of smell.
2. Emotional Experience
   Strategy and implementation affect customer perceptions of a company through communication, products, environment, website, and employees. Consumers' emotions are triggered by events, agents (people, entities, situations), and things. The employees must have the following qualities to deliver customer experience, such as

a. Knowledge (the head), an employee must know what customers want and need.
b. Attitude (the heart), employees must be competent, friendly, and polite to customers.
c. Skill (the hand), workers must have skills to provide a customer experience to get the product or services.

3. Social Experience
   Through social experiences, customers become part of a larger social environment, which helps brands build stronger relationships and communities. The most important parts of a brand are:
   a. An identifier is anything that helps people remember a company, product, or service. This could be a name, image, colour, or shape.
   b. Attributes are everything that comes to mind when people think of a brand.
   c. An association is a link between an identifier and a trait in

There are several factors that can affect customer experience based on Dani Wibowo's [56] study,
a. Accessibility, in terms of how simple it is for customers to get their hands on and use goods.
b. Competence is the level of expertise possessed by the service supplier.
c. Customer recognition means that the company notices and values the customer's existence.
d. Helpfulness, customer confidence in getting assistance quickly and easily.
e. Personalization is the customer's sense of being cared for in a way that respects his unique needs and preferences.
f. Problem-solving, the customer guarantees that the issue has been resolved by the service supplier.
g. Promise fulfilment is the observance of commitments made by service or product suppliers.
h. Value for time, satisfaction with the product's worth for the customer's time.
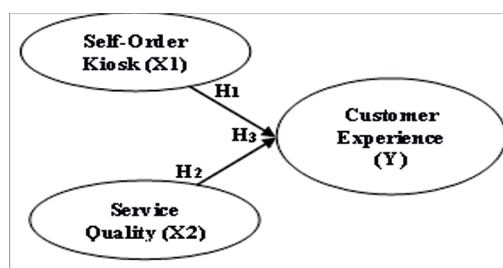
Fig 1. Research Framework. Source: Primary Data (2023).

H_1 = The self-order kiosk has an impact on customer experience.
H_2 = The service quality has an impact on customer experience.
H_3 = The self-order kiosk and service quality have an impact on customer experience.

3 Research Method

A research method is a plan for collecting and analysing data in response to specific research questions [32]. In this study, there are three variables. The Self-Order Kiosk (SOK) (X_1) and Service Quality (SQ) (X_2) as independent variables, and Customer Experience (CE) (Y) as dependent variable. The research used the quantitative method, which uses numbers measured statically to reach conclusions about the topic [57]. The location of the research at Citra Garden 6, Kalideres, West Jakarta. The research was held for three months, from early February to April. Primary data collection techniques are through filling out online questionnaires using Google Docs and the link shared on social media such as LINE, WhatsApp, and Instagram. This study used closed-ended multiple-choice questionnaires with the research instrument using the Likert scale 1 to 5 (1: strongly disagree: 2: disagree; 3: neutral; 4: agree; 5: strongly agree). Respondents were asked to answer the statement which considered correct based on the instrument. The statement used in the research came from an indicator of each variable in the framework illustrated below.

Table 1. Operational Variable X1.

Variable	Indicator	Scale
The Self-Order Kiosk (X1)	Functionality	Likert Scale (1-5)
	Enjoyment	
	Security	
	Assurance	
	Design	
	Convenience	
	Customization	

Source: S.Park [36].

Tabel 1 show there are seven indicators from variable X1 "The Self-Order Kiosk".

Table 2. Operational Variable X2.

Variable	Indicator	Scale
Service Quality (X2)	Tangibles	Likert Scale (1-5)
	Empathy	
	Reliability	
	Responsiveness	
	Assurance	

Source : Pasuraman in A. Yesika [30].

Tabel 2 show there are five indicators from variable X2 "Service Quality".

Table 3. Operational Variable Y1.

Variable	Indicator	Scale
Customer Experience (Y1)	Sensory	Likert Scale (1-5)
	Emotional	
	Social	

Source : Schmitt in Septian [51].

Tabel 3 show there are three indicators from variable Y1 "Customer Experience".

