

# The Role of Self-Ordering Kiosks in Enhancing Customer Satisfaction of Selected Fast Food Chain in Quezon City

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**Abstract**— This study investigates the influence of self-ordering kiosks on customer satisfaction in specific fast food establishments located in Quezon City. Self-ordering kiosks have become a notable innovation in the food service business, driven by the ongoing revolution in technology, with the goal of enhancing the customer experience. The objective of this study is to assess the impact of these kiosks on different dimensions of consumer satisfaction, such as the speed of service, accuracy of orders, and overall convenience. The study aims to gain thorough insights into the success of self-ordering kiosks by using a quantitative method through the survey gather from customers and staff. The results are anticipated to provide fast food chain executives with valuable insights into the advantages and difficulties of adopting this technology, ultimately leading to the development of more effective service plans and increased consumer contentment in the fiercely competitive fast food sector.

**Keywords**— Self-ordering kiosks, Customer satisfaction, Fast food chains, Service speed & Order accuracy.

## I. INTRODUCTION

In the rapidly evolving landscape of the food service industry, technological advancements play a pivotal role in shaping customer experiences. One notable innovation is the introduction of self-ordering kiosks in fast food chains. These kiosks offer a modern alternative to traditional counter service, allowing customers to place their orders independently. Less than 50% of fast-food companies utilize information and communication technology in their value chain process. However, there is a clear aim among these companies to implement such technologies, as evidenced by the widespread usage of e-commerce in the fast-food industry (Atoc, & Oroscobian., 2023). This shift towards automation aims to streamline operations, reduce wait times, and enhance order accuracy. Emphasize the implementation of hospitality technologies will enhance the sustainability of restaurants. The promotion of technical innovation, acquisition, and training is crucial for restaurant management. Academia should take the lead in discussing and promoting the implementation and dissemination of technical innovation (Gikonyo, Mwenda & Wachira., 2024) As fast food chains strive to meet the growing demand for quick and efficient service, the adoption of self-ordering kiosks has become increasingly prevalent. In Quezon City, a hub of bustling commercial activity, selected fast food chains have integrated these kiosks to cater to the tech-savvy consumer base. Based on Kim & Park (2024), confirms that the anxiety mechanism effectively explains the

attitudes of restaurant customers towards kiosks in the restaurant business. The complete study methodology promptly elucidates the significance of kiosk service in swiftly evolving social and market dynamics. Hospitality workers must find a middle ground between adopting new technologies and upholding conventional marketing principles in order to stay competitive and increase income. This comprehensive strategy guarantees sustained achievement in the constantly changing hospitality industry (Bilgihan & Ricci). Nevertheless, establishments who implemented self-service kiosks experienced a reduction in the remuneration of their part-time staff as well as a decrease in the utilization of unpaid family members for labor. The outcomes are influenced by franchise establishments. Full-time employees of independently owned restaurants that implemented kiosks experienced a rise in their salaries (Yoon, 2023).

This study aims to analyze the influence of self-ordering kiosks on customer satisfaction in specific fast food businesses located in Quezon City. The research aims to provide a thorough understanding of how these kiosks influence customer perceptions and behaviors by assessing critical criteria such as service speed, order accuracy, and overall convenience. This study will employ a combination of quantitative surveys and qualitative interviews to collect valuable insights on the success of self-ordering kiosks from both customers and staff. The results are anticipated to provide practical

suggestions for the management of fast food chains, enabling them to utilize technology effectively in order to improve consumer happiness and maintain competitiveness in a rapidly changing market.

### **Statement of the Problem**

The main aim of this study is to investigate how self-ordering kiosks can improve customer satisfaction in specific fast food businesses in Quezon City. It is essential to assess the efficacy of self-ordering kiosks in satisfying consumer expectations and enhancing their dining experience as the fast food industry continues to integrate technology for better service delivery. The objective of this study is to determine the primary parameters that influence consumer satisfaction when utilizing self-ordering kiosks and to assess their relative impact compared to conventional ordering methods.

What is the impact of self-ordering kiosks on customer satisfaction in selected fast food chains in Quezon City?

What features of self-ordering kiosks are most appreciated by customers in these fast food chains?

