Internal Control Systems and Non-Financial Performance of Micro and Small Enterprises: Evidence from the Quezon City, Philippines

Dr. Jomar Valonda Villena[1], Atty. Emmanuel M. Serna[2], Prof. Fideliz Arca C. Vidal[3], Prof. Alfred Bautista[4]

[1]Program Chair/Assistant Professor IV, Department of Accountancy, School of Business and Accountancy, NU Philippines
[2]Program Chair/Assistant Professor I, Department of Accountancy, School of Business and Accountancy, NU Philippines
[3]Assistant Professor II, Department of Accountancy, School of Business and Accountancy, NU Philippines
[4]Faculty Member, Department of Accountancy, School of Business and Accountancy, NU Philippines

Abstract
This study examines the relationship between internal control systems and non-financial performance among micro and small enterprises in the Philippines. Using the Committee of Sponsoring Organizations (COSO) framework, the research explores how internal control components—control environment, risk assessment, control activities, information and communication, and monitoring—contribute to addressing operational inefficiencies commonly observed in small businesses.
A quantitative descriptive-correlational research design was employed. Data were collected through a structured survey questionnaire administered to 56 owners and/or managers of micro and small enterprises. Statistical tools, including weighted mean and Pearson correlation analysis, were used to evaluate the level of implementation of internal control systems and their relationship to non-financial performance indicators, namely external stakeholder management, employee-related measures, and internal process efficiency.
The findings indicate that internal control systems are generally highly implemented across the surveyed enterprises, with particular strength in control activities and monitoring mechanisms. Non-financial performance was also rated highly, especially in terms of process efficiency. Correlation analysis revealed a positive and significant relationship between internal control implementation and non-financial performance, suggesting that stronger internal control systems contribute to improved operational effectiveness and business sustainability.
The results underscore the importance of enhancing internal control mechanisms in micro and small enterprises to improve service delivery, ensure regulatory compliance, and support long-term operational sustainability. The study contributes to the growing body of literature on internal control in small businesses and provides practical insights for enterprise owners, policymakers, and management practitioners.

Keywords: Internal Control Systems; Non-Financial Performance; Micro and Small Enterprises; COSO Framework; Service Industry; Stakeholder Management; Employee Performance; Process Efficiency

1. Introduction

In today's dynamic economic landscape, micro and small enterprises (MSEs) play a vital role in promoting innovation, supporting development, and driving economic growth, particularly in emerging economies. In the Philippines, MSEs constitute approximately 99.25% of all registered enterprises, totaling 1,237,070 businesses, and account for around 60.20% of total employment (Department of Trade and Industry, 2023). As such, these enterprises significantly contribute to poverty reduction by generating employment opportunities and fostering entrepreneurial activities within local communities. Through the provision of essential goods and services, MSEs serve as fundamental drivers of economic activity both locally and nationally.

Despite their critical importance, many small-scale service enterprises continue to operate without adequately established internal control systems. In particular, such businesses often rely on basic operational practices, including informal performance assessments, customer service routines, and time tracking mechanisms, without sufficient verification processes, monitoring systems, authorization controls, or physical safeguards. This lack of structured controls exposes enterprises to operational inefficiencies and potential resource losses. Moreover, internal controls are essential in managing non-financial aspects of performance, including operational efficiency, employee management, service quality, and customer satisfaction. The absence of robust control mechanisms can negatively affect organizational performance, credibility, and stability, thereby increasing the likelihood of issues such as customer dissatisfaction and inefficient resource utilization. Consequently, evaluating internal control practices provides valuable insights into how MSEs manage risks, optimize resources, and enhance operational resilience.

For micro and small enterprises operating within a rapidly evolving local economy, the establishment of strong internal control systems is not merely an operational necessity but a strategic imperative for long-term sustainability. Service-oriented enterprises, particularly those involving frequent customer interactions and reliance on workforce compliance with procedures, are naturally exposed to various non-financial risks. Weaknesses in internal controls—such as inadequate supervision, inefficient processes, or poor communication systems—can lead to service delays, inconsistent quality, operational errors, and increased customer complaints. These shortcomings not only disrupt routine operations but also threaten business reputation and customer retention. Compared to larger organizations, MSEs are more susceptible to the adverse non-financial impacts of ineffective controls, including declining employee morale, reduced reliability of services, and weaker stakeholder relationships. Supporting this perspective, Nguyen et al. (2023) highlight that effective implementation of internal control components—such as control environment, risk assessment, control activities, and information and communication—significantly enhances non-financial performance by improving efficiency, employee satisfaction, compliance, and overall service quality. Thus, strengthening internal control systems is crucial not only for addressing operational challenges but also for ensuring sustained organizational credibility and performance.

The significance of this study lies in its contribution to addressing the limited body of research on internal control and non-financial performance within micro and small enterprises, particularly in a localized context. Although prior studies have explored these variables in broader settings, there remains a lack of research focusing on the unique conditions and challenges faced by MSEs in specific regions. This study emphasizes the need to examine how MSEs implement internal control practices and sustain operational effectiveness within their specific economic environment.

Overall, this research seeks to contribute to existing literature by analyzing internal control practices and their influence on non-financial performance among micro and small enterprises. By investigating the specific control mechanisms adopted, the study aims to provide empirical evidence that can guide business owners, policymakers, and stakeholders in developing practical strategies to enhance resource management, operational efficiency, and long-term sustainability. Ultimately, the findings are expected to support enterprise owners in strengthening their internal control systems, improving resource utilization, and contributing to the development of a more resilient and transparent MSE sector, not only in the local context but also in similar settings globally.

Theoretical Framework of the Study

This study is grounded in three complementary theoretical perspectives that explain how internal control systems influence non-financial performance in micro and small enterprises in Quezon City, Philippines: the COSO Internal Control Framework, Fraud Triangle Theory, and Agency Theory. Together, these frameworks provide structural, behavioral, and relational explanations of organizational performance beyond financial outcomes.

COSO Internal Control Framework

According to COSO (2020), internal control is a process implemented by management and personnel to provide reasonable assurance in achieving operational, reporting, and compliance objectives. The framework identifies five interrelated components: control environment, risk assessment, control activities, information and communication, and monitoring. These components collectively support accountability, efficiency, and compliance within organizations. In the context of micro and small enterprises, the effective implementation of these elements enhances operational processes, improves communication flows, and ensures continuous performance monitoring, thereby strengthening non-financial outcomes such as service quality, employee coordination, and stakeholder relations.