The secondary data of this study comes from review studies of books, literature, and reports that are related to the variables used. The researcher decided to use a sample calculation according to Sugiyono [57], the Cochran formula is used to find the sample size when the number of people in the population is unknown.

$$n = \frac{Z^2 pq}{e^2} \tag{1}$$

n = Total sample needed
Z^2 = By value 1.96, prices are on the normal curve with a 5% deviation.
p = 50% chance of correctness
q = 50% chance of being incorrect
e = 10% is the sample error rate (sampling error) used in this study.

Therefore, the number of samples created,

$$n = \frac{(1,96)^2(0,5)(0,5)}{(0,1)^2} \tag{2}$$
$$n = 96,04$$

Sugiyono in Wina Almayanti & Chaerudin [58] also stated in calculations that generate fractions (there are commas), 96.04 should be adjusted up because it is a fraction. Therefore, the sample size for this investigation was 97 respondents. The criteria for the respondents were customers who had visited, bought, or used the service in McDonald's Citra Garden 6.

The research data analysis was tested using IBM SPSS Statistic 25 Programs, which analysed through several types of tests, including reliability and validity test, analysis descriptive, hypotheses test, and multiple linear regression analysis. The output of the test will be shown in the next section.

4 Result

4.1 Profile Respondent

According to the data collected that has been distributed to 117 respondents who have used the self-order kiosk at McDonald Citra Garden 6. A proportionate number of males, 38 responses (32.5%), and women, 79 responses (67.5%), participated in the current study. The respondent's ages range from below 17 to 45, with most respondents being between 18 to 25 years old. Most respondents work as employees, 45.3%, and students or colleges, 43.6%. Their frequency of visiting McDonald's Citra Garden 6 in a month range from 1-3 times a month with 85 responses, 4-6 times a month with 13 responses, every day with two responses, and when there is an attractive promo, 17 responses, based on Tabel 4 shown below.

4.2 Reliability and Validity Test

4.2.1 Reliability Test

A reliability test is used to determine whether statement item is reliable or not if its Cronbach Alpha value exceeds 0.60. Tabel 5 shows the representations of the self-order kiosk (X1), service quality (X2), and customer experience (Y) are reliable, with Cronbach's Alpha values more than 0.60.

Table 4. Profile Respondent.

Gender	Frequency	Percentage
Female	79	67.5%
Male	38	32.5%

Age	Frequency	Percentage
<17 years old	5	5.1%
18 – 25 years old	71	60.7%
26 – 35 years old	16	13.7%
36 – 45 years old	7	5.1%
>45 years old	18	15.4%

Occupation	Frequency	Percentage
Student/Colleague	51	43.6%
Entrepreneur	4	3.4%
Employee	53	45.3%
Housewife	6	5.1%
Business partner	1	0.85%
Ex-employee	1	0.85%
Not working	1	0.85%

Times of Visiting McD Citra Garden 6	Frequency	Percentage
1-3 times a month	85	72.6%
4-6 times a month	13	11.1%
Everyday	2	1.8%
When there is an attractive promo at McD	17	14.5%

Source: Primary Data (2023).

Table 5. Reliability test result.

Variable	Cronbach's Alpha	Items	Result
The Self-Order Kiosk	0,907	9	Reliable
Service Quality	0,932	9	Reliable
Customer Experience	0,962	17	Reliable

Source: IBM Statistic SPSS 25 (2023).

4.2.2 Validity Test

If R Count ≥ R Table, the indicator items correlate significantly with the total score (declared valid). Table 6 show that all the indicators from each variable are valid.

4.3 Descriptive Analysis

According to the Table 7 shown above, the respondent with the lowest score, 4.21, shows statement 8, "Ordered through self-order kiosk at McD Citra Garden 6 are delivered on time to customers" with the lowest score. This average value (4.21< 5) indicates that some respondents were still dissatisfied with the length of time they had to wait for the food.

"Self-order kiosk at McD Citra Garden 6 speeds me up in ordering food" has the highest average (4.44 < 5) indicates that the self-order kiosk at Mcdonald's Citra Garden 6 work well to better serve their customers.

