

Operational Efficiency and Customer Satisfaction of Food Service Establishments

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ABSTRACT

This study explores the operational efficiency and customer satisfaction levels of food service establishments in Biliran, focusing on key areas such as resource management, process optimization, technology adoption, and customer service practices. Data collected from 80 respondents reveal that the food service industry in the region is characterized by a young, educated workforce, with a predominance of college graduates. The results show high operational efficiency, particularly in resource management and process optimization, but highlight areas for improvement in service speed, pricing strategies, and technology integration. Customer satisfaction is significantly influenced by product quality, policies, and staff attitudes, with service speed and pricing as areas of concern. The study concludes that food service establishments should prioritize staff training, optimize scheduling, improve service speed, refine pricing strategies, and expand technology adoption to enhance operational performance and customer satisfaction.

Keywords: Food Service, Operational Efficiency, Customer Satisfaction, Technology Adoption, Staff Training.

INTRODUCTION

In today's fast-paced world, people often struggle to find time to enjoy meals at home. Many individuals seek dining establishments that offer high-quality food and services that cater to their tastes and expectations. In response to this growing demand, food service operators continuously develop strategies to enhance their products and services, ensuring that operational efficiency and customer satisfaction are not compromised. Achieving this balance is critical to sustaining a competitive edge in the industry (Ababio & Adi, 2012).

The success of a food service establishment extends beyond the quality of food served. It encompasses aspects such as convenience, ambiance, and overall dining experience, all of which contribute to customer satisfaction and increased sales. A well-managed operation that prioritizes efficiency and customer needs will likely attract more patrons, reinforcing its market appeal (Gössling et al., 2012).

The food service industry plays a pivotal role in modern society by addressing diverse consumer needs and contributing significantly to economic development. However, achieving success in this competitive landscape requires a delicate balance between operational efficiency and customer satisfaction. Operational efficiency involves optimizing resources, streamlining processes, and maintaining cost-effectiveness (Slack, Chambers, & Johnston, 2010). Meanwhile, customer satisfaction is determined by the extent to which service delivery meets or exceeds customer expectations (Lo, Lin, & Tsai, 2011).

Existing research has established a positive correlation between operational efficiency and customer satisfaction in various service industries, including hospitality (Zhou & Wang, 2023), retail (Koç & Boz, 2022), and healthcare (Pantelidis, 2010). These studies highlight how improved efficiency enhances customer experience and business performance. However, most of these studies focus on large-scale enterprises or specific service sectors, overlooking the unique challenges faced by food service establishments such as restaurants, cafés, and fast-food chains.

Moreover, previous research has often examined individual aspects of operational efficiency, such as inventory management or employee training. There is a lack of a comprehensive framework that integrates multiple dimensions of operational efficiency and their impact on customer satisfaction within the food service industry (McCrickerd & Forde, 2016). Addressing this gap is essential, as food service businesses operate in a highly competitive and dynamic environment.

Food service establishments encounter numerous challenges, including economic uncertainties, fierce competition, demographic shifts, and evolving consumer preferences. Given the competitive nature of the food and beverage industry, businesses must ensure effective and efficient service delivery to retain existing customers, attract new ones, and foster brand loyalty. Customer satisfaction is crucial for maintaining long-term success and sustainability in this sector (Josiam & Foster, 2014).

This study focuses on operational efficiency and customer satisfaction within food service establishments in the eight municipalities of Biliran Province, Philippines. These municipalities were chosen due to their growing prominence in the tourism and hospitality industry. As these areas continue to develop, there is a pressing need to establish operational standards that will enhance their competitiveness in the market.

Furthermore, the findings of this study will benefit Eastern Samar State University by informing curriculum enhancements that better prepare students with relevant theories and principles, aligning with its mission of academic excellence. This study will also serve as a valuable reference for future researchers exploring similar topics. In addition, prospective food service businesses, such as restaurants, can utilize the study's insights to improve their operational efficiency, maximize profitability, and enhance customer satisfaction.