Fraud Triangle Theory

Fraud Triangle Theory developed by Cressey explains the behavioral conditions that may weaken organizational performance. The theory posits that misconduct occurs when pressure, opportunity, and rationalization coexist. In small enterprises, operational pressures, weak supervision, and unclear policies can create conditions that lead to inefficiencies, errors, and misuse of resources. Strong internal control systems help mitigate these risks by reducing opportunities for misconduct, reinforcing ethical behavior, and establishing clear procedures. As a result, internal controls play a significant role in improving operational reliability, employee performance, and stakeholder trust.

Agency Theory

Using this theory it provides a relational perspective by explaining the dynamics between business owners (principals) and employees (agents). In micro and small enterprises, owners often delegate critical tasks to employees, creating potential conflicts of interest and inefficiencies. Internal control systems serve as governance mechanisms that align employee actions with organizational objectives through clear policies, defined responsibilities, and monitoring systems. By reducing agency problems, internal controls contribute to improved accountability, operational consistency, and overall non-financial performance.

In summary, the integration of these theories provides a comprehensive framework for understanding how internal control systems influence non-financial performance. The COSO framework explains the structural components of control systems, the Fraud Triangle Theory highlights behavioral risks associated with weak controls, and Agency Theory emphasizes the importance of aligning organizational roles and responsibilities. Collectively, these perspectives support the argument that strong internal control systems are essential for enhancing efficiency, employee effectiveness, and stakeholder relationships in micro and small enterprises.

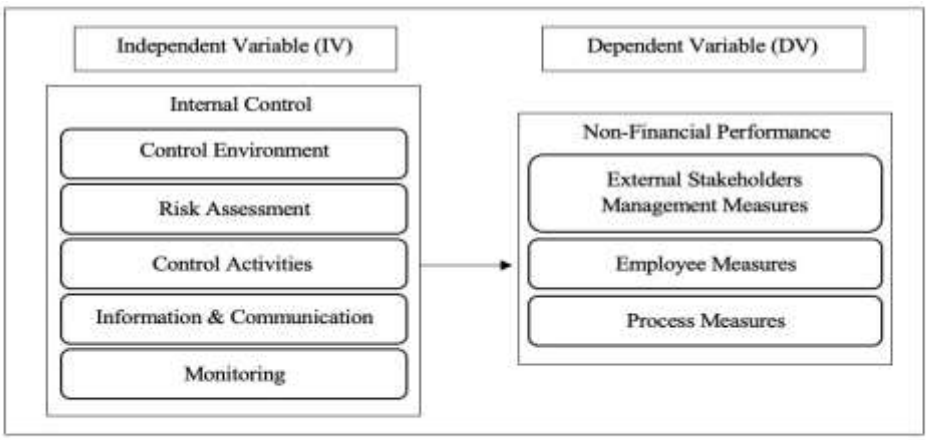
Statement of the Problem

Micro and small enterprises frequently encounter operational challenges and financial losses when they lack well-established internal control systems (Igbojioyibo, 2024). This deficiency may adversely affect the sustainability and overall non-financial performance of enterprises, particularly in service-oriented businesses.

In this context, the present study aims to examine internal control practices and their relationship with non-financial performance among micro and small enterprises in Quezon City, Philippines, Philippines. Specifically, it seeks to address the following research questions:

1. How do general managers and/or owners perceive the implementation of internal control systems in micro and small enterprises in Quezon City, Philippines, Philippines in terms of:
   1.1 Control Environment
   1.2 Risk Assessment
   1.3 Control Activities
   1.4 Information and Communication
   1.5 Monitoring Activities
2. How do general managers and/or owners assess the non-financial performance of micro and small enterprises in Quezon City, Philippines, Philippines with respect to:
   2.1 External Stakeholder Management
   2.2 Employee-Related Measures
   2.3 Internal Process Efficiency
3. Is there a significant relationship between the level of internal control implementation and the non-financial performance of micro and small enterprises in Quezon City, Philippines, Philippines?

Conceptual Framework



This conceptual framework illustrates the relationship between internal control and non-financial performance among micro and small enterprises in Bulacan. Internal control serves as the independent variable, consisting of control environment, risk assessment, control activities, information and communication, and monitoring, while non-financial performance is the dependent variable, measured through external stakeholder management, employee measures, and process efficiency.

The framework assumes that stronger internal control systems lead to improved non-financial performance. Effective controls enhance risk management, operational consistency, communication, and monitoring, which contribute to better stakeholder relationships, higher employee productivity, and more efficient processes.

Non-financial performance is evaluated through indicators such as customer satisfaction and retention, employee productivity and reliability, and operational efficiency measures, including response time, service accuracy, and error rates. These measurable indicators provide a basis for analyzing how internal control systems influence overall business performance.

2.0 MATERIAL AND METHODS

Internal Control Systems

Internal control refers to a structured system of policies, procedures, and practices designed to ensure efficient operations, safeguard resources, and ensure compliance with rules and regulations. According to the Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2020), internal control systems support organizational effectiveness by preventing unauthorized activities, minimizing inefficiencies, and promoting accountability. The COSO framework identifies five core components: control environment, risk assessment, control activities, information and communication, and monitoring. These components provide a systematic approach that enables micro and small enterprises (MSEs) to strengthen operational efficiency and overall organizational performance.

The control environment serves as the foundation of internal control systems by establishing organizational values, ethical standards, and accountability structures. In many small enterprises, owner-managed operations often result in limited segregation of duties, which may lead to unclear responsibilities and inefficiencies. COSO (2020) emphasizes that a strong control environment promotes discipline and ethical behavior, while Çika (2022) highlights the importance of formal policies and supervision in reinforcing accountability and consistency in operations.

Risk assessment involves identifying and evaluating potential risks that may affect business operations. In many small enterprises, risk management is often reactive rather than proactive. Çika (2022) and Dvorsky et al. (2021) note that enterprises that regularly assess internal and external risks are better able to maintain operational stability and sustain long-term performance. Effective risk assessment allows businesses to anticipate operational challenges, implement corrective actions, and maintain service continuity.

Control activities include procedures such as approvals, verifications, and monitoring mechanisms that ensure tasks are performed correctly. COSO (2020) explains that effective control activities reduce operational errors, improve process efficiency, and support service consistency. However, in many small businesses, these controls are informal, leading to inconsistencies and inefficiencies in daily operations.

Information and communication are essential in ensuring that relevant data are properly conveyed within the organization. AuditBoard (2023) and CBH (2024) emphasize that clear and timely communication improves coordination, reduces misunderstandings, and enhances accountability among employees.