Table 6. Validity test result.

Variable	Indicator	R Count	R Table	Result
The Self-Order Kiosk (SOK)	SOK1	0,748		Valid
	SOK2	0,726		Valid
	SOK3	0,685		Valid
	SOK4	0,815		Valid
	SOK5	0,725	0.181	Valid
	SOK6	0,790		Valid
	SOK7	0,765		Valid
	SOK8	0,713		Valid
	SOK9	0,718		Valid
Service Quality (SQ)	SQ1	0,733		Valid
	SQ2	0,821		Valid
	SQ3	0,793		Valid
	SQ4	0,753		Valid
	SQ5	0,779	0.181	Valid
	SQ6	0,798		Valid
	SQ7	0,849		Valid
	SQ8	0,874		Valid
	SQ9	0,841		Valid
Customer Experiences (CE)	CE1	0,724		Valid
	CE2	0,791		Valid
	CE3	0,809		Valid
	CE4	0,834		Valid
	CE5	0,844		Valid
	CE6	0,757		Valid
	CE7	0,808		Valid
	CE8	0,820	0.181	Valid
	CE9	0,883		Valid
	CE10	0,831		Valid
	CE11	0,701		Valid
	CE12	0,835		Valid
	CE13	0,843		Valid
	CE14	0,855		Valid
	CE15	0,815		Valid
	CE16	0,577		Valid
	CE17	0,747		Valid

Source: IBM Statistic SPSS 25 (2023).

Table 7. Descriptive analysis results of the self-order kiosk (X1).

Indicator	N	1	2	3	4	5	Total	Mean	Std. Deviation
X1.1	117	1	1	14	41	60	509	4,35	,791
X1.2	117	1	0	7	60	49	507	4,33	,670
X1.3	117	1	2	10	36	68	519	4,44	,792
X1.4	117	1	3	11	36	66	514	4,39	,830
X1.5	117	1	2	11	50	53	503	4,30	,780
X1.6	117	1	0	10	47	59	514	4,39	,719
X1.7	117	1	1	18	44	53	498	4,26	,811
X1.8	117	1	2	15	53	46	492	4,21	,794
X1.9	117	1	2	13	52	49	497	4,25	,787
Total Mean								**4,324**	

Source: IBM Statistic SPSS 25 (2023).

Table 8. Descriptive analysis results of service quality (X2).

Indicator	N	1	2	3	4	5	Total	Mean	Std. Deviation
X2.1	117	0	3	10	53	51	503	4,30	,734
X2.2	117	1	0	13	52	51	503	4,30	,734
X2.3	117	1	0	18	53	45	492	4,21	,760
X2.4	117	1	2	23	55	36	474	4,05	,808
X2.5	117	1	0	9	54	53	509	4,35	,699
X2.6	117	1	4	9	44	59	507	4,33	,830
X2.7	117	1	1	15	46	54	504	4,31	,793
X2.8	117	3	2	14	47	51	492	4,21	,905
X2.9	117	1	4	11	49	52	498	4,26	,832
Total Mean								**4,257**	

Source: IBM Statistic SPSS 25 (2023).

Table 9. Descriptive analysis results of customer experience (Y).

Indicator	N	1	2	3	4	5	Total	Mean	Std. Deviation
Y.1	117	2	1	13	35	66	513	4,38	,849
Y.2	117	1	4	12	42	58	503	4,30	,854
Y.3	117	1	2	15	47	52	498	4,26	,811
Y.4	117	1	1	17	51	47	493	4,21	,786
Y.5	117	1	2	18	46	50	493	4,21	,829
Y.6	117	1	7	18	51	40	473	4,04	,904
Y.7	117	2	4	25	38	48	477	4,08	,957
Y.8	117	3	0	13	47	54	500	4,27	,857
Y.9	117	1	2	6	43	65	520	4,44	,748
Y.10	117	1	2	12	47	55	504	4,31	,793
Y.11	117	1	4	22	46	44	479	4,09	,881
Y.12	117	1	3	14	43	56	501	4,28	,839
Y.13	117	1	2	10	41	63	514	4,39	,787
Y.14	117	1	1	13	37	65	515	4,40	,788
Y.15	117	1	0	11	32	73	527	4,50	,738
Y.16	117	3	1	14	33	66	509	4,35	,913
Y.17	117	1	1	19	41	55	499	4,26	,824
Total Mean								**4,280**	

Source: IBM Statistic SPSS 25 (2023).

