

Measuring Employee Satisfaction with Self-Ordering Kiosks: A Case Study on Selected Fast-Food Chains in General Santos City

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Abstract

Self-ordering kiosks (SOKs) are one of the most important technical developments that are rapidly transforming the fast-food sector to improve productivity, accuracy, and customer satisfaction. Despite fewer than half of fast-food companies fully integrating digital systems, the adoption of SOKs continues to grow as establishments recognize their value in streamlining operations. This study examines the impact of self-ordering kiosks on worker happiness in several fast-food restaurants in General Santos City. It focuses on how employees perceive the kiosks' utility, usability, job satisfaction, and the level of assistance and training provided. The study collected responses indicating high levels of employee satisfaction, with a mean score ranging from 4.45 to 4.63. We used Cronbach's Alpha for verification of the standardized survey questionnaire used in the study. Workers stated that kiosks significantly reduce tedious order-taking duties, minimize mistakes, and free them up to concentrate on higher-value jobs, such as food preparation, customer care, and upholding service standards. This change contributes to a more orderly and manageable work environment by increasing workflow efficiency and lowering stress during peak hours. Additionally, employees emphasized that proper training and ongoing support are essential for a smooth integration, as they increase their confidence and enhance their ability to engage with the technology. To maximize employee performance and operational results, the study recommends continuous training, strong technical support, and the strategic application of data collected from kiosks. The results demonstrate that self-ordering kiosks have a favorable influence on employee motivation, efficiency, and satisfaction.

Keywords: Employee satisfaction, self-ordering kiosks, fast-food industry, technology acceptance, General Santos City

1. Introduction

Through technological advancements intended to improve operational effectiveness, service precision, and customer satisfaction, the fast-food sector is constantly evolving. Self-ordering kiosks (SOKs), which are computerized devices that enable customers to independently make their purchases

without interacting with workers, are one of the most critical advancements in recent years. Although the objective is to increase service speed and decrease human error, the installation of these kiosk's changes staff roles and work dynamics. Continuous technological innovations have a significant impact on customer interactions with staff in the food and service industries. The adoption of self-ordering kiosks in fast-food franchises is a noteworthy innovation. Customers can place their orders individually at these kiosks, which offer a contemporary alternative to traditional counter service. Information and communication technology is used in the value chain process by less than half of fast-food enterprises. However, there is a precise aim among these companies to implement such technologies, as evidenced by the widespread usage of e-commerce in the fast-food industry (Atoc & Orasco-Fabian, 2023).

Fast food businesses have made extensive use of fast-food kiosks because they offer customers a better service experience, primarily through quicker ordering, reduced wait times, and dependable service quality without human involvement (Dela Peña & Aquino, 2023).

Several fast-food restaurants in General Santos City have utilized these kiosks to enhance customer satisfaction and service. However, employee satisfaction—which continues to be a crucial factor in determining performance, motivation, and retention—is affected by such technological integration. As new technology changes work processes, employee perceptions of control, value, and competence may rise or fall. Understanding how these changes impact employees' satisfaction as they adapt to new systems becomes critical.

According to SGD 8: Decent Work and Economic Growth, this leads to sustainable economic growth, creating full capacity for work production, which in turn leads to a decent work environment. Kiosks are a vital element that can contribute to economic growth and increased productivity. It also examines how this technology drives economic efficiency and changes the nature of work. In addition, our study also aims to understand how the investment in the kiosk is converted into improved working conditions and prepares workers for the digital economy.

This study aims to examine the effects of self-ordering kiosks on employee satisfaction among selected fast-food chains in General Santos City. Specifically, it aims to (1) identify the employees' perceptions of the usefulness and ease of using kiosks, (2) determine the impact of kiosks towards their job satisfaction, and (3) assess the training and support of the staff in accordance with the self-ordering kiosks.

The findings of this research will help managers and business owners design practical training, support systems, and job structures that align technological advancement with employee well-being. Additionally, it contributes to the limited body of research on the human aspect of digital transformation in the Philippine fast-food sector, providing policymakers and emerging scholars interested in employee behaviour and technology adoption with new perspectives.

