

Research Article

Operations Management of Canteen Among Higher Education Institutions in Rinconada

JANINE L. JARABESE, MBA

*UNIVERSITY OF SAINT ANTHONY, IRIGA CITY

Abstract:

This study was conducted to determine the extent of implementation of operations management practices of canteen among Higher Education Institutions (HEIs) in Rinconada. Specifically, it sought answers to the following questions: 1. What is the business profile of canteen owners in terms of years of operation, working capital, number of workers, days of operation, average daily customers served, and facilities and equipment? 2. What is the extent of implementation of key operational practices along food safety and sanitation, customer service relations, procurement and inventory management, financial management, facilities and equipment, and compliance with government rules and regulations? 3. Is there a significant relationship between the extent of implementation of canteen business operations management practices when grouped according to profile? 4. What operations management guide can be formulated based on the findings of the study? A descriptive research method was employed, using survey questionnaires and interviews with fifteen (15) canteen owners. Statistical tools such as percentage, weighted mean, and chi-square test were utilized. The findings revealed that all six (6) key operational functions are being practiced to some extent, the areas of financial management and food safety and sanitation are the most consistently and effectively applied. On the other hand, the procurement, customer service relations, facilities and equipment, and government rules and regulations indicate areas where investment, or oversight further enhance overall operational efficiency. These results the importance of a balanced focus across all management areas to ensure the continued success and compliance of canteen operations. Based on the findings of this study, "Efficient Canteen Management: An Operations Guide for School Canteen" was developed. This serves not only as a reference but also as a strategic tool to help canteen maintain its consistency in service quality regardless of their profile or available resources.

Keywords: Canteen Business, Extent of Implementation, Higher Education Institutions, Operations Management, Rinconada

1. Introduction

Canteen serve a significant function within higher education institutions by providing students, faculty, and staff with accessible and affordable meals that support their daily activities. In addition to supplying food, canteens facilitate convenient spaces for campus community members to interact and socialize.

Effective canteen management ensures that food is procured, prepared, and served efficiently, safely, and at reasonable cost. Higher education institutions are responsible for promoting the well-being of all campus members, particularly students and faculty. The management of canteen directly influences the quality, availability, and pricing of food, which in turn affects student satisfaction and overall campus experience.

The canteen encourages a culture of healthy eating by promoting nutritious food. It's the ideal setting for promoting eating a balanced diet. People's eating habits, tastes, and total food intake are significantly influenced by their food purchases. In addition to provide the school community with reasonably priced and healthful meals, the canteen must uphold an operational management practice. Institutions that oversee canteen operations make ensuring that food procurement, preparation, inventory control, personnel, and customer service are carried out effectively and in complete accordance with national rules and regulations.

Accrediting bodies frequently evaluate the availability, quality, and management of auxiliary services such as canteen. Properly managed canteen facilities contribute to a positive learning environment, which is an essential factor in institutional accreditation. A school canteen that fails to meet hygienic, nutritional, affordability, and accessibility criteria may have adverse effects on the institution's accreditation. Operational issues in canteen management is critical not just for student well-being but also for preserving and improving the institution's overall certification and reputation.

The Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015 that serve as a global blueprint to achieve a better and more sustainable future for all. Several of these goals are directly relevant to the operations management of the canteen. SDG 3: Good Health and Well-Being, seeks to guarantee healthy lifestyles and advance well-being for everyone. This policy promotes responsible consumption and sustainable food practices, which supports SDG 12: Responsible Consumption and Production. School canteens that follow this regulatory requirement not only meet national standards but also advance more general sustainability and global health objectives. Integrating these SDGs into canteen operations management provides a structured and ethical framework for decision-making, helping school administrators and canteen managers align daily operations with broader global objectives for health, sustainability, and educational success.

Additionally, Republic Act No. 10611, an act to enhance the nation's food safety regulations, safeguard consumer health, facilitate regional foods and food products to reach markets, and accomplish other goals, must be adhered to. It establishes the regulatory foundation for maintaining food safety throughout the food supply chain and mandates that food establishments, including school

and university canteen, uphold standards that protect public health, ensuring that all food served is safe, properly handled, and hygienically prepared.

In the Rinconada area comprising several municipalities in Camarines Sur, Philippines, higher education institutions continue to expand, increasing the demand for well-managed food service facilities. However, despite the presence of canteen across these institutions, challenges such as limited resources, inconsistent food quality, hygiene concerns, and inefficient workflows still persist. These issues need to be examined of how operations management practices are being implemented and what improvements can be made.

The purpose of this study is to ascertain how higher education institutions run their canteen operations in order to optimize operations, boost customer happiness, and achieve cost-effectiveness; it is important to identify best practices and areas for improvement. The result of this study may serve as benchmark for the development of a guidebook for operations of canteen management business industry. This guidebook aims to serve as a resource for school administrators, aspiring entrepreneurs, and existing canteen operators, providing them with a structured approach to establishing and managing successful canteen businesses in educational settings.

