

Integration Challenges of Accounting Information Systems in Multi-Unit Small Enterprises: A Case Study of CV. Gelora Harmoni Sejahtera, Indonesia

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ABSTRACT

The rapid growth of multi-unit small enterprises in Indonesia has created increasing demand for reliable, integrated Accounting Information Systems (AIS). However, many small businesses still rely on manual processes, resulting in inefficiencies and weak internal controls. This study aims to analyse the implementation and integration challenges of AIS at CV. Gelora Harmoni Sejahtera, a multi-unit enterprise operating SIPLAH, Abang COD, and Gelora Farm. Using a qualitative case study approach, data were collected through in-depth interviews, direct observation, and documentation, and then analysed inductively using thematic analysis. The findings reveal three main issues: (1) dependence on manual Excel-based recording across units, (2) absence of standard operating procedures (SOPs) and internal audit mechanisms, and (3) fragmented information flow that hinders managerial decision-making. These weaknesses reduce the accuracy, timeliness, and reliability of financial information. The study contributes to the literature on AIS in SMEs by identifying integration barriers in multi-unit settings and proposing a roadmap for gradual system integration. Practically, it offers policy and managerial implications for improving internal control and data governance within small enterprises.

Keywords: Accounting Information System; Small Enterprises; Internal Control; System Integration

INTRODUCTION

The adoption of Accounting Information Systems (AIS) has become increasingly essential for enhancing financial transparency, operational efficiency, and internal control within small and medium-sized enterprises (SMEs) (Radzi et al., 2024). In developing economies such as Indonesia, SMEs serve as a backbone of national growth and employment generation. Despite this strategic importance, many small enterprises continue to rely on manual, fragmented accounting processes, which compromise the accuracy and reliability of their financial information. The accelerating pace of digital transformation and the emergence of multi-unit business structures have further highlighted the need for integrated, standardised accounting systems that support effective coordination and decision-making.

Multi-unit SMEs face distinctive operational and managerial challenges compared to single-unit enterprises. Each unit often develops its own financial routines, data recording methods, and reporting standards, resulting in discrepancies and inconsistencies in financial reporting. Without a unified AIS, information flows become fragmented, managerial oversight weakens, and decision-making processes are delayed or based on incomplete data. These conditions not only reduce financial accountability but also expose the organisation to greater operational and audit risks. Such issues are particularly relevant in Indonesian SMEs, where digital adoption is uneven and often limited by financial and human resource constraints.

Previous studies on AIS have predominantly examined adoption factors in larger corporations or single-unit SMEs, emphasising technological readiness, management commitment, and cost-benefit considerations. However, relatively few studies have explored how structural complexity in multi-unit SMEs influences the implementation, integration, and control mechanisms of AIS (Lopung & Rulindo, 2023). In the Indonesian context, the existing literature tends to focus on manual accounting practices without providing a comprehensive understanding of how they affect inter-unit coordination, data governance, and financial decision-making.

This study investigates the implementation and integration challenges of Accounting Information Systems in multi-unit SMEs through a qualitative case study of CV. Gelora Harmoni Sejahtera is an enterprise operating three distinct business units—SIPLAH, Abang COD, and Gelora Farm (Sese & Qalbia, 2025). The study aims to understand how the absence of standardised procedures, weak internal control systems, and limited digital integration influence accounting accuracy and managerial effectiveness. By focusing on an enterprise that operates across multiple sectors, this research provides insight into the organisational and technological barriers that hinder the establishment of a cohesive AIS framework.

The findings from this study are expected to contribute to the literature by introducing the perspective of structural multi-unit complexity as a critical dimension in understanding AIS implementation within small enterprises. Furthermore, the study offers practical implications for improving system integration, strengthening internal control, and enhancing data reliability in SMEs striving to achieve digital transformation under resource constraints. Through this approach, the research bridges theoretical discussions on accounting information systems with the practical realities of small, multi-unit business operations in Indonesia.

METHOD

This study employs a qualitative case study approach to explore the implementation and integration challenges of Accounting Information Systems (AIS) within a multi-unit small enterprise—the case of CV. Gelora Harmoni Sejahtera was selected because it operates three distinct business units—SIPLAH, Abang COD, and Gelora Farm—each with different accounting practices, operational models, and information flows. This organisational diversity provides a rich empirical context for understanding how structural complexity and decentralised operations influence the effectiveness and integration of AIS in small enterprises (Tindage et al., 2025).