OBJECTIVES OF THE STUDY

The primary objective of this study is to examine the impact of self-ordering kiosks on worker satisfaction at specific fast-food restaurants in General Santos City. It seeks to understand how employees' attitudes, perceptions, and overall work experience are influenced by the integration of this technology in a rapidly changing service environment.

Specifically, the study aims to evaluate the level of employee satisfaction with the use of self-ordering kiosks, with a particular focus on how these systems impact their daily tasks, workload, and sense of job fulfilment. It also aims to assess the level of training and support provided to staff in relation to the self-ordering kiosks. Additionally, the study aims to provide managers and organisations with helpful suggestions to enhance employee engagement, adaptation, and satisfaction with technological advancements in fast-food operations.

MATERIALS AND METHODS

Research Design

This study examined employees' experiences with self-ordering kiosks using a quantitative research design and a descriptive case study methodology. It concentrated on a few General Santos City fast-food restaurants that have implemented these digital technologies. The approach aimed to gather quantitative data regarding the attitudes, opinions, and degree of satisfaction that employees had with the kiosks. The study shed light on how technology impacts day-to-day operations and job efficiency by looking at actual workplace scenarios. All things considered, this approach helped highlight the advantages and difficulties workers encounter when adjusting to kiosk-based service systems.

Sampling Technique

A purposive sampling method was used to carefully choose participants who are directly involved in or impacted by the use of self-ordering kiosks. This strategy ensured that only employees who had direct interaction with the technology were included in the study. Managers, floor workers, and cashiers were among the answers, representing a range of job responsibilities. The study aimed to gather diverse perspectives on how kiosk operations impact workers' daily responsibilities and overall well-being by incorporating a range of positions.

Instrument

The study gathered data using a physical survey questionnaire. To fully capture employees' experiences with self-ordering kiosks, we divided the questionnaire into multiple sections. Basic demographic data, including age, occupation, and duration of employment, was gathered in the first section. The following sections measured how easy the kiosks were to use, how helpful they were in completing their jobs, and how satisfied users were with the technology in general. To ensure the questions were understandable, pertinent, and aligned with the study's goals, the instrument was examined and verified by research specialists prior to dissemination. To improve the questionnaire and verify its

reliability, a pilot test was also conducted. We calculated Cronbach's Alpha to confirm the consistency of responses further, ensuring that the tool generated reliable and accurate results.

Data Collection Procedure

Employees of fast-food restaurants that use self-ordering kiosks were given a physical survey. The study's purpose was explained to the participants, and they were assured that their responses would be kept confidential and used solely for academic research. Employees were free to react whenever it suited them and were not under any pressure from management because participation was entirely optional. This strategy ensured candid and considerate input, providing the researchers with trustworthy data that accurately represented the experiences and viewpoints of real employees.

Data Analysis

RESULTS AND DISCUSSION



Figure 1. Demographic Profile of the Selected Fast-Food Chain. Positions and Length of Employment.

Based on the gathered data (Figure 1), the demographic profile of employees from selected fast-food chains in General Santos City shows that most respondents are young frontline workers directly engaged in customer service and order processing. A majority of the participants are Dining Crew members (53.3%), followed by Counter/Cashiers (30%) and Managers (16.7%), with no technicians included in the sample. Most respondents fall within the 21–30 age bracket (60%), while 20% are between 11–20 years old and another 20% are between 31–40 years old. This indicates that the workforce is predominantly young and likely more adaptable to new technology such as self-ordering kiosks. Gender distribution is nearly balanced, with 50% male, 43.3% female, and 6.7% preferring not to disclose their gender, suggesting that both male and female employees share similar exposure and experiences with the kiosks. Regarding the length of employment, most employees have been with their companies for one to five years (46.7%), while 30% have worked for less than a year. Only 10% have been employed for five to ten years, and a small portion (6.7%) have been with the company for fifteen years or more. This shows that the majority of employees are relatively new but have sufficient experience to understand workflow changes brought by self-ordering kiosks. Their responses likely reflect both fresh insights and adaptability to technological integration in the workplace.