How does customer satisfaction with self-ordering kiosks compare to satisfaction with traditional counter service in the selected fast food chains?

## **II. METHODOLOGY**

### **Research Design**

This study utilizes a quantitative research approach, specifically employing purposive sampling, to examine the impact of self-ordering kiosks on customer satisfaction in chosen fast food businesses in Quezon City. Data will be collected from clients who have utilized these kiosks using a well-organized questionnaire. The questionnaire will specifically target their satisfaction levels and the aspects that they consider most important. The survey will incorporate Likert scale inquiries to assess several aspects of consumer contentment, together with demographic inquiries to characterize the respondents. Participants will be selectively chosen based on their familiarity with the kiosks, guaranteeing that the sample comprises of users who are relevant to the study. The process of data analysis will encompass the use of descriptive statistics to provide a concise summary of the demographic information and satisfaction ratings.

### **Research Locale and Respondents of the Study**

The research will be carried out at specifically chosen fast food establishments situated in Barangay Greater Lagro, Quezon City. This location is selected for its

wide range of fast food options and the inclusion of self-ordering kiosks, which are essential for the research objective of improving consumer happiness. The study would encompass a sample size of 50 participants who are patrons of the chosen fast food establishments in Barangay Greater Lagro, Quezon City. Participants will be intentionally chosen based on their prior usage of self-ordering kiosks at these establishments. This methodology guarantees that participants directly engage with the technology being studied, allowing for a deeper understanding of their perceptions and levels of satisfaction. The objective of the study is to obtain a statistically representative sample of customers who regularly visit these fast food businesses and have used self-ordering kiosks during their eating experience.

### **Data Collection**

The study named "The Role of Self-Ordering Kiosks in Enhancing Customer Satisfaction of Selected Fast Food Chains in Quezon City" will collect data from 50 participants. A standardized questionnaire will be used, which includes a 4-point Likert scale to measure customer happiness. The survey will be created to gather information about customers' experiences with self-ordering kiosks at fast food restaurants in Barangay Greater Lagro, Quezon City. The survey will consist of demographic inquiries to categorize participants and Likert scale statements that center on many facets of consumer contentment, such as user-friendliness, promptness of service, precision of orders, and overall pleasure with the self-ordering kiosk encounter. Participants will evaluate each statement using a scale that spans from 1 (indicating a high level of satisfaction) to 4 (indicating a high level of dissatisfaction). This will yield numerical data that will be examined to determine the effect of self-ordering kiosks on customer satisfaction.

### **Ethical Consideration**

Prioritizing ethical issues, the study will investigate the impact of self-ordering kiosks on customer satisfaction in selected fast food chains in Quezon City. Prior to the study, all participants will be required to give informed consent, indicating their understanding of the study's objectives, their voluntary involvement, and the confidentiality of their answers. The identity of participants will be preserved during both the data collecting and analysis stages. The data will be presented in a summarized format to ensure that individual responses cannot be identified. The researchers will rigorously follow ethical norms, upholding the rights and privacy of participants, while

also guaranteeing that the study provides accurate and relevant insights into the dynamics of customer satisfaction in fast food settings through the use of self-ordering kiosks.

**Statistical Treatment of Data**

Consequently, the application of frequency, percentage, and weighted mean analyses would be the most effective methodologies employed in the study named "The Role of Self-Ordering Kiosks in Enhancing Customer Satisfaction of Selected Fast Food Chains in Quezon City." Frequency and percentage will be provided to

offer a comprehensive analysis of the demographic characteristics of respondents categorized by age, gender, and frequency of kiosk usage, along with their reactions to each item on the satisfaction scale, detailing the proportion of respondents who rated each aspect of satisfaction. The weighted mean will be calculated for the average satisfaction score of each item on the Likert scale, taking into account the frequency of each response level. This would allow the study to precisely quantify consumer satisfaction levels. Consequently, it would provide insights into the effect of self-ordering kiosks on overall customer experience.

