

Operational Cost Control in Food and Beverage Establishments: Awareness, Practices, and Challenges in Southern Oriental Mindoro, Philippines

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DOI: <https://dx.doi.org/10.47772/IJRISS.2025.903SEDU0536>

Received: 18 September 2025; Accepted: 24 September 2025; Published: 10 October 2025

ABSTRACT

The study analyzed the cost control awareness, practices, and challenges of the Food and Beverage Service establishments in the Southern part of Oriental Mindoro, Philippines. By using a quantitative research design with survey questionnaires, the research gathered data from thirty-eight (38) employees, comprised of chefs, managers, and other staff involved in cost control awareness and practices, particularly in food cost, inventory, portion control, and water and energy savings, and identified challenges they face in maintaining effective cost control practices. The majority of the respondents were chefs or head cooks, and were working in the establishments for one to three (1-3) years. Findings revealed that, though there is a high level of awareness in areas like food cost control methods, menu design, inventory management, and portion control with high adherence to best practices, there were still challenges related to adjusting menu prices in response to fluctuating costs of ingredients, maintaining portion consistency, and a prominent motivation among staff to minimize waste. The adaptation of technology and staff training was recommended. The output of the study was the proposed cost control strategies that consisted of activities and programs for the implementation of the different food and beverage establishments. These insights aimed to improve operational efficiency, reduce waste, and maximize profitability, ensuring long-term success for food and beverage businesses in the region.

Keywords: Awareness, challenges, Cost control, Practices

INTRODUCTION

Food cost control is crucial in the hospitality sector since it may reduce waste and necessitates careful budgeting. When food costs are appropriately managed and every aspect and procedure in its operations and activities is given careful consideration, the sector grows.

To maintain their operations and increase earnings, food service businesses should seize this chance to provide consumers premium food, beverages, and services. According to Abdullah, et al., (2015), cost is a crucial component of business that affects its ability to survive or fail, grow or contract, transition, develop, prosper, or experience an economic catastrophe.

According to Alex-Onyeocha (2015), different firms employ a variety of methods, including cost plus. Depending on the establishment, the general manager, accountant, storeman, purchasing officer, food and beverage controller, supervisors, kitchen supervisors, restaurant and bar supervisors, or the general manager themselves execute the budgeting process for preparing or making appropriate food cost and control. In other hotels, the breakfast supervisor handles this task.

The four-step operational control procedure described by Dittmer and Keefe (2008) has been supported by a number of studies in recent years, highlighting its applicability to modern management techniques. The steps in the process include establishing performance standards, evaluating actual performance, comparing it to the standards, and taking corrective action when there are differences. This methodical approach enables organizations to effectively monitor and adjust their operations to meet their objectives.

Özbiltekin et al. (2022) emphasized that aligning operational processes with strategic objectives is critical for achieving organizational excellence. Their study highlights the importance of identifying key performance factors, monitoring them effectively, and applying corrective measures to ensure sustainable success in modern management practices.

This exploratory study aims to investigate the cost control awareness and practices that food and beverage establishments employ in their daily operations. Additionally, this study intends to investigate how food service establishments faced challenges in their daily operations. There isn't much research on control measures because this is a field that isn't well studied, particularly in Oriental Mindoro's second district. The researchers decided to look into the food and beverage cost control of the food service establishments because they are members of the College of Business and Management community. The results of the study will act as a guide for the recommended methods of managing food and beverage expenses in food service operations.

Controlling operational costs in food and beverage businesses is a crucial strategy for boosting profitability and encouraging sustainable development in Southern Oriental Mindoro, Philippines. Through efficient cost management, businesses can optimize resource utilization, minimize waste, and enhance operational effectiveness—all of which support responsible consumption, job creation, and economic advancement.

These businesses can support the Sustainable Development Goals (SDGs) of the UN, especially SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action), by implementing strategies like inventory management, portion control, energy-efficient operations, and local sourcing. Notwithstanding obstacles including erratic demand, perishable goods, and restricted training opportunities, improving operational cost control in the food and beverage industry fosters environmental stewardship and financial sustainability, which in turn supports the region's overall socioeconomic development.