I. Identify Employees' Perceptions of the Usefulness and Ease of Using Kiosks

Table 1. Employee Satisfaction and Motivation

Question	Mean	Description	Interpretation
Self-ordering kiosks are used to simplify the ordering process.	4.62	Strongly Agree	Highly Satisfied
The process of receiving an order from the self-ordering kiosk was convenient.	4.58	Strongly Agree	Highly Satisfied
The self-ordering kiosks have positively affected my motivation at work.	4.45	Strongly Agree	Highly Satisfied
I feel satisfied with how the self-ordering kiosks are integrated into our workflow.	4.63	Strongly Agree	Highly Satisfied

II. For Section II (Employee Satisfaction & Motivation), employees reported a high level of satisfaction with an overall mean of 4.571 (SD = 0.762). The highest-rated indicator was SII_Q4 (M = 4.633), showing that employees feel strongly motivated by supportive workplace practices and recognition efforts. Similarly, SII_Q1 (M = 4.617) and SII_Q2 (M = 4.583) reflect that employees are highly satisfied with the clarity of expectations and encouragement they receive from management. Meanwhile, SII_Q3 (M = 4.450), though still rated "Highly Satisfied," indicates a slightly lower perception of motivational strategies, suggesting opportunities for strengthening programs that boost employee morale. Overall, results demonstrate that employees feel motivated, valued, and supported within their work environment.

III. Employee Satisfaction and Motivation, demonstrates an exceptionally high level of employee satisfaction with the implementation of self-ordering kiosks. With all mean scores clustered between 4.45 and 4.63, the interpretation of "Strongly Agree" and "Highly Satisfied" is overwhelmingly supported. The data clearly shows that employees perceive the kiosks as highly effective tools that genuinely simplify the ordering process and make the subsequent task of receiving the order convenient.

IV. According to a study in Quezon City, self-ordering kiosks significantly enhance customer satisfaction in fast food chains. 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 (Dela Peña and Aquino, 2023) Based on our results, this satisfaction of customers is also reflected in the employees indicating that SOKs address a key pain point in the workflow, the manual order-taking process allowing staff to transition their focus to order preparation and customer service rather than transactional input.

V. Self-service kiosks, a particular kind of self-service technology, have grown in popularity in quick-service restaurants and enable patrons to complete the ordering procedure with little to no assistance from staff. Although these kiosks have the potential to simplify ordering and payment procedures, customer acceptance and satisfaction are crucial to their efficacy. Some consumers may even prefer the human touch of speaking with a staff member; others may not feel comfortable using technology. Due to their lack of knowledge with the technology or their perception that self-service kiosks are less user-friendly, some consumers may choose not to use the kiosks' services, which could lead to their discontent (Chen and Wang, 2020). For customers, SOKs provide faster, more convenient service and greater choice-making capabilities, which increase overall satisfaction and loyalty (Souie, 2025). By integrating digital displays, touchscreens, and networked ordering systems, restaurants not only improve the dining experience but also achieve better financial outcomes and positive feedback from staff, highlighting the dual advantage of SOKs in supporting employees and enhancing customer experience in the digitalized foodservice industry [3] (Dela Peña, Aquino, 2023)

VI. Determine the Impact of Kiosks on their Job Satisfaction

Table 2. Impact on Job Role and Workload

Question	Mean	Description	Interpretation
Using the self-ordering kiosks improves my job performance.	4.68	Strongly Agree	Highly Satisfied
The kiosks have reduced my workload.	4.6	Strongly Agree	Highly Satisfied
I feel more efficient with the help of the kiosk.	4.62	Strongly Agree	Highly Satisfied
The self-ordering kiosks reduced the likelihood of ordering errors.	4.5	Strongly Agree	Highly Satisfied