Nguyen and Le-Anh (2021) further highlight that effective communication systems contribute to improved employee performance and service quality.

Monitoring activities ensure that internal control systems remain effective over time. Regular supervision, performance reviews, and internal checks enable enterprises to detect operational issues early and implement timely corrective actions. Cohen et al. (2021) found that organizations that actively monitor their internal controls demonstrate higher levels of efficiency and responsiveness, thereby strengthening overall performance.

In the Philippine context, many micro and small enterprises operate with limited formal internal control systems, which negatively affects operational efficiency and service consistency. The Philippine Development Plan 2023–2028 (NEDA, 2023) emphasizes the need for capacity-building initiatives and improved business practices to strengthen internal control systems and enhance long-term sustainability.

Non-Financial Performance

Non-financial performance refers to organizational outcomes that are not directly measured in monetary terms but are critical for long-term sustainability and operational success. These include aspects such as service quality, employee performance, stakeholder relationships, and operational efficiency. Hardiningsih et al. (2020) emphasize that non-financial indicators provide a broader understanding of organizational performance by strengthening credibility, trust, and long-term stability.

One key dimension is external stakeholder management, which focuses on maintaining strong relationships with customers and suppliers. Vitolla et al. (2020) found that effective stakeholder engagement enhances organizational reputation and sustainability. In service-oriented enterprises, customer satisfaction is influenced by service reliability, communication, and responsiveness, making stakeholder management a critical performance indicator.

Another important dimension is employee measures, which assess workforce productivity, discipline, and reliability. Musthafa et al. (2024) highlight that human capital plays a crucial role in improving operational efficiency and service quality, particularly in small enterprises where employees perform multiple roles. Employee behavior and performance directly influence service outcomes and customer experience.

The third dimension, process measures, evaluates the efficiency and consistency of internal operations. Rathnayake et al. (2021) and Yanti et al. (2023) note that structured processes and effective control mechanisms reduce errors, improve coordination, and enhance service outcomes. Process efficiency is particularly important in service industries, where operational delays and errors can negatively affect customer satisfaction.

In the Philippines, Capina (2021) found that enterprises with efficient processes and effective employee management demonstrate higher service quality and operational stability. Non-financial performance thus serves as a practical measure of how well small enterprises utilize limited resources and meet customer expectations.

Relationship Between Internal Control and Non-Financial Performance

Existing studies consistently highlight the significant relationship between internal control systems and organizational performance. Tam and Tuan (2021) found that effective internal control systems improve non-financial performance indicators such as service quality, employee behavior, operational efficiency, and customer satisfaction. Strong internal controls reduce operational inefficiencies, enhance accountability, and improve overall service delivery.

Similarly, Adela et al. (2024) and Utami and Nugroho (2022) emphasize that internal control practices, even in simplified forms, contribute to improved accountability and asset protection in small enterprises. Herjuna et al. (2024) further stress the importance of continuous monitoring and employee training to maintain effective internal control systems.

Case-based evidence from Kaparang et al. (2025) demonstrates that the implementation of structured internal controls, such as clear roles, transaction documentation, and monitoring systems, leads to improvements in accountability and operational consistency. These findings confirm that even small-scale enterprises benefit significantly from formalized control systems.

However, research gaps remain. Many studies focus on large or formally structured organizations, while limited research examines internal control practices in micro and small enterprises within specific industries and local contexts. Furthermore, the effectiveness of informal control practices—common in small enterprises—has not been extensively explored.

Synthesis and Research Gap

The reviewed literature demonstrates that internal control systems are essential for improving non-financial performance in micro and small enterprises. The COSO framework provides a structured approach to strengthening operations, while empirical studies confirm that effective controls enhance stakeholder relationships, employee performance, and process efficiency.

Despite these findings, there remains a lack of localized and industry-specific research, particularly in service-oriented micro enterprises. Many studies focus on financial outcomes or larger organizations, overlooking the unique operational challenges faced by small enterprises with informal structures.

Thus, this study addresses these gaps by examining how internal control systems influence non-financial performance in micro and small enterprises, providing insights into practical control mechanisms that can enhance operational efficiency, accountability, and long-term sustainability.

Research Design

This study employed a quantitative correlational research design to examine the relationship between internal control systems and non-financial performance among micro and small enterprises in Quezon City, Philippines. Data were collected through a structured survey questionnaire organized into two main variables: internal control and non-financial performance. The internal control variable included five components—control environment, risk assessment, control activities, information and communication, and monitoring—while non-financial performance was measured through external stakeholder management, employee measures, and process efficiency.

The survey instrument was developed based on the review of related literature, which highlights the importance of internal control systems in improving operational effectiveness and organizational performance. A four-point Likert scale was used to capture respondents' perceptions, ensuring consistency and reliability in data collection and analysis. This structured quantitative approach enabled the researchers to systematically assess the level of internal control implementation and determine its relationship with non-financial performance among micro and small enterprises in Quezon City, Philippines.

Research Locale and Sampling Procedure

This study was conducted among micro and small enterprises operating in Quezon City, Philippines. The location was selected due to its high concentration of small service-oriented businesses, making it an appropriate setting for examining internal control practices and non-financial performance.

The respondents consisted of general managers and/or owners of micro and small enterprises, with a total target population of 67. These individuals were chosen because of their direct involvement in operational and managerial functions, enabling them to provide relevant insights aligned with the objectives of the study.

A universal sampling technique was applied, where all identified owners and/or managers within Quezon City were included as respondents. The population frame was established through an official list of registered businesses obtained from the Business Permit and Licensing Office of Quezon City, following approval of a formal request. This method ensured comprehensive coverage and minimized sampling bias. A response rate of 83.58% was achieved through physical distribution and follow-up of questionnaires.

Research Instrument

A structured survey questionnaire was used as the primary data collection instrument. It was organized into two main variables: internal control and non-financial performance. Internal control was measured using five components—control environment, risk assessment, control activities, information and communication, and monitoring—while non-financial performance was assessed through external stakeholder management, employee measures, and process efficiency.

All items were rated using a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). The questionnaire was adapted from established studies, namely Habamenshi (2024) for internal control and Hernaus et al. (2012) for non-financial performance, ensuring content validity and relevance. Reliability testing using Cronbach's alpha indicated acceptable internal consistency across all constructs. Internal control components yielded coefficients ranging from 0.746 to 0.876, while non-financial performance measures ranged from 0.751 to 0.811, confirming the instrument's reliability.