Objectives

The study aims to determine the operational efficiency and customer satisfaction of food service establishments in the Province of Biliran.

Specifically, it seeks to:

1. Determine the profile of the respondents in terms of:
 - 1.1 age.
 - 1.2 gender.
 - 1.3 educational attainment.
 - 1.4 years of experience in the food industry.
 - 1.5 training on food safety; and,
 - 1.6 position in a food establishment.
2. Determine the operational efficiency of the food service establishments in terms of:
 - 2.1 resource management.
 - 2.2 process optimization; and,
 - 2.3 technology adoption.
3. Determine the level of customer satisfaction of the food service establishments in terms of:
 - 3.1 product.
 - 3.2 policies.
 - 3.4 process and pro-activity.
4. Is there a significant relationship between the operational efficiency and the level of customer satisfaction?

Research Hypothesis

Hypothesis (Ho1). There is no significant relationship between the operational efficiency and the level of

customer satisfaction.

RESEARCH METHODOLOGY

Research Design and Sampling

This study will employ a descriptive correlational research design Creswell (2009). A descriptive correlational research design is suitable for this study because it aims to investigate the relationship between operational efficiency and customer satisfaction in food service establishments. This design allows for the examination of the extent to which variables are associated with each other. By collecting data on various aspects of operational efficiency, such as order accuracy, speed of service, and staff efficiency, and correlating them with customer satisfaction measures like overall satisfaction, food quality, and service quality, the study can identify potential relationships and patterns.

The research respondents of the study were the owners, managers, and supervisors of food service establishments including also the customers. These individuals possess direct knowledge and experience regarding the operational aspects of their businesses, including staffing, inventory management, customer service practices, and overall efficiency. Respondents were selected through purposive sampling; food service establishments were chosen based on the criteria of the researcher.

The research was conducted in Biliran Province, Philippines due to its strategic location in the Visayas region, renowned for its diverse culinary landscape. As a popular tourist destination with both domestic and international visitors, Biliran faces the critical challenge of ensuring high standards of operational efficiency in its food service establishments to maintain customer satisfaction. This study aims to contribute to a better understanding of the factors influencing operational efficiency and its impact on customer satisfaction within the unique context of Biliran.