Aim of the Study

In general, this study's main goal is to analyze the cost control of food and beverages in the southern region of Oriental Mindoro.

Specific Objectives

- To analyze the respondents' profiles;
- To evaluate the food service establishments' awareness of food and beverage cost control;
- To evaluate their practices;
- To evaluate their challenges with food and beverage cost control; and
- To suggest strategies for food and beverage cost control.

LITERATURE REVIEW

Cost Control Awareness

Cost control awareness in food and beverage establishments plays a critical role in profitability, yet research shows it is often unevenly understood and implemented. Studies from Malaysia indicate that many foodservice-outlet managers recognize the importance of cost control techniques—such as purchasing strategies, inventory audits, and standardizing portion sizes—but implementation is often inconsistent and based more on intuition and routine practice than formal training or systematic methods (Noor Azimin Zainol et al., 2023; Zainol & Ahmad, 2019). A case study in Istanbul found that F&B cost-control measures, when frequently applied and viewed as important by managers, have a positive effect on both financial and nonfinancial performance of hotels (Cengiz, Cengiz, Demirciftci, & Cobanoglu, 2018). More detailed work has identified key cost drivers—meat and seafood being among the largest expenses—and shown that applying

methods such as the Harris, Kerr and Forster method for daily cost tracking helps enterprises pinpoint where changes in menu, supplier selection, or portioning can yield better returns (Aksu & Eken, 2021). Despite this, literature also highlights gaps: many businesses lack formal cost control standards, regular monitoring, or systematic staff training in cost awareness, which undermines consistency and the potential for maximized profitability.

Cost Control Practices

Cost control practices are a key area of study in food & beverage operations, particularly in how cost-cutting, inventory control, and standardization affect profitability. Awasthi, Nain, and Roy (2020) investigated cost cutting measures in the Food & Beverage Service Department and found that various strategies—such as outsourcing manpower, selecting alternative suppliers, and training staff—help control costs, especially in labor and material usage. Çakır and Göde (2025) in a systematic review of cost control in F&B businesses noted that frequent cost checking, using standard recipes, and periodic inventory counts are among the most common methods to maintain cost discipline. Ali-Momoh, Adisa, and Olufemi et al. (2022) studied standard cost effects in F&B manufacturing in Nigeria and determined that effective standard costing across labor and overheads positively affects firm performance, though raw material cost remains a risk factor.

Cost Control Challenges

Food and beverage establishments encounter multiple challenges in sustaining effective cost control practices. Rahmayanti et al. (2020) observed that mismatches between standard and actual costs often arise due to incorrect purchase orders, delivery discrepancies, and inconsistent adherence to portion standards. Ghafour (2023) highlighted that accurate forecasting reduces supply chain disruptions and improves inventory management, especially during crises.

Gumbo and Sukdeo (2024) noted that theft, economic pressures, and inadequate management information systems further undermine cost control in fast casual restaurants. Absari (2023) added that fluctuating raw material prices and gaps in production control complicate the application of cost-volume-profit analysis for profit optimization. In the Malaysian context, Zainol et al. (2024) emphasized that challenges frequently stem from limited formal systems, reliance on informal practices, and balancing quality with cost efficiency. Collectively, these studies suggest that both internal management inefficiencies and external market dynamics play critical roles in hindering effective cost control in food and beverage operations.

Theoretical Framework

The study is anchored on the Cost Control Theory, which emphasizes the systematic monitoring, evaluation, and regulation of expenses to ensure operational efficiency and profitability. According to Horngren et al. (2014), effective cost control relies on the establishment of standards, regular variance analysis, and corrective measures to minimize deviations from planned budgets. This theory is particularly relevant in food and beverage (F&B) establishments, where fluctuations in raw material prices, portioning inconsistencies, and waste significantly affect operational costs.

Another foundation of this study is the Cost-Volume-Profit (CVP) Analysis Framework, which provides insights into how changes in costs, sales volume, and pricing influence profit levels (Drury, 2018). CVP analysis helps managers in the F&B industry make informed decisions on menu pricing, portion sizes, and sales targets while identifying break-even points and contribution margins. The application of CVP is vital in addressing challenges such as price volatility and consumer demand shifts.