Data Gathering, Screening, and Reliability

Prior to data collection, a formal permission request was secured from the appropriate authorities. The research instrument was validated by a statistician to ensure clarity and accuracy. Questionnaires were distributed through on-site administration, and informed consent was obtained from all participants.

After data collection, responses were compiled and screened for completeness and consistency. Incomplete or inconsistent entries were reviewed and addressed accordingly. All data were anonymized by assigning codes to respondents and removing identifying details to ensure confidentiality. The final dataset was securely stored for analysis.

Reliability analysis was conducted using Cronbach's alpha, confirming that all constructs met acceptable standards for internal consistency.

Data Management and Analysis

Data were analyzed using statistical software. Descriptive statistics, including mean, frequency, and standard deviation, were used to assess the level of internal control implementation and non-financial performance.

Composite mean scores were calculated for each dimension to represent overall performance levels. To examine the relationship between variables, Pearson product-moment correlation analysis was employed.

Additionally, partial correlation analysis was conducted to control for potential confounding variables, particularly enterprise size, using micro and small enterprise classification as a proxy.

Results, Discussion and Detailed Interpretation of Findings

1. Profile of Respondents

The respondents of the study consisted of 56 general managers and/or owners of micro and small enterprises operating in Quezon City, Philippines. The majority of enterprises were classified as micro enterprises, indicating that most businesses operate on a small scale with limited resources, manpower, and formal organizational structures. This context is essential in interpreting the level of internal control implementation and non-financial performance.

2. Perception of Internal Control Systems

2.1 Control Environment

The overall mean of 3.44 (Strongly Agree) indicates that enterprises in Quezon City generally maintain a strong control environment. High ratings in employee coordination and proper handling of supplies suggest that businesses emphasize teamwork and safeguarding of resources. However, the relatively lower rating in management information systems indicates that many enterprises still rely on informal or manual systems.The findings imply that while the foundation of internal control exists, technological integration and formal documentation systems need improvement. A strong control environment enhances accountability and operational efficiency, which are critical in small enterprises.

2.2 Risk Assessment

The overall mean of 3.78 (Strongly Agree) suggests that enterprises actively identify and manage risks. Continuous monitoring of operational risks received the highest rating. Enterprises demonstrate proactive risk awareness, which supports operational stability. However, the slightly lower score in updating procedures suggests that some businesses may not fully adapt to changing risks, limiting responsiveness to dynamic environments.

2.3 Control Activities

Preventive Controls

The overall mean of 3.80 (Strongly Agree) indicates that preventive measures such as documentation and compliance with policies are strongly implemented.

Detective Controls

The overall mean of 3.70 (Strongly Agree) shows that enterprises regularly conduct checks and reviews, although formal audits are less consistent.

Corrective Controls

With an overall mean of 3.78 (Strongly Agree), enterprises actively apply disciplinary actions and employee training to address errors.

Control activities are well-established, particularly in preventing errors and ensuring compliance. However, the limited use of formal auditing and structured training programs suggests opportunities for strengthening internal controls.

2.4 Information and Communication

The overall mean of 3.42 (Strongly Agree) indicates effective communication practices, especially in using a common language for coordination. However, management information systems showed lower consistency. Effective communication supports daily operations, but limited adoption of formal information systems may affect accuracy, reporting, and decision-making efficiency.

2.5 Monitoring Activities

The overall mean of 3.73 (Strongly Agree) indicates that enterprises consistently monitor operations through internal reviews and staff accountability. Monitoring practices are effective in detecting errors and improving operations. However, variability in the use of technology (e.g., CCTV) suggests unequal access to monitoring resources.

3. Perception of Non-Financial Performance

3.1 External Stakeholder Management

The overall mean of 3.74 (Strongly Agree) indicates strong customer retention, service quality, and supplier relationships.

Interpretation:

Enterprises effectively maintain customer satisfaction and trust, which enhances reputation and ensures business sustainability. However, managing customer complaints remains a potential area for improvement.

3.2 Employee Measures

The overall mean of 3.63 (Strongly Agree) reflects high employee retention, commitment, and attendance, with slightly lower ratings on productivity.

Interpretation:

Employees contribute significantly to operational success, but productivity improvements can further enhance performance. This suggests a need for better training and workflow optimization.

3.3 Process Measures

The overall mean of 3.81 (Strongly Agree) indicates strong operational efficiency, particularly in quick response to customer complaints and low error rates.

Interpretation:

Efficient processes enhance service quality and customer satisfaction. The results show that operational systems are effective, although variability in error rates suggests room for consistency improvement.

4. Relationship Between Internal Control and Non-Financial Performance

The results reveal a moderate positive correlation ($r = 0.508$, $p < 0.001$) between internal control and non-financial performance. The findings confirm that stronger internal control systems lead to improved non-financial performance. Enterprises with effective control environment, risk assessment, control activities, communication, and monitoring systems tend to achieve: Better service quality, Higher employee performance, Improved customer satisfaction and more efficient operational processes

The rejection of the null hypothesis indicates that internal control significantly influences non-financial performance.

Overall Discussion of Findings

The results show that micro and small enterprises in Quezon City, Philippines generally exhibit a high level of internal control implementation and non-financial performance. Internal control components, particularly control activities and monitoring, are strongly practiced, contributing to efficient operations and service quality. However, certain gaps were identified: Limited use of formal management information systems, Inconsistent updating of control procedures and Variations in employee productivity and process consistency. Despite these limitations, the significant positive relationship between internal control and non-financial performance highlights the importance of strengthening internal control frameworks in small enterprises.

Overall, the study demonstrates that internal control systems play a critical role in enhancing non-financial performance among micro and small enterprises in Quezon City. Strengthening these systems can lead to improved operational efficiency, employee performance, and stakeholder satisfaction, ultimately supporting long-term sustainability.

Conclusion

This study investigated the relationship between internal control systems and non-financial performance among micro and small enterprises in Quezon City, Philippines. The findings indicate that while these enterprises have established internal control practices particularly in preventive controls and risk assessment they largely rely on informal or manual systems for managing operations. This reliance limits the full effectiveness of internal control mechanisms, particularly in areas such as management information systems (MIS) and employee productivity.

The results highlight that the adoption of the COSO internal control framework should not be viewed merely as a compliance requirement but as a strategic tool capable of enhancing operational efficiency, service quality, and long-term sustainability. However, variations in technological adoption and workforce productivity suggest that the full benefits of internal control systems are not yet uniformly realized across enterprises.

Furthermore, the study revealed a statistically significant positive relationship between internal control and non-financial performance ($r = 0.508$, $p < 0.001$), indicating a moderate but meaningful association.