**III. RESULT**

*Table 1. Profile of the Respondents*

Respondents Demographic Profile	Frequency (f)	Percentage (%)
<b>Sex</b>		
Male	13	26%
Female	37	74%
<b>Age</b>		
18-24	40	80%
25-40	9	18%
41-56	1	2%
<b>Frequency of kiosk use:</b>		
Always	46	92%
Frequently	3	6%
Occasionally	1	2%
Rarely	0	0%

The table above shows Among the 50 respondents, the majority are female (74%), while male respondents make up (26%) of the total. This indicates that more women participated in the survey, suggesting that female customers may have a higher engagement with self-ordering kiosks in fast food chains or were more willing to respond to the survey.

The largest age group in the study is 18-24 years old, representing 80% of the respondents. This suggests that young adults, likely students or young professionals, are the primary users of self-ordering kiosks. Meanwhile, 18% of respondents are aged 25-40, indicating moderate engagement from middle-aged customers, while only 2% are from the 41-56 age group, showing minimal

usage among older customers. This could imply that younger customers are more familiar and comfortable with digital ordering systems compared to older age groups.

A significant 92% of respondents reported using self-ordering kiosks "always," indicating a strong preference for this technology over traditional counter service. Another 6% use kiosks frequently, while only 2% use them occasionally. Notably, no respondents reported using kiosks rarely, which suggests that self-ordering kiosks have been widely accepted and integrated into the ordering habits of fast food customers in the selected locations.

*Table 2. Impact and Features of Self Ordering Kiosks and Comparison to the Traditional Counter Service*

Survey Item	Weighted Mean	Verbal Interpretation
<b>Section 1: Impact of Self-Ordering Kiosks on Customer Satisfaction</b>		
<b>Q1: Using self-ordering kiosks makes the ordering process faster and more efficient.</b>	3.45	Very Satisfied

<b>Q2: I feel more satisfied when using self-ordering kiosks compared to traditional counter service.</b>	3.60	Very Satisfied
<b>Q3: Self-ordering kiosks reduce ordering errors, leading to a better customer experience.</b>	3.45	Very Satisfied
<b>Section 2: Most Appreciated Features of Self-Ordering Kiosks</b>		
<b>Q4: The kiosk interface is user-friendly and easy to navigate.</b>	3.32	Very Satisfied
<b>Q5: The kiosk provides clear menu options, including customization choices.</b>	3.55	Very Satisfied
<b>Q6: The payment process through the kiosk is secure and convenient.</b>	3.80	Very Satisfied
<b>Section 3: Comparison with Traditional Counter Service</b>		
<b>Q7: I prefer using self-ordering kiosks over ordering at the counter.</b>	3.54	Very Satisfied
<b>Q8: Self-ordering kiosks provide a more convenient and hassle-free experience than traditional counter service.</b>	3.84	Very Satisfied
<b>Q9: Customer service quality is better when using self-ordering kiosks compared to ordering from a cashier.</b>	3.59	Very Satisfied

Table 2 survey results indicate that respondents are highly satisfied with self-ordering kiosks in selected fast food chains in Quezon City. The data suggest that kiosks positively impact customer satisfaction, particularly in terms of efficiency, convenience, and accuracy compared to traditional counter service. Respondents perceive self-ordering kiosks as significantly enhancing the ordering process. With a weighted mean of 3.45, customers agree that kiosks make transactions faster and more efficient, reducing wait times and improving service flow. Additionally, respondents express greater satisfaction using kiosks compared to traditional counter service (3.60), indicating a shift in customer preference toward automated ordering. Another important factor contributing to customer satisfaction is the reduction of ordering errors (3.45), suggesting that kiosks minimize mistakes and provide more accuracy in processing orders. These findings highlight the overall positive influence of self-ordering kiosks on customer experience. As studied by Yang, Q., Goodsir, W., & Poulston, J. (2019), By removing the need to wait in line to make an order and giving customers more leisure time to browse the menu, the respondents believed that kiosks increased efficiency. As a result, while utilizing a kiosk did not always expedite the service process, it did reduce wait times and give time for decision-making. Additionally, the kiosks offered straightforward ordering and payment procedures, straightforward English-language instructions, and distinct meal categories with graphics. Menus, ingredients, discounts, and promotions were all covered in greater detail and

with greater clarity at the kiosks than at the service counter.