VII. For Section III, employees reported an overall interpretation of Satisfied with a total mean of 4.600 (SD = 0.713). The highest-rated indicator was SIII_Q1 (M = 4.683), indicating that employees are highly satisfied with this aspect of their experience, showing strong positive perceptions. SIII_Q3 (M = 4.617) also received a “Highly Satisfied” rating, reflecting consistently strong satisfaction across related items. Meanwhile, SIII_Q2 (M = 4.600) and SIII_Q4 (M = 4.500) were rated “Satisfied,” suggesting that although employees have favorable views, these areas leave room for further improvements. Overall, results show that employees generally maintain positive experiences, with a mix of high satisfaction and areas that may benefit from targeted enhancement.

VIII. Employees clearly view the kiosks as valuable tools that fundamentally enhance their work environment. Specifically, the data highlights the successful simplification of the workflow, as employees strongly agree the kiosks simplify the ordering process and that the process of receiving an order was convenient. This positive feedback indicates that the kiosks have successfully absorbed the transactional burden of order-taking, allowing employees to focus more effectively on order fulfillment and customer interaction. The primary drivers for this increased efficiency are the reduction in workload and a substantial decrease in the likelihood of ordering errors. This reduction in stress and errors is key to the overall psychological benefit recorded, where employees state the kiosks have positively affected their motivation at work. By integrating seamlessly into the workflow, the kiosks are not perceived as a complication, but as a supportive technology that allows the staff to execute their duties more competently, leading to high satisfaction with the way the kiosks are integrated into our workflow.

IX. The introduction of self-ordering kiosks has significantly transformed employee roles in modern service settings. Traditionally focused on taking orders, processing payments, and serving customers, employees now shift toward value-added tasks such as quality assurance, customer support, and operational management. Freed from repetitive order-taking, staff can engage in more meaningful interactions with customers, addressing queries or accommodating special requests. Additionally, the need to interact with and troubleshoot kiosk systems provides opportunities for skill development and career growth, enhancing overall job satisfaction and workplace morale. When implemented with proper training and transparent communication, kiosks are perceived as empowering tools rather than threats to employment, further boosting employee engagement [6] (Cheng et. al 2020).

X. In terms of workload, self-ordering kiosks reduce routine tasks and alleviate time pressure, allowing employees to focus on other operational responsibilities such as food preparation, service quality, and inventory management. Streamlined operations and accurate order processing decrease errors and minimize stress, particularly during peak hours, creating a more balanced and manageable work environment. Kiosk-generated data also enables staff to anticipate demand and optimize workflow, reducing last-minute workload spikes [6] (Cheng et. al 2020).

XI. Assess the Training and Support of the Staff in Accordance to Self-Ordering Kiosks

Table 3. Training and Support

Question	Mean	Description	Interpretation
I received adequate training in using the kiosk	4.48	Strongly Agree	Highly Satisfied
Support is available when I encounter problems with the kiosk.	4.55	Strongly Agree	Highly Satisfied

For Section IV (Assess the Training and Support of the Staff in Accordance to Self-Ordering Kiosks), employees reported being highly satisfied with an overall mean of 4.517 ($SD = 0.799$). Results show that the highest-rated indicator was SIV_Q2 ($M = 4.550$), suggesting that employees feel strongly motivated by the support and encouragement they receive in their roles. Likewise, SIV_Q1 ($M = 4.483$) reflects a high level of satisfaction regarding the factors that contribute to their motivation and overall sense of fulfillment at work. Although both indicators fall under the “Highly Satisfied” category, the slightly lower mean of SIV_Q1 highlights minor areas where motivational strategies can still be enhanced. Overall, findings indicate that employees feel well-supported, motivated, and satisfied within their work environment.

The survey results indicate a high level of satisfaction among respondents regarding both training and support for kiosk usage. With a mean score of 4.483, participants strongly agreed that they received adequate training, reflecting confidence in the effectiveness of the instructional program. Similarly, a mean of 4.55 demonstrates that respondents perceive support to be readily available when encountering issues, suggesting that the organization has established an effective support system.