The Philippines

Biliran Island

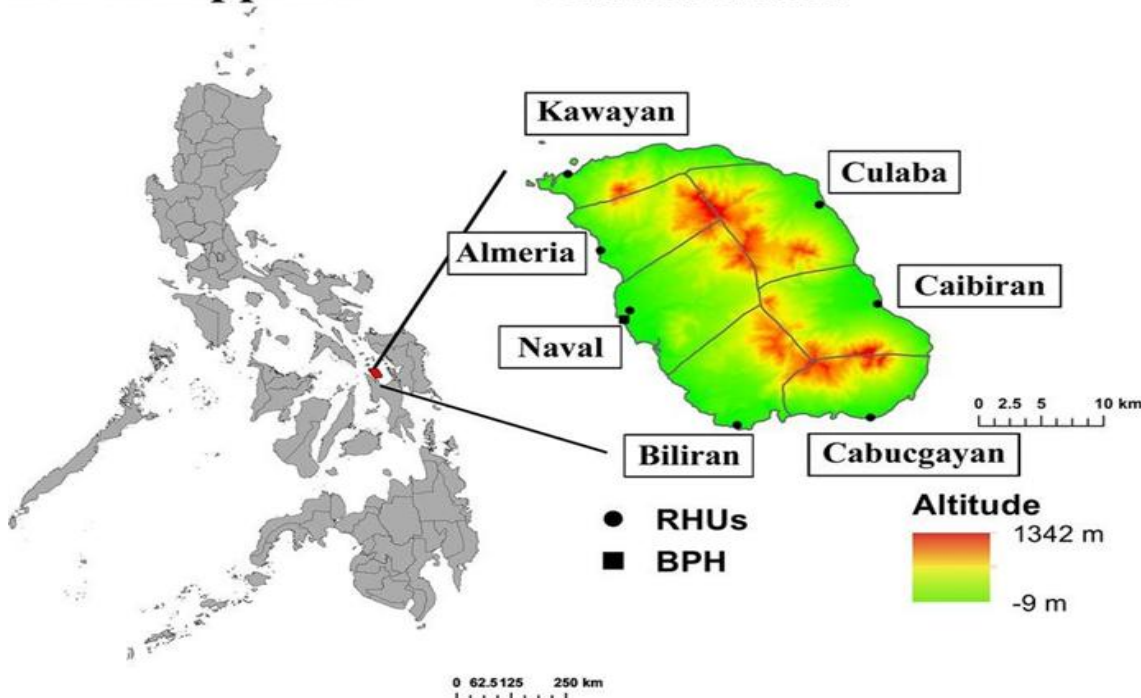


Figure 2. Map of Biliran Province

Data Collection Procedure

Before conducting the study, the researcher will obtain permission from the local government office to conduct the research in Biliran Province. Additionally, permission letters will be sent to the owners or managers of different food establishments, seeking approval to conduct the study with their employees.

The researcher personally explain the study's objectives to the respondents, ensuring they understand the importance of their participation and could complete the questionnaire accurately. The researcher also asked for consent before administering the survey questionnaire. In both distribution methods, the researcher emphasized the significance of the study and the value of the respondents' input, aiming to motivate them to complete the questionnaires accurately.

By providing clear instructions and maintaining open communication, the researcher will ensure that the participants are well-informed about the study's goals and the process of filling out the questionnaire. Follow-up reminders will be sent to prompt timely submission, and in-person visits will be conducted to collect the completed questionnaires, ensuring a high response rate and the reliability of the data collected.

The research instrument that will be used in the study is an adopted questionnaire from the study entitled: "Operational Efficiency And Customer Satisfaction of Restaurants: Basis For Business Operation Enhancement of Annie Gay Barlan-Espino, (2017) hereby modified by the researcher to obtain the necessary information that pertains to the study 'OPERATIONAL EFFICIENCY AND CUSTOMER SATISFACTION OF FOOD SERVICE ESTABLISHMENTS'. There are questions that undergo validation to the experts. The survey instrument consists of three (3) parts to the selected respondents in food establishments.

Data Analysis

The gathered data will be collated, tabulated, analyzed, interpreted, and presented in tables and narrative descriptions. For this descriptive correlational study, data analysis will involve descriptive statistics (frequencies, means, standard deviations) to summarize the data. Correlational analyses, such as Pearson's or Spearman's correlation, will be used to determine the strength and direction of relationships between operational efficiency and customer satisfaction.

Ethical Consideration

The ethical aspects of all respondents participating in the study's conduct, approval, integrity, and secrecy were the most common considerations in conducting this research. This study adhered to ethical principles by obtaining informed consent from all participants, ensuring their privacy, anonymity and confidentiality, minimizing any potential risks or discomforts. The researcher obtained necessary permissions from relevant authorities and adhered to ethical guidelines set by the institution and professional organizations. Additionally, the researcher will maintain the highest standards of professionalism and integrity throughout the study, ensuring that the participants' rights and well-being are protected.

RESULTS AND DISCUSSIONS

Demographic Profile of Respondents

This part shows the results of the respondents' profile specifically in their age, sex, educational attainment, years of experience in the food industry, food safety training, and position in food establishment.

Age of customers. Most of the respondents are aged 22-35 years old, which shows that substantial proportion of customers fall to into this age bracket accounting for 33.8 %. The age group 29-35 years old age bracket comprises 31.3 % of the customer base, whereas the 36-42 age group represents 16.3% of the customers. Moreover, the relatively lower percentage customers aged 21 below (6.3%) and 43- 50 years old above (12.5%) highlight a somewhat limited representation of the customer demographic profile.