Table 8 show that statement 4, "Customer's areas at McD Citra Garden 6 are regularly cleaned and sanitized" has the lowest value at 4.05, according to the data processing above. Showed that the McDonald's Citra Garden 6's employees are still rarely clean and sanitize their surround.

"All McDonalds Citra Garden 6 products are presented with good quality" has the highest average, indicating that all the products from McDonald's Citra Garden 6 serve the best quality.

Table 9 above show that the lowest average value at 4.4, the statement "Music played on McDonald's Citra Garden 6 makes the atmosphere comfortable", the respondent suggested the music being played does not have a big impact on comfort because sometimes the music can be heard or not depends on the outlet situation.

"McD Citra Garden 6 brand logo/symbol display is easy to recognize." has the highest average (*mean*) value

at 4.50. Respondents believe that McD Citra Garden 6 is easy to know and recognized by many people.

4.4 Hypotheses Test

4.4.1 Simultaneous Test (F-Test)

Table 10. F-Test Result.

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12838,201	2	6419,100	439,697	,000ᵇ
	Residual	1664,278	114	14,599		
	Total	14502,479	116			

a. Dependent Variable: Customer Experience

b. Predictors: (Constant), Service Quality, Self-Order Kiosk

Source: IBM Statistic SPSS 25 (2023).

Table 10 show that a significance level of 0.00, which is less than the commonly used threshold of 0.05, it is possible to infer that both self-order kiosks and service quality variables have a significant and simultaneous impact on the customer experience.

4.4.2 Partial Test (T-Test)

Table 11. T-Test Result.

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-3,696	2,693		-1,373	,173
	Self-Order Kiosks	,666	,105	,315	6,319	,000
	Service Quality	1,320	,097	,676	13,549	,000

Source : IBM Statistic SPSS 25 (2023).

Table 11 show that the results are obtained. The significance value obtained for the self-order kiosk variable is 0.000 < 0.05. This suggests there is a partial impact of self-order kiosks on the customer experience. The service quality variable also has a significance value of 0.000 < 0.05, indicating there is a partial impact on service quality and customer experience.

The test results from the F-Test and T-Test are

H_1 = The self-order kiosk has a significant impact on customer experience.

H_2 = The service quality has a significant impact on customer experience.

H_3 = The self-order kiosk and service quality have a significant impact on customer experience.

All hypotheses are accepted and show a significant impact.

4.5 Multiple Regression Test

Table 12. Multiple Regression Result.

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-3,696	2,693		-1,373	,173
	Self-Ordering Kiosks	,666	,105	,315	6,319	,000
	Service Quality	1,320	,097	,676	13,549	,000

Dependent Variable: Customer Experience

Source: IBM Statistic SPSS 25 (2023).

From Table 12 above the researchers can determine the significance of the influence of predictor variables on dependent variables precisely. Through formulas:

$$Y = a + b1X1 + b2X2 \qquad (3)$$

The results of this multiple linear regression equation :

$$Y = -3{,}696 + 0{,}666\ X1 + 1{,}320\ X2 \qquad (4)$$

Based on the equations generated through multiple linear regression indicates that

a. The constant value a = -3.696 means that if the self-order kiosk and service quality variables are not included in the study, the customer experience will increase by 3.696.

b. The coefficient value of self-order kiosk = 0.666 means that if the other independent variables are fixed and the self-order kiosk variable increases by 1%, then customer experience will increase by 0.666. The coefficient is positive, meaning that *there is a positive relationship between the self-order kiosk (X1) and the customer experience (Y)*.

c. The service quality coefficient value = 1.320 means that if the other independent variables are fixed and the service quality variable increases by 1%, then customer experience will increase by 1.320. The coefficient is positive, meaning that *there is a positive relationship between the service quality (X2) and customer experience (Y)*.