In addition, the study draws from the Resource-Based View (RBV) of the firm, which posits that organizational resources—both tangible (ingredients, equipment) and intangible (employee skills, managerial expertise)—are critical in achieving competitive advantage (Barney, 1991). Effective cost control, therefore, depends not only on systems and tools but also on managerial capability and employee compliance. This perspective is especially relevant in understanding challenges related to staff training, compliance with cost standards, and adaptation to market dynamics.

By integrating Cost Control Theory, CVP analysis, and the RBV framework, this study underscores that cost control in F&B establishments is a multidimensional process shaped by systematic financial monitoring, decision-making tools, and organizational resources.

METHODOLOGY

This study employed a quantitative research design to assess cost control awareness, practices, and challenges in food service establishments located in the southern part of Oriental Mindoro.

A total of thirty-eight (38) employees from establishments with at least thirty seats participated in the study, selected through purposive sampling to ensure that respondents were directly involved in food and beverage operations.

Data were gathered using a structured survey questionnaire consisting of Likert-scale items designed to measure awareness, extent of practice, and perceived challenges in cost control.

Before administration, the instrument was reviewed for clarity, and ethical considerations were observed by securing informed consent and maintaining the privacy and confidentiality of participants. The responses were then tallied, encoded, and analyzed using descriptive statistics, specifically frequency and percentage distribution to summarize respondent profiles and categorical data, and weighted mean to determine the overall level of awareness, practices, and challenges encountered in cost control.

RESULTS AND DISCUSSIONS

Profile of the Respondents

The results reveal that the largest group of respondents (34%) were chefs or head cooks, followed by managers (26%), both of whom play significant roles in overseeing food preparation and supervising operations that directly influence cost control. A smaller proportion of participants were purchasing officers and accountants or finance officers (5% each), while 29% were categorized as “Others,” representing diverse staff members who also contribute to cost control practices. This reflects a broad range of involvement across different organizational roles, with a strong emphasis on management and culinary personnel.

In terms of work experience, the majority of respondents had been with their organizations for one to three years (53%), suggesting a relatively new workforce with developing expertise in the food and beverage industry. About 21% had less than a year of experience, indicating a notable proportion of newcomers, while 8% reported three to five years of tenure, and 18% had more than five years of experience. This distribution demonstrates a mix of fresh perspectives from newer employees alongside the insights of more seasoned staff members.

Cost Control Awareness

The results of the study revealed a generally high level of awareness among respondents regarding food and beverage cost control strategies, as reflected in the overall ratings across various domains.

In terms of food cost control strategies, the respondents strongly agreed that tracking food costs, understanding the influence of ingredients and portion sizes on pricing, and knowledge of food cost percentage are critical, with the highest rating given to monitoring food costs ($M = 3.79$). This supports the view of Chathoth and Olsen (2019) that systematic cost monitoring enhances profitability, while Tesfaye and Tessema (2020) highlighted the role of portion control in reducing waste and maximizing revenue. Similarly, Ali et al. (2022) emphasized that cost awareness strengthens sustainable decision-making in food operations.

In the area of menu design, respondents demonstrated strong awareness, especially in determining menu item profitability ($M = 3.68$), which aligns with Kimes and Beard (2020) who stressed the role of menu engineering in balancing satisfaction and efficiency. Awareness of portion sizes, ingredient use, and visual menu layouts

also reflects the findings of Sánchez and López-Bonilla (2019) and Zhang and Huang (2022), who emphasized the link between menu design, cost control, and sustainability.

For inventory control, the highest level of awareness was recorded ($M = 3.84$), highlighting its importance in reducing waste and expenses. This is consistent with Yang et al. (2021), who underscored the role of proper inventory tracking and storage practices in minimizing losses and promoting sustainability. Awareness of portion control was also high ($M = 3.74$), with respondents recognizing its direct effect on profitability and waste reduction, supporting earlier findings by Kwok et al. (2021) that portion consistency leads to better cost efficiency.