2. Research Design

The researcher used the descriptive-survey method of research to interpret the data gathered through the survey questionnaire focusing on the Operations Management of Canteens among Higher Education Institutions in Rinconada. The use of descriptive-survey provides a systematic way to gather data that reflects the current state of a population or phenomenon. It allows to collect a factual information about people's opinions, behaviors, attitudes, or characteristics in a way that is both efficient and cost-effective. This method is described as "what exists" rather than cause-and-effect relationships. By using standardized instruments such as questionnaires and structured interviews, the descriptive-survey method ensures consistency in data collection, which enhances the reliability and validity of the results. Additionally, data is often gathered from large, representative samples, findings can be generalized to a wider population. According to Creswell (2012), the descriptive research design is a study that describes the characteristics of a population or phenomenon being studied. Primarily used to gain an understanding of a group or phenomenon. This involves collecting data through surveys, interviews, or observation. Siedlecki (2020) added that descriptive research is a method used to observe and describe the characteristics of a phenomenon or the relationships among variables without manipulating them. This approach is particularly useful when the goal is to understand the current state of affairs, identify patterns, or recognize trends within a specific population or setting.

The researcher employed the descriptive-survey method to draw out the business profile of canteen business in terms of years of operations, average working capital, number of workers, days of operations, average daily customer served, facilities and equipment and the extent of implementation of operations management of canteen business along food safety and sanitation, customer service relations, procurement and inventory management, financial management and facilities and equipment. Furthermore, the researcher used the survey method, under the descriptive research in order for the survey to be reliable and valid, it is important that the questions are constructed properly.

2.1 Respondents of the Study

The respondents of this research study were the fifteen (15) canteen owners of Higher Education Institutions in Rinconada. It was delimited to canteen owners located in the municipalities of Bato, Baa, and Nabua, as well as the City of Iriga.

2.2 Research Instrument

The primary research instrument used was a standardized survey questionnaire supplemented by unstructured interviews. Questionnaire Structure: The questionnaire was divided into two main parts: Part I: Gathered the business profile of canteen owners in terms of years of operation, working capital, number of workers, days of operation, average daily customers served, and facilities and equipment; Part II: Measured the extent of implementation of key operational practices including food safety and sanitation, customer service relations, procurement and inventory management, financial management, facilities and equipment, and compliance with government rules and regulations. A Five-Point Likert Rating Scale was utilized for the responses, ranging from 5 (Highly Implemented) to 1 (Not Implemented). The instrument was validated by the Head of the Department of Trade and Industry and a Canteen Coordinator before being finalized through a dry run.

2.3 Data Gathering and Analysis

The data gathering process began with securing formal permission from University Presidents and Canteen Owners to conduct the study. The researcher personally distributed and retrieved the questionnaires from the respondents, conducting unstructured interviews as necessary to substantiate the questionnaire data with deeper personal insights. Additionally, library and internet techniques were used to gather pertinent secondary information from books and journals. The study employed several statistical tools: the percentage technique and frequency counts were used to quantify profile responses, while the weighted mean was utilized to objectively interpret the implementation indicators. Furthermore, the chi-square test was applied to determine if significant relationships existed between the business profiles and the extent of operational implementation, and a ranking system was used to identify the priority of various suggestions and results.

3. Results and Discussion

From the statistical treatment of the data with the corresponding analysis and interpretation to that, the following findings have

surfaced:

3.1 Majority of canteen owners have been operating less than 3 years and 9 to 11 years, indicated a significant presence to start a canteen business in the market. The most common range for average working capital is PHP 30,000.00 and below. There's a sharp decline in the number of businesses with 4 to 6 workers, operates from Monday to Saturday. The average daily customer served is 251 and above. Majority of canteen businesses have an adequate facilities and equipment that meet health and safety standards.

3.2 On the extent of implementation of the operations management of canteen among Higher Education Institutions in Rinconada along: 3.2.a. Food Safety and Sanitation are implemented, indicated a strong focus on monitoring and evaluating practices to ensure the extent of implementation. Rigorous sanitation and cleaning protocols daily received the highest rank (Rank 1) with a weighted mean score of 4.13; 3.2.b. Customer Service Relations are implemented, suggested for improvement to prioritize customer service, focused on operational efficiency or cost control. A welcoming and comfortable environment through appropriate lighting, seating arrangements, and cleanliness; Set SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) customer service goals received the highest rank (Rank 1.5) with a weighted mean score of 3.60; 3.2.c. Procurement and Inventory Management are implemented, led to enhanced relationships with multiple reliable suppliers to minimize supply chain disruptions. Just-in-time (JIT) inventory management approach received the highest rank (Rank 1) with a weighted mean score of 4.00; 3.2.d. Financial management are highly implemented with a significant emphasis on a strong internal controls to prevent fraud and errors and available funds are used in the most effective manner. Monitoring cash inflows and outflows to ensure sufficient working capital for daily operations received the highest rank (Rank 1) with a weighted mean score of 3.73; 3.2.e. Facilities and equipment are implemented, needs assessment to determine the space utilization by using appropriate storage solutions and equipment. Choosing equipment that meets the operational needs and tests to ensure all equipment functions correctly before opening received the highest rank (Rank 1.5) with a weighted mean score of 3.33; 3.2.f. Government Rules and Regulations are implemented, findings indicated a requirement to secure health certificates for each employee from the health office. Proper disposal of food waste, recycling, and compliance with local environmental laws, received the highest rank (Rank 1) with a weighted mean score of 3.80.