Age of personnel. Table 3 shows that most food establishment owners/managers in Naval, Biliran are between 36 to 50 years old, with the largest group (38.75%) in the 43 to 50 age range. Younger age groups, particularly those under 29, make up a small portion of the total. This indicates that the food industry in Biliran is largely led by more experienced individuals, which may contribute to greater business stability and decision-making. However, it also suggests that there could be limited opportunities for younger entrepreneurs to engage in the food service sector.

Table 2. Distribution of customer respondents according to age

Category	Frequency	Percentage
21 below	5	6.3%
22 to 28 years old	27	33.8%
29 to 35 years old	25	31.3%
36 to 42 years old	13	16.3%
43 to 50 years old and above	10	12.5%
Total	80	100%

Table 3. Distribution of personnel respondents according to age

Category	Frequency	Percentage
21 below	2	2.5%
22 to 28 years old	10	12.5%
29 to 35 years old	15	18.75%
36 to 42 years old	22	27.5%
43-50 years old above	31	38.37%
TOTAL	80	100%

Sex of customers. Table 4 shows 56 percent of the customer respondents were male while 43.8 percent were female, which fairly shows there is a balanced distribution of customers in the food service establishments in Biliran. This suggest that the food establishment in Biliran is catering to an equal proportion of male and female customers.

Sex of personnel. Table 5 shows the sex of the respondents which revealed forty-five (45) or 56.3 percent of the respondents were male while thirty-five (35) or 43.8 percent were female, which shows the sex distribution of the food service industry in Biliran. Although males dominate the field, there is scope for even more females, such as management or kitchen staff members to make a case for diversity in the workplace.

Table 4. Distribution of customer respondents according to sex

Category	Frequency	Percentage
Male	45	56.3%
Female	35	43.8%
TOTAL	80	100%

Table 5. Distribution of personnel respondents according to sex

Category	Frequency	Percentage
Male	49	61.25%
Female	31	38.75%
TOTAL	80	100%

Educational attainment of customer respondents. Table 6 shows the distribution of respondents based on their educational attainment. The majority (62.5%) are college graduates, followed by 26.3 percent who are high school graduates. A smaller proportion has completed graduate studies, with 7.5 percent at the masteral level and 2.5 percent as masteral graduates. Only 1.3 percent have reached the doctoral level, and no respondents are doctoral graduates. This implied that educational attainment might be a significant factor in understanding the sample's overall socio-economic background, potentially indicating higher levels of professional or academic engagement.

Educational attainment of personnel respondents. Table 7 shows that fifty (50) or 62.5 percent of the respondents are college graduates, while there is no elementary and doctorate graduate among the respondents. Likewise, there is one (1) or 1.3 percent in doctorate level, two (2) or 2.5 percent is a masteral graduate, six (6) or 7.5 percent is a masteral level and twenty-one (21) or 26.3 percent is a high school graduate. This result shows that most of the workers in the food service establishment in Biliran are college degree holders.

Table 6 Distribution of respondents according to customers educational attainment

Category	Frequency	Percentage
Elementary School Graduate	0	0.0 %
High School Graduate	21	26.3%
College Graduate	50	62.5%
Masteral Level	6	7.5%
Masteral Graduate	2	2.5%
Doctoral Level	1	1.3%
Doctoral Graduate	0	0.0%
Total	80	100 %

Table 7. Distribution of respondents according to personnel educational attainment

Category	Frequency	Percentage
Elementary School Graduate	0	0.0 %
High School Graduate	26	32.5%
College Graduate	45	56.25%
Masteral Level	6	7.5%
Masteral Graduate	2	2.5%
Doctoral Level	1	1.3%
Doctoral Graduate	0	0.0 %
TOTAL	80	100%

Years of experience in the food service industry. Table 8 shows the workforce of the food service industry in Biliran island. Fifty-eight (58) or 72.5 percent of the respondents belong to the year experience bracket ranging from 0-6 years. Likewise, one (1) or 1.25 percent of the respondents belong to the year experience bracket ranging from 14- 20 years. Twenty-one (21) or 26.25 percent of the respondents belong to the year experience bracket ranging from 7-1 years. Based on the answer of the respondents this implies that workers in the food service industry in Biliran are relatively inexperienced.