Awareness of waste reduction also ranked strongly ($M = 3.66$), as respondents acknowledged its role in improving profitability, consistent with the findings of Mihalache et al. (2020), who emphasized the operational and environmental benefits of waste minimization. Similarly, energy-saving practices ($M = 3.75$) and water-saving measures ($M = 3.82$) were highly acknowledged, demonstrating that respondents recognized the impact of utilities management on cost efficiency. These results reflect the conclusions of Jones et al. (2020), who noted that resource efficiency significantly contributes to operational savings and sustainability in hospitality establishments.

Lastly, respondents strongly recognized the importance of staff training and technology use ($M = 3.74$), with the highest awareness given to reducing errors and managing expenses through technology integration such as point-of-sale and inventory systems. This finding resonates with Altinay and Wang (2021), who stressed that training and technology adoption improve operational efficiency and cost management in food service businesses.

Overall, the findings demonstrate that respondents possess a strong and well-rounded awareness of multiple cost control domains—ranging from food costing, menu engineering, and inventory practices to waste reduction, resource conservation, and staff development. This comprehensive awareness underscores the crucial role of cost control in ensuring profitability, efficiency, and sustainability within the food and beverage industry.

Cost Control Practices

The findings revealed a consistently high level of practice among respondents across the different domains of food and beverage cost control. In the area of food cost control (overall mean = 3.45), respondents strongly agreed on the importance of following standard recipes ($M = 3.50$), adherence to cost control methods ($M = 3.47$), and regular monitoring of costs ($M = 3.37$). This indicates that establishments prioritize recipe standardization to avoid wastage and ensure portion accuracy while aligning menu pricing with ingredient costs. Regular cost monitoring, though slightly lower, reflects the importance of adapting to price fluctuations to sustain profitability. These results are consistent with Baylen (2020), who found that strict adherence to recipes and monitoring practices significantly reduce spoilage in restaurants.

In terms of menu design practices (overall mean = 3.60), respondents emphasized analyzing food costs, adjusting portions and ingredients, and selecting cost-effective recipes ($M = 3.61$). Ensuring a balance between cost efficiency and customer satisfaction ($M = 3.58$) was also strongly recognized. These findings align with the study in the *Academy of Marketing Studies Journal* (2025), which highlighted that effective menu design strategies enhance profitability without compromising customer value.

For inventory control (overall mean = 3.54), monitoring inventory levels and applying the First In, First Out (FIFO) method ranked highest ($M = 3.55$). Conducting regular inventory counts ($M = 3.53$) further demonstrated a strong commitment to maintaining stock accuracy. Ani et al. (2017) similarly emphasized that FIFO and regular monitoring are essential in managing perishable goods and preventing unnecessary losses. Toroba et al. (2025) also noted that inventory management has a direct influence on financial performance.

Portion control practices (overall mean = 3.58) were also strongly upheld, with measuring portions and checking staff compliance ($M = 3.61$) ranking highest. The use of tools such as scoops and measuring cups ($M = 3.53$) ensures consistency in serving sizes, which contributes to cost efficiency and customer satisfaction.

In terms of waste reduction (overall mean = 3.42), monitoring food waste ($M = 3.47$) and repurposing ingredients ($M = 3.42$) were emphasized, while encouraging sustainable practices among staff ($M = 3.37$) ranked slightly lower. These findings highlight efforts to minimize resource wastage while promoting environmental sustainability, consistent with global calls for sustainable hospitality practices.

For energy-saving practices (overall mean = 3.55), turning off unused equipment ($M = 3.58$) ranked highest, followed by encouraging the use of energy-efficient equipment ($M = 3.55$) and monitoring energy consumption ($M = 3.53$). Similarly, water-saving practices (overall mean = 3.59) showed strong awareness, particularly in staff behavioral compliance ($M = 3.66$) and the use of water-saving equipment ($M = 3.63$). These results echo Park and Kim's (2021) findings that efficient resource utilization directly improves operational performance in restaurants.

Lastly, staff training and technology use received the strongest overall agreement ($M = 3.68$). Respondents equally recognized the importance of training participation, familiarity with cost-control technologies, and the use of digital tools to improve efficiency. This suggests that establishments view human resource development and technological integration as vital strategies in achieving operational efficiency and long-term sustainability.