This finding confirms that improvements in internal control practices are linked to enhanced non-financial outcomes, including more efficient operational processes, reduced errors, improved service quality, and stronger relationships with employees, suppliers, and customers. Consequently, the null hypothesis was rejected, affirming that internal control systems significantly influence non-financial performance in micro and small enterprises.

Overall, the study demonstrates that strengthening internal control systems is essential for improving operational effectiveness and sustaining competitive advantage in service-oriented micro and small enterprises in urban settings such as Quezon City.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. **Adoption of Cost-Effective Digital Tools**

Micro and small enterprises are encouraged to adopt affordable digital solutions, such as basic accounting software and electronic record-keeping systems, to enhance monitoring accuracy and reporting consistency. Improving information systems can address observed variability in data management and communication practices.

2. **Implementation of Formalized Monitoring Procedures**

Enterprises should transition from informal review practices to structured monitoring through regular reconciliations of transaction records, physical inventory, and cash balances. Monthly spot checks can strengthen detective control mechanisms and reduce inconsistencies.

3. Utilization of Digital Payment Systems

The use of e-wallet platforms, such as GCash and Maya, is recommended to minimize cash handling risks, improve transparency, and facilitate efficient financial record reconciliation.

4. Strengthening Employee Development Programs

Enterprises should establish structured training and performance evaluation systems to enhance employee productivity and consistency. Continuous training initiatives can improve service quality, reduce operational errors, and reinforce both preventive and corrective control activities.

5. Expansion of Future Research Scope

Future studies are encouraged to include larger sample sizes, broader geographic coverage, and additional variables such as organizational culture, leadership, and digitalization. The use of mixed-methods or longitudinal research designs may provide deeper insights into the long-term effects of internal control systems on non-financial performance.

6. Policy and Institutional Support

Policymakers and relevant government agencies should develop capacity-building programs focusing on internal control, risk management, and basic accounting for micro and small enterprises. Providing access to simplified internal control frameworks, digital tools, and technical assistance can significantly enhance operational efficiency, service quality, and long-term sustainability.

6. Declarations

6.1 Ethical Considerations

This study was conducted in strict adherence to internationally recognized ethical standards for research involving human participants. Ethical clearance was obtained from the National University Philippines (NU Baliwag) Ethics Review Committee under Protocol No. NU-BALIWAG-ERC-2024-010. All procedures complied with the ethical principles outlined in the Declaration of Helsinki.

Participation in the study was entirely voluntary. Prior to data collection, all respondents were provided with clear and comprehensive information regarding the purpose of the study, the nature of their participation, and their rights as participants. Written informed consent was secured from each respondent before the administration of the survey and any related data collection procedures.

Participants were informed of their right to decline participation, refuse to answer specific questions, or withdraw from the study at any time without penalty or adverse consequences.

Confidentiality and anonymity were rigorously maintained throughout the research process. No identifiable personal or business information was disclosed in the presentation of findings. Respondents were assigned coded identifiers to ensure anonymity. All collected data, including responses and supporting materials, were securely stored in password-protected files accessible only to the researchers and were used solely for academic and research purposes.

6.2 Use of Artificial Intelligence (AI)

The authors declare that generative artificial intelligence (AI) tools were utilized solely for language refinement, organization, and grammatical editing of the manuscript. The use of AI did not influence the study’s conceptualization, research design, data collection, data analysis, interpretation of results, or conclusions. Full responsibility for the accuracy, integrity, and originality of the work remains with the authors.

Funding
This study was fully funded by the researchers. All research-related expenses, including data collection, materials, and logistical requirements, were personally covered by the authors. No external funding, grants, or sponsorships were received.
As no external funding was involved, the researchers maintained full independence and control over the research process. This ensured that the data analysis, interpretation, and conclusions were free from external influence or bias.

Reference List

1. A.L.L. Service. (2025, January 15). The Future of Facilities: Trends to Watch in 2025 and Beyond. lakeside.com. https://www.lakeside.com/blog/thefuture-of--facilities-trends-to-watch-in-2025-and-beyond
2. Adedoyin, F. (2025). Digital competence and operational performance in Agile organizations. Digital Competence in Agile and Hierarchical Organizations, 1- 16. https://doi.org/10.4324/9781003535416-1
3. Adhi Wardana, N., Hoesin, W., & Kurniawan Subagja, I. (2022). Effect of intrinsic organizational commitment and work environment on employee performance through organizational commitment at the Bekasi tax service office. Scientific Research Journal of Economics and Business Management, 02(02), 1-9. https://doi.org/10.47310/srjebm.2022.v02i02.021
4. Aggarwal, K. K., & Taneja, D. (2024). Impact of organizational culture on employee satisfaction, motivation, performance, commitment, and engagement in educational institutions. Advances in Human Resources Management and Organizational Development, 204-215. https://doi.org/10.4018/979-8-3693-1994-9.ch012
5. Alharthi, S. (2025). Harnessing knowledge: The robust role of knowledge management practices and business intelligence systems in developing entrepreneurial leadership and organizational sustainability in SMEs. Sustainability, 17(14), 6264. https://doi.org/10.3390/su17146264
6. Apriliantika, A., & Praptapa, A. (2025). Pengaruh financial performance Terhadap financial distress Pada Perusahaan Subsektor customer non cyclical. JIEF Journal of Islamic Economics and Finance, 5(1), 1-10. https://doi.org/10.28918/jief.v5i1.9087
7. ATMICX. (2024). The evolution of enterprises in the Philippines: From traditional to tech-savvy. Atmicx – Machine Trading. https://atmicx.com/the-evolution-of-enterprises-in-the-philippines-from-traditional-to-tech-savvy/
8. AuditBoard. (2023). Fundamentals of the COSO Framework. https://auditboard.com/blog/coso-framework-fundamentals
9. Bajpai, H. V., & Mishra, A. (2025). Client satisfaction and service quality in chartered accountancy firms. International Journal of Research Publication and Reviews, 6(11), 10276-10278. https://doi.org/10.55248/gengpi.06.1125.4076
10. Basyari, A., Rizqi, M., & Nandalia, D. (2024). The influence on employee performance in organization: The study of organizational culture, work environment, financial compensation and non financial compensation. Proceedings of the 1st International Conference on Economics and Business, ICEB 2023, 2-3 August 2023, Padang, Sumatera Barat, Indonesia. https://doi.org/10.4108/eai.2-8-2023.2348359
11. Batocael, A., Dimasuay, I., & Matulin, R. (2022). The Influence of the Internal Control System to