4.5.1 Determination Coefficient Test (R Square)

Table 13. R Square Result.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,941ᵃ	,885	,883	3,821

Predictors: (Constant), Service Quality, The Self-Order Kiosk

Source: IBM Statistic SPSS 25 (2023).

Table 13 show the value of the coefficient of determination or R Square is 0.885 (88.5%). It can be concluded that the contribution of the self-order kiosk (X1) and service quality (X2) to customer experience (Y) simultaneously is 88.5%.

5 Conclusion

The researcher examined how the self-order kiosk and service quality at McDonald's Citra Garden 6 impacted customers' experience. McDonald's implemented the self-order kiosk to improve their services in response to increasing the importance of technology in the food and beverage industry. The self-order kiosk at McDonald's Citra Garden 6 is convenient for patrons. The highest value was placed on this self-order kiosk because it expedites and improves the accuracy of food orders. But in fact, delivery times for orders placed via self-order kiosk are longer and make customers wait. Relatively, many customers were satisfied with the excellent quality of food McDonald's served. Most of them gave the highest value that the logo is easy to recognize which reminds them about the company. However, according to the description analysis, in the sensory experience (sound), the music does not comfort customers. Another thing in the operation got the lower value that employees rarely clean tables and chairs, which decreases customer satisfaction as it relates to service quality.

Overall, there are significant impacts between the self-order kiosk and customer experience, service quality to the customer experiences, and significant impact between self-order kiosk and service quality to the customer experience of McDonald's Citra Garden 6 by 88.5% and 11.5% could be influenced by other variables outside this study which means all hypotheses are accepted. From the multiple regression test, it can be concluded:

1. There is a *positive* relationship between the self-order kiosk (X1) and customer experience (Y).
2. There is a *positive* relationship between the service quality (X2) and customer experience (Y).

Based on the results, the researchers have created several suggestions, which are
The Self-Order Kiosk (X1) :
a. McDonald's Citra Garden 6 may sustain efficient operations by reviewing and addressing barriers and regularly improving operational procedures to improve operations.
b. McDonald's Citra Garden 6 can sustain service speed by paying attention to the details of incoming orders according to each queue's service channel to avoid queue interruptions.
Service Quality (X2) :
a. McDonald's Citra Garden 6 should maintain all operations based on the Standard Operational Procedures (SOP) and wear masks and hand gloves when handling food to ensure consistent quality.
b. McDonald's has a self-service system where customers clean their tables. Therefore they need to remind consumers and enforce Standard Operating Procedures (SOPs) to check tables and chairs regularly for cleaning and sanitization.
Customer Experience (Y) :
a. McDonald's Citra Garden 6 can increase brand recognition by frequently evaluating the logo's illumination quality.

b. McDonald's Citra Garden 6's music should follow the latest trends and played with the comfort volume to keep consumers enjoy their time in McDonald's Citra Garden 6.

Using self-order kiosk with IoT technology has become increasingly popular in the food service industry, particularly in the new normal where touchless experiences are preferred. McDonald's has been at the forefront of this trend, utilizing the self-order kiosk to enhance the customer experience. The benefit of using SOK is that it can improve operational efficiency, increase revenue, and improve customer experience. As such, service providers should consider the adoption of SOK to improve the experience for their customers and the efficiency of their operations while gaining valuable insights into their operations.

In this study, there is still 11.5% of the effect that may be gained from other factors, which will be a new issue in future research. This study is limited to McDonald's in the sector of food (fast food restaurant) in Citra Garden 6, Jakarta. Other probable variables can be discovered if studies are conducted in other restaurants, in various circumstances, and with a range of individuals.

Researchers were subsequently able to find continuity between Self-Order Kiosk (SOK), Service Quality (SQ), and Customer Experience (CE) in other category areas, such as the usage of self-order kiosks at hospitals for medicine ordering, refuelling, and at stations as ticket booking machines. This will undoubtedly have a different impact than this research, which can be altered by several factors that aren't covered in this research.

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