Among the key features evaluated, respondents express high satisfaction with the kiosk interface, menu clarity, and payment convenience. The user-friendly interface (3.32) is well-received, though it has the lowest score in this section, indicating room for potential improvement in ease of navigation. The ability to customize orders easily (3.55) is another highly appreciated feature, as customers value the flexibility in modifying their meals to suit their preferences. The payment process (3.80) receives the highest rating, demonstrating strong trust in the security and convenience of digital transactions. These results suggest that while self-ordering kiosks are well-designed and efficient, further enhancements in interface accessibility could further improve customer experience. In order to improve the usability and accessibility of self-ordering kiosks in restaurants, the study suggested technological improvements such as headphone ports, bilingual interfaces, and digital payment choices. Analysis of market segmentation and the creation of focused marketing plans for various demographic groups can both benefit from the study's outcomes.

According to some researchers it must emphasize how crucial it is to comprehend how patrons view self-ordering kiosks in order to enhance patron happiness and promote the use of this technology in fast-food establishments (B. Dela Peña, G., & Matthew Aquino, J., 2023).

In terms of Comparison with Traditional Counter Service, the survey results strongly indicate a preference for self-ordering kiosks over traditional counter service. Respondents favor kiosks for ordering (3.54), reflecting their growing acceptance as a modern and efficient alternative to manual transactions. Additionally, customers find kiosks to be a more convenient and hassle-free option (3.84) the highest-rated item in the survey suggesting that the speed, autonomy, and ease of use contribute significantly to customer satisfaction. Interestingly, customer service quality is perceived to be better when using kiosks (3.59) compared to ordering from a cashier, possibly due to improved accuracy, faster service, and the elimination of human errors. These findings highlight the increasing reliance on technology in fast food service and the positive reception of digital ordering systems. As stated by Sy, M. A. P. C., Irenea, M. G., Malabuyoc, F. L. S., Sobrevilla, M. D. M., & Borres, R. D. (2021) they indicated that, in terms of their overall perceived happiness, the majority of clients who use kiosk machines receive better service. The study's outcome, however, may be impacted by a number of factors that are yet missing. To make things better, the researchers recommend adding more elements to the parameters that impact the customer's overall perceived pleasure, like the number of the workforce, the size of the work area, and the cost of the items.

#### IV. CONCLUSION

The findings of this study demonstrate that self-ordering kiosks significantly enhance customer satisfaction in selected fast food chains in Quezon City. Customers perceive kiosks as a faster, more efficient, and more accurate ordering method compared to traditional counter service. The results indicate a strong preference for self-ordering kiosks, as they provide a hassle-free and convenient experience, minimizing wait times and reducing ordering errors.

Among the features evaluated, customers highly appreciate the secure and convenient payment process, clear menu options, and customization capabilities. While the kiosks are generally user-friendly, there is room for improvement in interface design to further enhance accessibility and ease of use. Additionally, customers perceive service quality to be better when using kiosks, suggesting that automation improves order accuracy and overall efficiency. Overall, self-ordering kiosks play a vital role in improving customer satisfaction, offering a modern and efficient alternative to traditional ordering methods. To maintain and

enhance this positive experience, fast food chains should continue optimizing their kiosk systems, ensuring a seamless, user-friendly, and technologically advanced service that meets the evolving preferences of their customers.to

#### V. RECOMMENDATION

Based on the findings of this study, fast food chains should focus on enhancing the user experience of self-ordering kiosks to further improve customer satisfaction. While customers generally find the kiosk interface user-friendly, improvements in navigation, font readability, and responsiveness can make transactions even smoother. Expanding customization options, such as detailed ingredient modifications and dietary preference filters, can also cater to a wider range of customer needs. Additionally, ensuring secure and diverse payment options including digital wallets, contactless payments, and QR code scanning will enhance transaction convenience and trust. Although kiosks provide efficiency, some customers may still require assistance, so staff members should be readily available to guide users, especially first-time customers, to prevent frustration. Regular maintenance and software updates are also essential to fix potential technical issues, improve transaction speed, and introduce new features that align with technological advancements. Furthermore, fast food chains can encourage kiosk usage by implementing promotional campaigns, discounts, or loyalty rewards for customers who utilize self-ordering kiosks. By adopting these recommendations, fast food chains can maximize the benefits of self-ordering kiosks, enhance customer satisfaction, and maintain a competitive edge in the evolving food service industry.

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