The requirement for proper training and support for employees is critical prior to the operational use of equipment in the workplace. Training programs focused on post-holding ability serve as the primary mechanism for developing both the theoretical knowledge and practical competencies necessary for personnel to perform their duties effectively. The systematic optimization of these training programs is a key strategy to achieve comprehensive enhancement of post-holding capabilities and overall professional quality [6] (Cheng et. al 2020). As presented in the results of the study, the staff strongly agrees and is highly satisfied with the adequate training and support provided by the establishment. This highlights the proper way of launching equipment for proper operational use which increases the customer and employee satisfaction.

CONCLUSION AND RECOMMENDATION

According to the study, self-ordering kiosks significantly improve worker satisfaction and workflow effectiveness in several fast-food restaurants in General Santos City. Workers view the kiosks as valuable tools that make taking orders easier, lighten their workload, and free them up to concentrate on higher-value tasks, such as meal preparation, customer service, and quality assurance. The findings also show that adequate training and assistance are crucial, as they empower employees to use the technology with confidence and resolve minor issues. In the QSR industry, kiosks are a valuable technological advancement, as they enhance employee engagement, motivation, and job satisfaction, while also increasing operational efficiency and reducing errors.

For the recommendation, we advise that fast-food companies continue to provide their employees with comprehensive training programs and ongoing technical support. Managers should encourage staff members to view kiosks as empowering tools, rather than replacements, in order to foster a culture of adaptability and technological competence.

Businesses may also use data from kiosks to optimize operations better and pinpoint areas where workers can contribute to jobs that offer value. Organizations can improve operational performance and employee happiness by integrating technology with employee development. Businesses might also use data from kiosks to better optimize operations and pinpoint areas where workers can contribute to jobs that offer value. Organizations can improve operational performance and employee happiness by integrating technology with employee development.

APPENDICES

APPENDIX A. QUESTIONNAIRE

Talledo, Mecaila

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***Title: Measuring Employee Satisfaction on
Self-Ordering Kiosks: A Case Study on Selected Fast-Food Chains in General Santos City***

Section 1: Background and Demographics

1. Position:

- Dining Crew
- Counter /Cashier
- Manager
- Technician

2. Length of Employment:

- Less than 1 Year
- 1-5 Years
- 5-10 Years
- 10-15 Years
- 15 Years and Above

3. Age:

- 11-20
- 21-30
- 31-40
- 41- Above

6. Gender

- Male
- Female
- Prefer not to say

General Instructions: Please rate each item based on your level of satisfaction using the scale below: 1 means Strongly Dissatisfied and 5 means Strongly Satisfied. Select the number that best reflects your experience—there are no right or wrong answers.

1-Strongly Dissatisfied

2- Dissatisfied

3-Neutral

4- Satisfied

5-Strongly Satisfied

Section 2: Employees Satisfaction and Motivation

7. Self-ordering kiosks are used to simplify the ordering process.

- 1
- 2
- 3
- 4
- 5

8. The process of receiving an order from the self-ordering kiosk was convenient.

- 1
- 2
- 3
- 4
- 5

9. The self-ordering kiosks have positively affected my motivation at work.

- 1
- 2
- 3
- 4
- 5

10. I feel satisfied with how the self-ordering kiosks are integrated into our workflow.

- 1
- 2
- 3
- 4
- 5

Section 3: Impact on Job Role and Workload

11. Using the self-ordering kiosks improves my job performance.

- 1
- 2
- 3
- 4
- 5

12. The kiosks have reduced my workload.

- 1
- 2
- 3
- 4
- 5

13. I feel more efficient with the help of the kiosk.

- 1
- 2
- 3
- 4
- 5

14. The self-ordering kiosks reduced the likelihood of ordering errors.

- 1
- 2
- 3
- 4
- 5

Section 4: Training and Support (Likert Scale 1-5)