Table 8. Distribution of respondents according to the years of experience in the food service industry.

Category	Frequency	Percentage
0 to 6 years	58	72.05 %
7 to 13 years	21	26.25 %
14 to 20 years	1	1.25 %
21 to 27 years	0	0 %
TOTAL	80	100 %

Food Safety Training. Table 9 reflects the distribution of respondents who received food safety training. Thirty-three (33) or 41.3 percent of the respondents received a training in personal hygiene, showing the most training received by the population while seven (7) or 8.8 percent of the respondents received the temperature control training. Likewise, thirty (30) or 37.5 percent received a HACCP training and ten (10) or 12.5 percent have foodborne-illness prevention training. Most respondents have received training in personal hygiene (41.3%) and HACCP (37.5%). However, fewer employees have been trained in areas like foodborne illness prevention and temperature control, highlighting a need for more comprehensive food safety training to ensure staff are well-versed in all critical food safety practices.

Table 9. Distribution of respondents according to food safety training

Category	Frequency	Percentage
HACCP	30	37.5 %
Personal hygiene	33	41.3 %
Food-borne illness prevention	10	12.5 %
Temperature control	7	8.08 %
TOTAL	80	100 %

Position in Food Service Establishment. Table 10 shows the respondents position in the food service establishment. There were thirty-six (36) or 47.5 percent of the respondents are food service establishment servers, fifteen (15) or 18.8 percent were managers, eleven (11) or 13.8 percent are busser. Likewise, ten (10) or 12.5 percent are Chef and six (6) or 7.5 percent are bartenders. Food servers represent the largest group, 47.5 percent in the position food service establishments, followed by managers and bussers.

Table 10. Distribution of respondents according to position in food service establishment

Category	Frequency	Percentage
Manager	15	18.8 %
Chef	10	12.5 %
Dishwasher	0	0.0 %
Food server	38	47.5 %
Bartender	6	7.5 %
Busser	11	13.8 %
TOTAL	80	100 %

Table 11. Profile of Respondents in Operational Efficiency of Food Service Establishment

Indicator	Mean	Description	Interpretation
Resource Management			
Effective utilization of staff.	4.75	Very Efficient	Excellent performance
Efficient inventory management.	4.77	Very Efficient	Excellent performance
Proper maintenance of equipment.	4.70	Very Efficient	Excellent Performance
Minimization of food waste.	4.71	Very Efficient	Excellent Performance
Cost effective procurement of supplies.	4.79	Very Excellent	Excellent Performance
Effective scheduling of staff.	4.17	Efficient	Good performance
Proper utilization of space.	4.77	Very Excellent	Excellent Performance
Maintenance of a clean and hygienic environment.	4.70	Very Excellent	Excellent Performance
Effective utilization of resources.	4.71	Very Excellent	Excellent Performance
Management of energy consumption.	4.79	Very Excellent	Excellent Performance
Process Optimization			
Streamlined order taking and service process.	4.81	Very Efficient	Excellent Performance
Efficient food preparation and cooking processes.	4.87	Very Efficient	Excellent Performance
Effective communication among staff.	4.86	Very Efficient	Excellent Performance
Minimization of waiting times for customers.	4.69	Very Efficient	Excellent Performance
Smooth and efficient customer service.	4.61	Very Efficient	Excellent Performance
Effective handling of customer complaints.	4.64	Very Efficient	Excellent Performance
Regular review and improvement of operational procedures.	4.64	Very Efficient	Excellent Performance
Implementation of quality control measures.	4.65	Very Efficient	Excellent Performance
Efficient handling of peak hours.	4.59	Very Efficient	Excellent Performance
Overall efficiency of operational processes.	4.79	Very Efficient	Excellent Performance
Technology Adoption			
Utilization of point-of-sale (POS) systems.	2.99	often	Adequate performance
Use of technology for inventory management.	3.24	Often	Adequate performance
Implementation of online ordering systems.	4.02	Efficient	Good performance
Use of technology for customer relationship management.	2.96	Often	Adequate performance
Utilization of technology for food preparation and cooking.	5.00	Very Efficient	Excellent performance
Use of technology for staff training and development.	4.69	Very Efficient	Excellent performance
Adoption of technology for marketing promotions.	4.61	Very Efficient	Excellent performance