12. the Financial Performance of SMEs in Panabo City. https://repository.umindanao.edu.ph/handle/20.500.14045/1124.
13. Bautista-Bernal, I., Quintana-García, C., & Marchante-Lara, M. (2024). Safety culture, safety performance and financial performance. A longitudinal study. Safety Science, 172, 106409. https://doi.org/10.1016/j.ssci.2023.106409
14. Bejinariu, R. M. (2020). Possibilities of improving risk assessment related to organizational business processes in the context of ensuring sustainable performance. Sustainable Management, Wertschöpfung und Effizienz, 137-211. https://doi.org/10.1007/978-3-658- 29389-5_6
15. Berinyuy, B. (2021). Service quality, a correlation of customer expectation and customer perception of services received responsiveness and empathy in Shisong hospital. International Journal of Social Science and Human Research, 04(12). https://doi.org/10.47191/ijsshr/v4-i12-07
16. Capina, M. V. (2021). Impact of Management Practices on Micro and Small Enterprise (MSEs)
17. Performance in Marinduque, Philippines. Journal of Social Entrepreneurship Theory and
18. Practice, 1(1), 84–97. https://doi.org/10.31098/jsetp.v1i1.561
19. Carraquico, T. (2021). Quality assurance in university-industry collaborations: Financial and non
20. financial performance indicators. INTED Proceedings, 1, 10767- 10767. https://doi.org/10.21125/inted.2021.2189
21. CBH. (2024). Guide to Internal Controls and the COSO Integrated Framework.
22. Çika, N. (2022). Development of Internal Controls in Small and Medium Enterprises - Case of
23. Albania. European Journal of Marketing and Economics, 1(1), 53. https://doi.org/10.26417/ejme.v1i1.p53-62
24. Clean Middle East (2025). The Growth of Commercial : Trends to Know About in 2025. Cleanmiddleeast.ae. https://www.cleanmiddleeast.ae/the-growth-of-commercial-trends-to-know-about-in-2025
25. Cohen, J., Holder-Webb, L., & Zamora, V. (2021). Internal control and monitoring mechanisms:
26. Effects on financial reporting quality. Journal of Accounting and Public Policy, 40(4),
27. Article 106899. https://doi.org/10.1016/j.jaccpubpol.2021.106899
28. Coleman, C., Birk, S., & DeVoe, J. (2023). Health literacy and systemic racism—Using clear communication to reduce health care inequities. JAMA Internal Medicine, 183(8), 753. https://doi.org/10.1001/jamainternmed.2023.2558
29. Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2020).
30. Guidance on Internal Control. https://www.coso.org/guidance-on-ic
31. Cosa, Marcello & Urban, Boris. (2023). A Systematic Review of Performance Measurement Systems and Their Relevance to Social Enterprises. Journal of Social Entrepreneurship.
32. 1-29. 10.1080/19420676.2023.2236628.
33. Davis, M. V., & Harris, D. (2020). Strategies to prevent and detect occupational fraud in small
34. retail businesses. International Journal of Applied Management and Technology, 19(1). https://doi.org/10.5590/ijamt.2020.19.1.04
35. Department of Trade and Industry. (2023, October 6). MSME statistics. Department of Trade and
36. Industry. https://www.dti.gov.ph/resources/msme-statistics/
37. Dubey, P., & Pateriya, S. (2025). Evolving dimensions of senior citizen care: A prisma-guided systematic literature review. Proceedings of the 1st International Conference on Research and

Development in Information, Communication, and Computing Technologies, 894- 903. https://doi.org/10.5220/0013875500004919

38. Dvorsky, J., Belas, J., Gavurova, B., & Brabenec, T. (2020). Business risk management in the context of small and medium-sized enterprises. Economic Research-Ekonomska
39. Istraživanja, 34(1), 1690–1708. https://doi.org/10.1080/1331677x.2020.1844588
40. Elsayed, G. M. (2024). The role of Fintech in supporting small and medium enterprises (SMEs) lending. International Journal of Science and Research (IJSR), 13(11), 1768- 1776. https://doi.org/10.21275/sr241129022204
41. Fadhil, M. A., Mufidah, N., Pramudyo, H., & Nugroho, B. A. (2022). Profitability analysis of business in Indonesia during pandemic: Case study. ResearchGate.
42. https://www.researchgate.net/publication/362261524_Profitability_Analysis_of_
43. _Business_in_Indonesia_During_Pandemic_Case_Study
44. Fobbe, L., & Hilletofth, P. (2021). The role of stakeholder interaction in sustainable business models. A systematic literature review. Journal of Cleaner Production, 327, 129510. https://doi.org/10.1016/j.jclepro.2021.129510
45. Franco-Cantuarias, A., & Grimaldo-Quiroz, J. E. (2024). Improved operational efficiency and patient satisfaction in healthcare SMEs through lean service: A case study from Peru. Proceedings of the International Conference on Industrial Engineering and Operations Management. https://doi.org/10.46254/gc02.20240026
46. Freeman, C. (2025). Fraud and complexity theory: Moving beyond the fraud triangle towards a new theoretical framework. Journal of Economic Criminology, 10, 100198. https://doi.org/10.1016/j.jeconc.2025.100198
47. Fry, W. H. (2025). Improving operational efficiency through asset performance
48. management. Australian Energy Producers Journal, 65(2). https://doi.org/10.1071/ep24072
49. Genesis, I. O. (2021). Economic evaluation of digital pharmacy platforms in reducing medication errors and operational healthcare costs. International Journal of Science and Research Archive, 4(1), 311-328. https://doi.org/10.30574/ijsra.2021.4.1.0177
50. Hanukov, G. (2022). Improving efficiency of service systems by performing a part of the service without the customer's presence. European Journal of Operational Research, 302(2), 606- 620. https://doi.org/10.1016/j.ejor.2022.01.045
51. Hardiningsih, P., Januarti, I., Yuyetta, E. N. A., Srimindarti, C., & Udin, U. (2020). The effect of sustainability information disclosure on financial and market performance: empirical evidence from indonesia and malaysia. International Journal of Energy Economics and
52. Policy, 10(2), 18–25. https://doi.org/10.32479/ijeep.8520
53. Herjuna, S. a. S., Marhaeni, V. F., Alvira, M., Putri, F., & Anastasya, F. (2024). Impact of
54. Training and Development Programs on Employee Performance in the Manufacturing
55. Sector. Acta Psychologia, 3(3), 140–151. https://doi.org/10.35335/psychologia.v3i3.68
56. Hernaus, T., Pejić Bach, M., & Bosilj Vukšić, V. (2012). Influence of strategic approach to BPM on financial and non-financial performance. Baltic Journal of Management, 7(4), 376–
57. 396. https://doi.org/10.1108/17465261211272148
58. Herrera-Barreda, I. (2024). Enhancing operational efficiency in textile SMEs: Integrating lean manufacturing and total productive maintenance for superior performance. Proceedings of the