15. I received adequate training in using the kiosk

- 1
- 2
- 3
- 4
- 5

16. Support is available when I encounter problems with the kiosk.

- 1
- 2
- 3
- 4
- 5

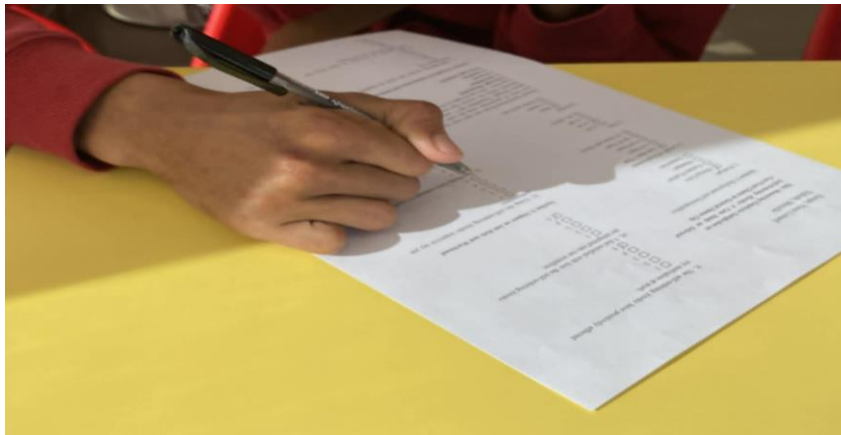


Image 1. Conduct of employee survey at selected fast-food chain in General Santos City

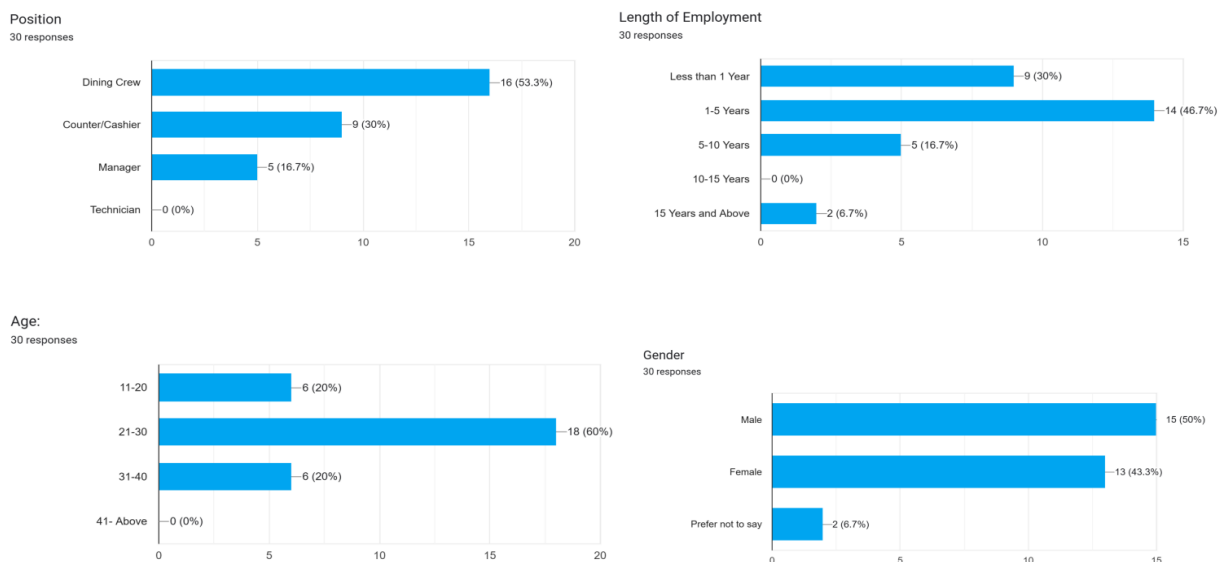


Image 2. Demographic Profile of the Workplace. Includes (1) position, (2) age, (3), length of employment, and (4) gender

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