Integration of technology across all operational areas.	4.64	Very Efficient	Excellent performance
Overall impact of technology on operational efficiency.	4.95	Very Efficient	Excellent performance
Willingness to adopt new technologies for improvement.	4.94	Very Efficient	Excellent performance
Total	4.53	Very Efficient	Excellent performance

The table provided gives an assessment of the operational efficiency in food service establishment in Biliran Province. The evaluation result shows that food service establishment in the province has a very excellent performance in various areas, showcasing the commitment of the food service workforce industry.

Resource management. The result shows high efficiency across various indicators. Notably, efficient inventory management (4.77), cost-effective procurement of supplies (4.79), and effective resource utilization (4.71) demonstrate excellent performance in managing core operations. This aligns with findings by Bardi and Goodale (2007), who emphasize the importance of efficient inventory and procurement systems in minimizing waste and improving profitability. A standout result is the effective management of energy consumption (4.79), reflecting the industry's growing focus on sustainability and cost-efficiency, as noted by Jones (2016). However, effective scheduling of staff (4.17) shows a slight lower score, suggesting that there may be room for improvement in this area, which Kimes (2008) highlights as a challenge for food service managers in balancing staffing levels with demand. This implies that food service establishments should focus on optimizing labor scheduling, possibly through predictive analytics or scheduling software, to improve operational efficiency and reduce costs.

Process optimization. This shows the very highly efficient result across various operational processes. Key indicators such as efficient food preparation and cooking processes (4.87), effective communication among staff (4.86), and streamlined order-taking and service processes (4.81) reflect excellent performance in optimizing core foodservice operations. These findings support previous research by Kimes (2008), which emphasizes the importance of streamlined processes and effective communication in reducing delays and improving customer satisfaction. The minimization of waiting times for customers (4.69) and smooth customer service (4.61) also reflect strong operational performance, contributing to a positive customer experience. However, efficient handling of peak hours (4.59), though still rated as "very efficient," suggests that there may be slight opportunities for further refinement during high-demand periods, as noted in studies by Jones (2016), who highlights the challenges of managing peak times effectively. This implies that food service establishments could benefit from investing in more advanced process optimization tools or training for staff, especially during peak hours, to further enhance efficiency and improve the customer experience during busy times.

Technology adoption. This reveals mixed levels of technology utilization. Indicators such as utilization of point-of-sale (POS) systems (2.99), use of technology for inventory management (3.24), and CRM technology (2.96) reflect adequate performance, indicating these areas could benefit from more advanced or consistent technology integration. This is in line with findings from studies like those by McKinsey & Company (2018), which suggest that many food service establishments still underutilize technology in some areas despite its potential to improve efficiency.

On the other hand, utilization of technology for food preparation and cooking (5.00), staff training (4.69), marketing and promotions (4.61), and overall impact on operational efficiency (4.95) score very highly, reflecting that food service establishments are leveraging advanced technology effectively in these areas. The positive impact of technology on efficiency has been highlighted by researchers like Jones (2016), who notes that automation and modern tech tools significantly streamline operations and improve productivity. This implies that while technology adoption is strong in certain areas, food service establishments should focus on enhancing their use of technology in inventory management, POS systems, and CRM to achieve more balanced and comprehensive technological integration across all operations.

The overall mean score of 4.53 across all sections signifies that the operational efficiency of food service establishment in Biliran province has very exceptional performance in terms of resource management, process optimization and technology adoption.