Data were collected through in-depth semi-structured interviews, direct observation, and documentation review to ensure a comprehensive understanding of the system implementation and its associated challenges. The interview participants consisted of key personnel involved in accounting and financial processes, including the owner, administrative and finance staff, and operational managers from each unit. They were selected through purposive sampling to ensure that informants had substantial knowledge of daily financial practices and system use. Each interview lasted between forty-five and sixty minutes and was conducted in the local language to enhance clarity and depth of responses. Observations were conducted during daily accounting and reporting activities to capture the workflow, data entry procedures, and coordination mechanisms among units. Relevant documents, including accounting records, Excel templates, transaction evidence, and internal memos, were also reviewed to triangulate findings and strengthen data validity.

All interviews were recorded with consent, transcribed verbatim, and analysed using an inductive thematic approach. Thematic analysis was conducted manually to identify patterns and relationships between units regarding data handling, internal control, and reporting practices. Coding began with open coding to capture emergent categories, followed by axial coding to establish connections among themes related to system implementation and integration barriers. Constant comparison was employed to refine and merge overlapping themes and to ensure coherence between empirical evidence and theoretical interpretation. The process of data triangulation—across interviews, observations, and documentation—was used to enhance credibility and confirm the consistency of findings. Member checking was performed by sharing summary findings with selected participants to validate interpretations and ensure representational accuracy.

The study's trustworthiness was maintained through several measures consistent with qualitative research standards. Credibility was ensured through prolonged field engagement and cross-verification of data sources. Transferability was addressed by providing detailed contextual descriptions of the organisation and its operational setting, enabling readers to assess the applicability of findings to other contexts. Dependability and confirmability were enhanced by maintaining a clear audit trail of data collection procedures, analytical steps, and interpretive decisions.

Ethical considerations were observed throughout the research process. Participation was voluntary, and informed consent was obtained from all participants before data collection. Anonymity and confidentiality were guaranteed by assigning codes to informants and removing any identifiable information from transcripts and documentation. The study adhered to the university's ethical research principles and aligned with general standards for social science research involving human participants.

RESULTS AND DISCUSSION

The empirical findings reveal that the implementation of the Accounting Information System (AIS) at CV. Gelora Harmoni Sejahtera remains highly fragmented and primarily manual across its three business units. Each unit—SIPLAH, Abang COD, and Gelora Farm—maintains separate financial records using basic spreadsheet applications without any centralised system integration (Efuntade & Efuntade, 2023). Although this approach offers some flexibility, it has led to inefficiencies, duplication of work, and inconsistencies in financial data. The use of Excel as the primary recording tool indicates a low level of technological adoption and a reliance on individual staff members' skills, which vary across units. This manual dependency has compromised data accuracy and delayed the consolidation process required for managerial reporting (Mark & Neal, 2024).

The first significant finding concerns the absence of a unified accounting framework or standard operating procedures (SOPs) across business units. Financial documentation, transaction recognition, and expense categorisation are handled differently across divisions, leading to significant discrepancies during reconciliation. The lack of formalised procedures also weakens internal control and audit readiness (Ankrah et al., 2015; Ezeagba, 2017). From a theoretical perspective, this condition aligns with the internal control component of the COSO framework, particularly the control environment and control activities dimensions, in the case of CV. Gelora Harmoni Sejahtera, the absence of clear policies and oversight mechanisms reduces accountability and increases the risk of errors and misstatements. The organisation's informal structure has made the enforcement of internal control practices highly dependent on personal trust rather than systematic verification, a common phenomenon observed in small enterprises with limited administrative capacity.

Another critical issue identified relates to information flow and inter-unit coordination. The three units operate independently, each focusing on its own business cycle—SIPLAH in digital procurement, Abang COD in logistics and delivery, and Gelora Farm in seasonal agricultural sales. There is minimal data sharing between units, and financial updates are often communicated through messaging platforms or ad hoc spreadsheets. This fragmented communication results in delays in consolidating financial statements and constrains management's ability to make timely decisions. Theoretically, this problem reflects the information integration barrier discussed in the AIS literature, where decentralised systems create data silos and hinder real-time visibility into organisational performance (Kareem et al., 2021). Similar findings have been reported in previous studies on SMEs, where limited digital infrastructure prevents effective coordination and undermines the strategic potential of AIS for managerial control.

The analysis also highlights the absence of internal audit mechanisms and independent verification processes. Financial transactions are rarely cross-checked against supporting evidence, and verification primarily occurs only when discrepancies arise. This reactive approach undermines the reliability of financial information and compromises the effectiveness of internal control systems. In the context of small enterprises, such weaknesses are often attributed to resource constraints and the lack of specialised accounting personnel (Nwobu et al., 2015). However, this study shows that, beyond resource limitations, the problem also lies in the lack of system integration to automate verification and reporting processes. From a governance perspective, this situation weakens the organisation's capacity to ensure transparency and accountability—two principles essential to modern financial management and compliance.