Overall, the results demonstrate that food and beverage establishments adopt comprehensive practices across all cost control domains, with particularly strong emphasis on staff training, technology adoption, inventory management, and portion control. These practices not only strengthen profitability but also contribute to resource efficiency and sustainability, aligning with global trends in responsible hospitality management.

Cost Control Challenges

Although respondents demonstrate strong practices across all domains, challenges remain. External factors such as fluctuating ingredient costs and limited access to affordable resources, combined with internal factors like inconsistent staff adherence and resistance to technology, pose barriers to effective cost control. Addressing these challenges through continuous training, staff monitoring, and technology integration is critical to sustaining operational efficiency, profitability, and resource sustainability in food and beverage establishments.

CONCLUSION

The awareness, procedures, and difficulties surrounding food and beverage cost control in a small-scale food and beverage business were investigated in this study. The results show that although staff members, especially chefs and head cooks, have a solid grasp of important cost-control techniques like portion control, waste reduction, and food cost management, there are significant gaps in their regular implementation. The main issues that have been found to impede the complete implementation of cost control measures are variable ingredient costs, irregular portion sizes, and reluctance to embrace new technologies. The lack of regular staff training and staff motivation to reduce waste were also noted as obstacles to reaching maximum efficiency.

The study indicates that although staff members are highly aware of cost control techniques, such as inventory management, food cost percentage, and energy-saving measures, their implementation is frequently uneven. A number of issues, including inadequate staff training, a lack of accountability, and technological resistance, can be blamed for this discrepancy. Despite following some best practices, like following standard recipes and keeping an eye on inventory, the company has operational inefficiencies brought on by difficulties controlling changes in ingredient prices, ensuring that all employees are properly trained, and ensuring that they are dedicated to waste reduction initiatives.

The study highlights the necessity of a more structured approach to cost control, emphasizing regular monitoring and application of best practices, in order to increase overall operational efficiency. In order to improve inventory management and enable businesses to react faster to changes in ingredient costs, technology must also be used to streamline procedures and improve data tracking. Enhancing cost control procedures and cutting down on inefficiencies will also require overcoming opposition to new technologies and making sure that staff members receive regular training.

Based on these findings, different strategies were recommended by the researchers. First, to guarantee the consistent application of cost control strategies and to reinforce awareness of them, regular, targeted training sessions should be put in place. It is important to create easily comprehensible manuals or guidelines that employees can consult daily. Adopting POS systems and basic inventory management tools, as well as conducting regular checks and audits, would help improve practices and guarantee that cost control measures are applied consistently throughout the company.

Dynamic pricing strategies, which enable the company to swiftly modify menu prices in response to changes in ingredient costs, should be implemented to address issues associated with fluctuating ingredient costs. In order to minimize waste and boost profitability, portion control should be standardized through the use of portioning tools and frequent checks to guarantee consistency. It is possible to overcome reluctance to adopt technology by providing practical training that highlights how these tools can increase productivity and decrease manual labor.

Another crucial step is to reward employees for their efforts to reduce waste. Employees will be encouraged to take a more active role in cost reduction if a rewards program is put in place for those who successfully reduce waste or embrace sustainable practices. To guarantee that all employees, not just a chosen few, comprehend and implement cost control procedures, regular and organized staff training is crucial.

Lastly, collaboration with higher educational institutions can play a big part in helping small businesses. They can create curriculum-based courses and provide specialized training programs and strategies that emphasize real-world business applications like pricing strategies, inventory management, and cost-controlling technology use. This will serve as the Extension Program of the institution particularly the College of Business and Management of the Mindoro State University-Bongabong Campus. Also, collaborations with nearby companies can result in internships for students, giving them the chance to put their academic knowledge to use in practical situations while offering creative solutions to businesses.

ACKNOWLEDGEMENT

The researchers would like to acknowledge the participation of the selected restaurants in the Second District of Oriental Mindoro, Philippines. Their insights gave significant contributions for the completion of the cost control research study.

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