Table 12. Customer Satisfaction Level of the Food Service Establishment in terms of:

Indicator	Mean	Description	Interpretation
Product			
Taste of the food	4.76	Very Satisfied	Extremely pleased
Quality of ingredients	4.59	Very Satisfied	Extremely pleased
Portion size	4.63	Very Satisfied	Extremely pleased
Presentation of food	4.76	Very Satisfied	Extremely pleased
Food temperature	4.79	Very Satisfied	Extremely pleased
Policies			
Clarity of Menu items	4.59	Very Satisfied	Extremely pleased
Pricing of food and beverages	4.15	Satisfied	Generally happy
Availability of promo and discounts	4.31	Very Satisfied	Extremely pleased
Return and refund policies	4.42	Very Satisfied	Extremely pleased
Reservation policies	4.77	Very Satisfied	Extremely pleased
Process			
Speed of service.	3.21	Moderately satisfied	Somewhat satisfied
Accuracy of orders.	4.21	Satisfied	Generally happy
Cleanliness of the dining area.	4.33	Very satisfied	Extremely pleased
Friendliness and attentive of staff.	4.34	Very Satisfied	Extremely pleased
Efficiency of order taking and delivery.	4.86	Very Satisfied	Extremely pleased
Proactivity			
Staff willingness to assist customers	4.18	Satisfied	Generally happy
Handling of customer complaints	4.77	Very satisfied	Extremely pleased
Proactive measures to ensure customer safety	4.70	Very satisfied	Extremely pleased
Use of technology to enhance Customer experience	4.71	Very satisfied	Extremely pleased
Overall satisfaction with the dining experience.	4.79	Very satisfied	Extremely pleased
Total	4.48	Very satisfied	Extremely pleased

Level of customer satisfaction in food service establishment terms of product. The customer satisfaction level of food service establishment indicates a high level of satisfaction which means a score ranging from (4.49) to (4.76) across different indicators. Key factors such as food taste (4.76), presentation of food (4.76), and quality of ingredients (4.59) reflect an extremely pleased customer base. This aligns with findings from the studies like Jones, (2016) which emphasize that food quality including taste and presentation plays a significant role in customer satisfaction in the food service industry. The portion size 4.63 are also rated highly, suggesting that customers are generally satisfied with these aspects, although there may be small areas for improvement, especially in maintaining the food temperature consistency. These findings highlight the importance of maintaining a balance in product quality to meet customer expectations consistently. This implies that the food service establishment should continue to focus on maintaining and improving food

quality, presentation, and consistency in temperature, as these are crucial elements that directly influence customer satisfaction and repeat business.

Level of customer satisfaction in food service establishment in terms of policies. The figures shows that customers are generally very satisfied with the food service establishment policies. Reservation policies (4.77), clarity of menu items (4.59), and availability of promos and discounts (4.31), indicate a high level of satisfaction, particularly in terms of clear communication and the availability of special offers which enhance customer experience. These findings align with the study of Bardi and Goodale (2007), who suggest that transparent policies contribute to higher customer satisfaction and loyalty. However, the price of food and beverages (4.15) scored slightly lower, reflecting that while customers are satisfied, there may be a room for improvement in aligning pricing with perceived value. This supports the findings by Kims (2008), who highlights the importance of competitive pricing in terms of maintaining customer satisfaction. This implies that food service establishment should consider refining their pricing strategies and better align with customer expectations while continuing to offer clear policies, attractive promotions, and streamlined reservations process to maintain high levels of customer satisfaction.

Level of customer satisfaction in food service establishment in terms of process. The figures show a mixed customer satisfaction level. Efficiency of order taking and delivery (4.86), friendliness and attentiveness of staff (4.34), and cleanliness of the dining area (4.33) indicate extremely pleased customers, suggesting that the service environment and staff behavior positively impact customer satisfaction. These findings are consistent with the study of Jones (2016), which highlights the importance of staff performance and a clean environment in shaping customer perceptions of service quality. However, the speed of service, which is (3.21) points lower, reflecting that customers are only moderately satisfied in this area. This indicates a potential opportunity for improvement in reducing waiting times, which can directly influence overall satisfaction. Studies like Kimes (2008) have shown that service speed is a critical factor in customer satisfaction, particularly in high-volume food service settings. This implies that the food service establishment should focus on improving service speed, possibly through a better staff training, optimized workflows, or technological support, to enhance overall customer satisfaction, particularly in reducing waiting times.