Despite these challenges, the study found a strong organisational awareness of the need for digital transformation. The management recognises that an integrated AIS would enable more efficient financial monitoring, improve data accuracy, and facilitate faster decision-making. Nevertheless, concerns about implementation costs, training requirements, and potential disruptions to existing operations have delayed adoption (Lutfi et al., 2022). This finding corresponds with previous research suggesting that perceived cost and complexity remain significant barriers to AIS adoption in SMEs. Yet, the case of CV. Gelora Harmoni Sejahtera also demonstrates that integration is not purely a technological issue but also a matter of organisational readiness, structural coordination, and cultural adaptation (Stentoft et al., 2019; Anatan & Nur, 2023)

From an analytical standpoint, the findings suggest that the current AIS implementation at CV. Gelora Harmoni Sejahtera is at a transitional stage between manual and semi-digital processes. The absence of system integration across units reflects a structural barrier that prevents the firm from realising the full potential of digital accounting (Verhoef et al., 2021). According to the literature on AIS development, integration is a gradual process that requires both technical and organisational alignment. Implementing an incremental integration model—starting with a shared central ledger and standardised templates—could help the enterprise improve consistency while minimising the cost and complexity of complete digital transformation.

The discussion also underscores the significance of internal control as an enabling factor in AIS integration. The findings illustrate that control mechanisms must be embedded not only in technology but also in managerial routines (Lestari, 2022). Establishing SOPs for data entry, verification, and reporting would enhance system reliability and create a foundation for future integration. In theoretical terms, this supports the argument that AIS effectiveness in small enterprises depends on the interplay between system capability and control culture (Kareem et al., 2021). Without formal procedures and data governance policies, technological solutions alone cannot guarantee reliable information flows or accurate reporting.

Overall, the case of CV. Gelora Harmoni Sejahtera exemplifies the challenges faced by multi-unit SMEs in transitioning from manual accounting systems to integrated digital solutions. The findings extend existing knowledge by revealing how structural complexity within a small enterprise—characterised by multiple business lines, informal coordination, and limited control—creates unique obstacles to AIS integration. The study contributes to the literature by proposing that integration readiness should be viewed not only as a technological capability but as an organisational process requiring policy alignment, resource allocation, and gradual system standardisation (Stentoft et al., 2019; Anatan & Nur, 2023). In practice, the results provide valuable insights for SME managers and policymakers seeking to design scalable AIS frameworks that accommodate multi-unit operations while strengthening internal controls and financial accountability.

CONCLUSION

This study examined the implementation and integration challenges of Accounting Information Systems (AIS) within a multi-unit small enterprise in Indonesia, using CV. Gelora Harmoni Sejahtera as a qualitative case study. The findings demonstrate that, despite increased awareness of digital transformation, the enterprise continues to rely on manual accounting processes conducted in spreadsheet-based systems. Such dependence on manual methods, combined with the absence of standard operating procedures and internal audit mechanisms, has led to fragmented information flows, inconsistent financial reporting, and limited managerial control (Mark & Neal,

2024). These conditions reflect a structural misalignment between the organisation's operational complexity and its accounting infrastructure.

From a theoretical standpoint, the study contributes to the growing body of literature on AIS in small enterprises by introducing the perspective of multi-unit structural complexity as a critical determinant of system integration and internal control effectiveness. The case illustrates that integration challenges are not solely technological but are embedded in organisational routines, data governance, and managerial culture. By framing AIS implementation as a socio-organisational rather than purely technical process, this research offers an analytical extension to existing models of AIS adoption and effectiveness in small enterprises.

In practical terms, the findings suggest that integration in multi-unit SMEs should proceed incrementally, beginning with the establishment of standardised accounting templates, internal control procedures, and a shared ledger platform that can later evolve into a complete digital system. Strengthening internal governance and promoting data consistency across units can improve both the reliability of financial information and the timeliness of managerial decision-making.

In conclusion, the experience of CV. Gelora Harmoni Sejahtera highlights the dual challenge faced by small enterprises operating across multiple business lines: maintaining operational flexibility while ensuring accounting consistency and control. The transition toward integrated AIS solutions requires not only technological investment but also a reconfiguration of organisational practices and control structures. Future research may extend this work by comparing integration strategies across different SME sectors or by quantitatively assessing the impact of system standardisation on financial performance and accountability.

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