International Conference on Industrial Engineering and Operations Management. https://doi.org/10.46254/ap05.20240101

59. Hossain, M. Z. (2025). Effectiveness of Internal Control Systems in Preventing Financial Fraud in SMEs. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5255489
60. Ideh, D. A. (2020). Reward systems and customer service delivery among small and medium enterprises in Lagos state, Nigeria. Customer Service Management in Africa, 241- 256. https://doi.org/10.4324/9780429031342-23
61. Igbojioyibo, R. P. (2024). The Impact of Internal Control Systems on Asset Protection and
62. Financial Reporting Accuracy in SMEs. Asian Journal of Economics, Business and
63. Accounting, 24(12), 65-80. https://doi.org/10.9734/ajeba/2024/v24i121592
64. IMARC Group. (2024). Philippines home and care market report 2024-2033.
65. https://www.imarcgroup.com/philippines-home--care-market
66. Jianmin, W., Paulin, A., & Jonathan, T. (2024). Effect of Strategic Management Practices on Financial and Non-Financial Performance of SMES in Abidjan, Ivory Coast. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4978685
67. Joshi, R. (2025). Strengthening employee value proposition (EVP): The vital impact of effective internal communication. Journal of Information Systems Engineering and Management, 10(11s), 438-444. https://doi.org/10.52783/jisem.v10i11s.1631
68. Kalo, I., & Amron, M.T., (2023). Transforming Services: A User-Centric Approach to
69. Streamlined Operations and Customer Satisfaction. 1-5. 10.1109/ICRAIE59459.2023.10468246
70. Kaparang, R., Alouw, S., Tandi, A., Rumambi, H., Walangitan, L., Kumaat, L., Wauran, A., Tuerah, R., & Syaefudin, F. (2025). Internal control system design for cash management at B&A in Tomohon City. International journal of arts humanities and social sciences Studies. 10(1) 6-9. http://www.ijahss.com
71. Karatepe, O. M., Rezapouraghdam, H., & Hassannia, R. (2020). Job Insecurity, Work Engagement and Their Effects on Hotel Employees' Non-Green and Nonattendance
72. Behaviors. International Journal of Hospitality Management, 87, 102472. https://doi.org/10.1016/j.ijhm.2020.102472
73. Khairunnisa, Latief, Y., & Riantini, L. S. (2020). Standard operational procedure (SOP) auditing process in integrated management system to improve the efficiency of organizational performance. IOP Conference Series: Earth and Environmental Science, 426(1), 012018. https://doi.org/10.1088/1755-1315/426/1/012018
74. Klint, E., Johansson, L., & Peters, G. (2021). No stain, no pain – A multidisciplinary review of factors underlying domestic laundering. Energy Research & Social Science, 84, 102442.
75. https://doi.org/10.1016/j.erss.2021.102442
76. Kouiri, K. E. (2023). Exploring the Development of Agency Theory: Review of theory. https://doi.org/10.56989/benkj.v3i10.698
77. Lal, M., & Kashyap, H. (2023). Consumer complaint satisfaction and customer retention: A study of complaint satisfaction in electronic industry. Jindal Journal of Business Research, 13(1), 82-99. https://doi.org/10.1177/22786821231183745
78. Lei, R., & Qiu, R. (2022). Fraud, misconduct, and unethical practices in biomedical research in China. Integrity of Scientific Research, 131-138. https://doi.org/10.1007/978-3-030- 99680-2_14

79. LG US. (2025). LG's smart AI washing machines: Efficient wash & spin cycles
80. https://www.lg.com/us/experience/smart-wash-spin-cycle
81. Mesioye, O., & Bakare, I. A. (2024). Evaluating Financial Reporting Quality: Metrics, challenges, and impact on Decision-Making. International Journal of Research Publication and Reviews, 5(10), 1144–1156. https://doi.org/10.55248/gengpi.5.1024.2735
82. Musthafa, I., Elfindri, E., Anas, Y., & Ariyanto, E. (2024). Human capital and performance of micro, small and medium enterprises: A literature review. Cashflow Curr. Adv. Res.
83. Sharia Financ. Econ. Worldw, 3, 250-275. https://doi.org/10.55047/cashflow.v3i2.1028
84. National Privacy Commission. (2012). REPUBLIC ACT 10173 DATA PRIVACY ACT OF 2012.
85. https://privacy.gov.ph/data-privacy-act/
86. Nguyen, T., Pham, T., Tran, M., & Nguyen, T. (2023). Impact of internal control on the performance of non-financial listed firms in an emerging country. Corporate Governance
87. and Organizational Behavior Review, 7(2), 178–189.
88. https://doi.org/10.22495/cgobrv7i2p16
89. Nguyen, H. T., s Le-Anh, T. (2021). The impact of internal control on performance of small and medium-sized enterprises in an emerging economy. Asia-Pacific Management
90. Accounting Journal, 1c(3), 167–188. https://doi.org/10.24191/APMAJ.V16i2-13
91. Onkiso, A. (2025). Enhancing employee cybersecurity awareness in small businesses. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5277921
92. Patayo, C. (2021). A preventive and detective model for phishing attack in small and medium size businesses. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3777065
93. Perera, W. I., & Ranasinghe, D. H. (2021). Impact of non-financial factors on performance of small and medium scale enterprises of furniture industry in Moratuwa, Sri Lanka. Journal
94. of Micro & Small Business Management, 2(2). https://doi.org/10.46610/jmsbm.2021.v02i02.001
95. Philippine development Plan 2023-2028 - Philippine development Plan. (2025). Philippine
96. Development Plan. https://pdp.depdev.gov.ph/philippine-development-plan-2023-2028/
97. Prakoso, B. (2023). Managing service quality and customer relationship management to increase customer satisfaction and customer retention. The International Journal of Business Review (The Jobs Review), 6(1), 31-38. https://doi.org/10.17509/tjr.v6i1.61842
98. Quinco-Cadosales, M. N., & Famacion-Quinco, D. F. (2022). Management control systems in small and medium-sized enterprises: A case study. International Journal of Scientific
99. Research and Management, 10(05), 3540- 3554. https://doi.org/10.18535/ijsrm/v10i5.em09
100. Rasheed, K., Saad, S., Ammad, S., & Bilal, M. (2023). Integrating Sustainability Management and Lean Practices for Enhanced Supply Chain Performance: Exploring the Role of Process Optimization in SMEs. The 4th International Electronic Conference on Applied Sciences, 154. https://doi.org/10.3390/asec2023-16370
101. Rathnayake, R. M. S. S., Rajapakse, R. P. G. S. N., & Lasantha, S. A. R. (2021). The Impact of
102. Financial Reporting Quality on Firm Performance. Journal of Business and Technology,
103. 5, 53-67. https://doi.org/10.4038/jbt.v5i0.53
104. Rather, R. A., & Hollebeek, L. D. (2021). Customers' service-related engagement, experience, and behavioral intent: Moderating role of age. Journal of Retailing and Consumer