Level of customer satisfaction in food service establishment terms of proactivity. The customer satisfaction level of food service establishments in terms of proactivity shows high customer satisfaction across various related factors. Indicators such as handling customer complaints (4.77), proactive measures to ensure customer safety (4.70), and use of technology to enhance customer experience (4.71) reflect extremely pleased customers. These results indicate that food service establishments are effectively addressing customer needs and ensuring a positive experience through proactive measures. This is related to the study of Bardi and Goodale (2007), which underscores the importance of proactive customer service in enhancing customer satisfaction. However, staff willingness to assist customers with (4.18) received a somewhat lower score, suggesting that while customers are generally satisfied, there is still room for improvement in ensuring that the staff are consistently proactive and attentive to customer needs. Kimes (2008) highlights the staff attitude that can significantly influence overall customer satisfaction. This implies that food service establishments should focus on further training staff to be more proactive and willing to assist customers, ensuring that every customer, ensuring that every customer interaction contributes positively to the overall dining experience.

Relationship between the operational efficiency of food service establishment and level of customer satisfaction

Table 13

Variable 1 Operational Efficiency	Variable 2 Customer satisfaction	Correlation Coefficient (r)	Interpretation	P-value	Interpretation
Resource management	Customer satisfaction	.343	Low Correlation	.002	Significant

Process Optimization		.075	Negative Correlation	.823	Not Significant
Technology Adoption		.501	Moderate Correlation	.000	Highly Significant

Table 13 reveals that resource management- computed r value was .343 which is interpreted as a low correlation resulting in a p-value of .002 interpreted as significant, indicating that better resource management practices are linked to high customer satisfaction. Process optimization computed r value was .075, which are interpreted as negative correlation, resulting in a p-value of .823 interpreted as not significant. The results suggest that food service industry operational efficiency in terms of process optimization does not affect customer satisfaction. Finally, the technology adoption r value is .501, which is interpreted as moderate correlation, p-value is .000 interpreted as highly significant. The results suggest that technology adoption is crucial for operational efficiency, it highly influence customer satisfaction in this case. The findings imply that food service establishments may prioritize improving resource management to enhance customer satisfaction and further efforts should be needed to optimize technology use for a more significant impact on customer experience. Therefore, the null hypothesis is rejected.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Based on the findings, the following conclusion is drawn:

The food service establishments in Biliran demonstrate a highly efficient operational structure, particularly in resource management and process optimization, which contributes to overall customer satisfaction. The workforce is predominantly with a high level of education but limited experience, suggesting that training and development initiatives could enhance their performance. While food quality, policies, and proactive service measures are key drivers of customer satisfaction, areas like service speed and pricing strategies require attention to further improve the customer experience. Additionally, resource management and technology adoption have a significant positive impact on customer satisfaction, while process optimization appears to have a less direct influence. Therefore, food service establishments should prioritize refining their resource management practices and technology adoption, improving service speed, while also exploring more comprehensive technology integration to support long-term operational success and customer satisfaction.

Recommendations

The following are the recommendations based on the results of the study:

1. Invest in training programs to improve both technical and soft skills, especially focusing on food safety, customer service, and leadership development.
2. Use advanced scheduling tools to ensure proper staffing levels during peak hours and reduce turnover, enhancing operational efficiency.
3. Streamline the order-taking process and kitchen operations to reduce waiting times and improve overall customer satisfaction.
4. Regularly assess pricing to ensure it aligns with customer expectations while maintaining profitability and offer value-based promotions or discounts.
5. Optimize the use of technology in inventory management, POS systems, and CRM to improve operational efficiency and customer service.
6. Reinforce a customer-first culture and train staff to be more proactive in assisting customers, ensuring a consistently positive experience.

7. Regularly review operational procedures and use customer and employee feedback to refine processes and maintain high efficiency.

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