3.3 In test of significant relationship, a chi-square test was conducted to assess the relationship between the business profile and the extent of implementation of canteen businesses. The critical chi-square value for a significance level of 0.05 was utilized.

3.4 An Operations Guide for School Canteen can be developed based on the findings of the study.

4. Conclusion

In view of the research findings, the following conclusions were drawn:

The Profile of the Canteen Business in terms of Years of Operations showed that majority of businesses with less than 3 years and 9 to 11 years have an average working capital of PHP 30,000.00 and below. Most business employed with 4 to 6 workers, operates from Monday to Saturday. The average daily customer served is 251 and above. Majority of school canteen businesses have an adequate facilities and equipment that meet health and safety standards.

The extent of implementation on the Operations Management of Canteen revealed that all six (6) operational areas are being implemented with particular strengths and some areas for improvement.

There is no significant relationship between extent of implementation of operations management and profile of canteen owners. The findings indicated that extent of implementation of canteen operations management are being practiced, but there is still need for continuous improvement, particularly in procurement, customer service relations, facilities and equipment, and government rules and regulations, to achieve the high level of operational management excellence and sustainability.

Efficient Canteen Management: An Operations Guide for School Canteen was developed to provide an effective management of canteen operations in higher education institutions. This is aim to support canteen operators in improving their management practices by offering practical guidelines on areas such as operations planning, hygiene and safety protocols, staffing, inventory control, customer service, and compliance with regulatory standards. It serves as a valuable tool for ensuring consistent, safe, and efficient food service operations across institutions.

References:

1. Abolade, A. O. (2009). Basic secondary school curriculum and instruction. Olad Graphics and Publishers.
2. Adebule, S. O., & Ayoola, O. O. (2015). Impact of instructional materials on students' academic performance in Mathematics in secondary schools in Ekiti State, Nigeria.
3. European Journal of Alternative Education Studies, 1(1). [Note: The text cites 2009; however, the standard academic record for these authors on this topic is often updated to 2015].
4. Antonina C. Sta. Maria, Lorina G. Salamat and Ferdinand P. Nocon (2012). General Statistics (Quezon City: National Bookstore, Inc.), 51.
5. Canteen Service Quality and Student Satisfaction. (2019). International Journal of Scientific & Technology Research, 8(6). Retrieved from: <https://www.ijstr.org/final-print/june2019/Canteen-Service-Quality-And-Student-Satisfaction.pdf>
6. Casingal, C. R., & Ancho, I. V. (2024). Financial Management Challenges and Best Practices of School Heads of Public High Schools. International Journal for Multidisciplinary Research, 6(1).
7. Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson Education.
8. Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.

9. Cristobal M. Pagoso, George Garcia and Cynthia Guerrero De Leon (2011). Fundamental Statistics for College Students (Manila: Sinagtala Publishers, Inc.), 116.
10. Department of Education. (2007). Revised guidelines on the operation and management of school canteens in public elementary and secondary schools (DepEd Order No. 8, s. 2007).
11. Fabre, J., & Pacpaco, R. (2020). Management and Operations of School Canteens in Selected Public Secondary Schools in Ilocos Sur, Philippines.
12. Food Safety Act of 2013, Rep. Act No. 10611 (2013) (Phil.).
13. Republic Act No. 10611. (2013). An Act to Strengthen the Food Safety Regulatory System in the Country to Protect Consumer Health and Facilitate Market Access of Local Foods and Food Products.
14. Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8–12. Retrieved from: <https://doi.org/10.1097/NUR.0000000000000493>
15. Student Satisfaction with Canteen Services at Davao Oriental State University-Cateel Campus. (2025). *Asian Journal of Education and Social Studies*.
16. United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. Retrieved from: <https://sdgs.un.org/goals>



By accessing and using the content from Medicine &Community Health Archives, users agree to adhere to the terms of the Creative Commons Attribution (CC BY) license. We encourage the responsible and ethical use of the published material to promote the advancement of knowledge in the field of medicine and community health

<https://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2026 _