105. Services, 60, 102453. https://doi.org/10.1016/j.jretconser.2021.102453
106. Republic Act No. 9501 - An act to promote entrepreneurship by strengthening development and assistance programs to micro, small and medium scale enterprises, amending for the purpose Republic Act No. 6977, as amended, otherwise known as the "magna carta for
107. small enterprises" and for other purposes. - Supreme Court E-Library. (2008). https://elibrary.judiciary.gov.ph/thebookshelf/showdocs/2/21416
108. Sakai, P., & Yao, Z. (2022). Financial losses and flood damages experienced by SMES: Who are
109. the biggest losers across sectors and sizes? SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4207752
110. Satapathy, S. S. (2023). Interpretive structural modeling approach to effective internal control practices for prevention of accounting fraud in small businesses using micmac analysis. International Journal of Scientific Research in Engineering and Management, 07(03). https://doi.org/10.55041/ijsrem18068
111. Silaji, T., Bagiwa, Z. L., & Muhammad, T. (2025). Organizational structure, performance monitoring, and academic staff performance in selected private chartered universities: A
112. qualitative study. Open Research Africa, 8, 7. https://doi.org/10.12688/openresafrica.15891.3
113. Smaraldaa, Z. A., & Wijaya, C. (2025). Influence service quality to performance employee and customer satisfaction at PT. PBM Adhiguna son. Enrichment: Journal of Multidisciplinary Research and Development, 2(11). https://doi.org/10.55324/enrichment.v2i11.292
114. Sulicz, A., & Salther, M. (2025). Standardization of publishing integrity norms and corrective actions. Standardization of Publishing Integrity Norms and Corrective Actions. https://doi.org/10.14293/s2199-ssp-am25-01003
115. Suratman, A. (2022). Supervision of BPD, competence of government apparatus, against-asset management-and village fund allocation with internal-control system. Journal of Economics, Finance And Management Studies, 05(05). https://doi.org/10.47191/jefms/v5i5-02
116. Tam, N. T., & Tuan, L. A. (2021). The impact of internal control on performance of Small and
117. Medium-Sized Enterprises in an emerging economy. Asia-Pacific Management
118. Accounting Journal, 16(2), 367–389. https://doi.org/10.24191/apmaj.v16i2-13
119. The Future of Commercial : Emerging Trends & Technologies for 2025. (2024).
120. https://www.coinomatic.com/coin-o-matic-blog/emerging--technology-2025/
121. Theonaldi, B., Theonaldi, F., Theonaldi, L., & Setiadi, A. S. (2025). The influence of relationship marketing and service delivery on customer satisfaction and customer loyalty with customer engagement behaviour as a moderating effect in Indonesia's internet service
122. providers industry. Journal of World Science, 4(10), 1324- 1333. https://doi.org/10.58344/jws.v4i10.1513
123. Utami, W., & Nugroho, L. (2021b). Internal Control and Risk Management Issues on the Sustainability Micro and Small Enterprises in Indonesia. BİLTÜRK Journal of Economics and Related Studies. https://doi.org/10.47103/bilturk.993568
124. Uwamusi, J. A. (2025). Navigating complex regulatory frameworks to optimize legal structures while minimizing tax liabilities and operational risks for startups. International Journal of
125. Research Publication and Reviews, 6(2), 845- 861. https://doi.org/10.55248/gengpi.6.0225.0736

126. Velez, S. B. (2025). Importance of effective internal control to company's control environment. Effective Internal Control Practices in Banks, 61- 79. https://doi.org/10.1108/978-1-83662-972-620251007
127. Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2020). The determinants of integrated reporting quality in financial institutions. Corporate Governance, 20(3), 429–444. https://doi.org/10.1108/cg-07-2019-0202
128. Xie, W. (2025). Analysis of internal causes of losses in Mainland China's small and medium-sized
129. enterprises and governance countermeasures. Finance & Economics, 1(6). https://doi.org/10.61173/69wy9g77
130. Xu, Y., Zhu, L., & Pinedo, M. (2020). Operational risk management: A stochastic control framework with preventive and corrective controls. Operations Research, 68(6), 1804- 1825. https://doi.org/10.1287/opre.2019.1960
131. Yanti, Ismail, T., Hanifah, I. A., & Muchlish, M. (2023). The role of Management Control System in Non-Financial Performance. In Advances in Social Science, Education and
132. Humanities Research/Advances in social science, education and humanities research (pp.
133. 1591–1600). https://doi.org/10.2991/978-2-38476-118-0_181
134. Yeboah, S., Kjærland, F., & Kustec, I. (2024). Resilience in Cyclicality: Impact of inventory management efficiency on operational profitability. Managerial and Decision Economics, 46(2), 832-842. https://doi.org/10.1002/mde.4406
135. Yoon, I., Lee, H., Choi, D., & Jee, E. (2023). Quantitative and qualitative investments in internal control personnel and firm operational efficiency: Evidence from Korea. Investment
136. Management and Financial Innovations, 20(3), 273- 284. https://doi.org/10.21511/imfi.20(3).2023.23
137. Zaidan, M. N. (2025). Investigating the determinants of customer satisfaction in taxi services: A comprehensive analysis of customer service quality, driver behaviour, price fairness, stakeholder engagement, and time reliability. International Journal of Industrial Management, 19(2), 71-82. https://doi.org/10.15282/ijim.19.2.2025.11103
138. Zhang, X., & Tan, X. (2022). Research on the credit risk assessment of small and medium enterprises based on BP neural network. Proceedings of the International Conference on
139. Big Data Economy and Digital Management, 82- 86. https://doi.org/10.5220/0011159900003440