Strategic Orchestration of Green Accounting and Accounting Information Systems for Corporate Sustainability and Financial Performance: A Literature Review

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Abstract

This study systematically reviews the literature on green accounting and Accounting Information Systems (AIS) to examine their relationship with corporate sustainability and financial performance. As environmental, social, and governance (ESG) considerations become increasingly important in corporate accountability and decision-making, the integration of environmental accounting practices and digital information systems offers a potential means of improving sustainability reporting, information transparency, and resource allocation. However, the extent to which these practices translate into measurable financial benefits remains unclear. Drawing on a synthesis of 28 studies, this review examines the complementary roles of green accounting and AIS, the variation in reported corporate outcomes, and the organizational and contextual factors that may explain these differences. The findings indicate that green accounting can support the identification and reporting of environmental costs and impacts, while AIS can facilitate the collection, integration, processing, and communication of sustainability-related information. Nevertheless, the reported relationships with corporate financial performance are heterogeneous, with studies documenting positive, insignificant, and context-dependent outcomes. These findings suggest that adopting environmental accounting practices and digital systems does not automatically lead to improved profitability or market valuation. The realization of potential benefits may depend on implementation quality, digital capabilities, governance arrangements, reporting credibility, and the regulatory environment. This review contributes to the literature by highlighting the need to examine green accounting and AIS as complementary mechanisms and by identifying opportunities for further research into the conditions under which their integration supports corporate sustainability and long-term organizational resilience. The findings also underscore the importance of strengthening environmental data management, accounting competencies, and sustainability reporting frameworks.

Keywords: green accounting; accounting information systems; corporate sustainability

1. Introduction

In the contemporary business constellation, the escalation of climate change, ecological degradation, and the determination of global regulations have fundamentally driven corporate entities to reconfigure their operations toward a sustainable business paradigm. The evaluation of an organization's viability is currently no longer based exclusively on economic performance parameters or short-term profitability, but also incorporates ecological and social responsibility capabilities comprehensively conceptualized within the Environmental, Social, and Governance (ESG) framework. Demands from various stakeholders and investors necessitate more proportional transparency regarding environmentally responsible business operations. To

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accommodate the complexity of such reporting and expectations, Green Accounting manifests as a strategic approach that internalizes the variables of externality costs and environmental impacts into the architecture of the corporate accounting system. This approach facilitates entities to systematically identify, measure, and report ecological costs, which in turn supports the rationality of managerial decision-making based on risk mitigation and resource efficiency.

Despite its increasingly recognized academic and practical significance, the praxis of environmental information disclosure and the operationalization of green accounting often experience stagnation due to fragmented reporting system infrastructures. Conventional bookkeeping practices frequently lack adequate capacity to capture sustainability data instruments. Therefore, digital transformation and the integration of a comprehensive Accounting Information System (AIS) play an essential role in aggregating both financial and non-financial data entities with sustainability dimensions into a unified platform. The evolution toward the Green Accounting 5.0 concept, which exploits the capabilities of digital technology and big data, offers a more precise level of ecological performance monitoring accuracy. The quality of an optimally integrated AIS is believed to be capable of reducing information asymmetry between management and investors.

Although the theoretical foundation indicates positive implications, the discourse in empirical literature shows highly varied results regarding the effectiveness of these practices. Some literature affirms that the integration of green accounting, supported by good reporting technology, contributes significantly to enhancing firm value and long-term operational efficiency. Conversely, a number of other empirical studies document insignificant results; where environmental information disclosure and sustainability initiatives are often represented by market participants as cost burdens that potentially degrade short-term profitability. The existence of this divergence in empirical findings, which is also influenced by literacy limitations, high implementation costs, and governance restrictions, underlines the urgency of this study. This article is oriented to synthesize the latest literature to analyze the strategic implications of implementing Green Accounting accelerated by AIS digitalization on optimizing financial performance and firm value, while objectively mapping various structural determinants that act as obstacles in its implementation.

2. Literature Review

The conceptualization of Green Accounting represents a multidimensional accounting paradigm that internalizes environmental variables (such as the allocation of externality costs, optimization of resource efficiency, and waste management) into the measurement and reporting architecture of corporate entity operations. Theoretically, this approach is oriented to facilitate the presentation of relevant and comprehensive information regarding environmental costs alongside their generated economic benefits. The availability of this information assertion acts as an essential instrument to support the rationality of precise managerial decision-making, while simultaneously manifesting institutional commitment to continuous environmental protection and preservation. Furthermore, the evolution of green accounting does not merely focus on reporting expense burdens but transforms into an ecological risk mitigation mechanism that can drive long-term corporate efficiency and competitive advantage. Green Accounting: Green Accounting is an accounting approach that integrates environmental aspects, such as the disclosure of environmental costs, resource efficiency, and waste management, into the measurement and reporting of company operations. Its objective is to present relevant information regarding

environmental costs and economic benefits to support managerial decision-making and environmental protection (Nisaa & Hidayati, 2025).

The Quality of Accounting Information Systems (AIS) is represented by systemic capabilities in aggregating, processing, storing, and generating accounting information outputs that possess superior levels of accuracy, relevance, timeliness, and integration. The reliability of this AIS infrastructure occupies a highly strategic position in degrading information asymmetry that frequently occurs between management (agents) and stakeholders (principals). In the contemporary context, the modernization and digitalization of AIS have revolutionized the traditional bookkeeping function into a holistic management information system capable of processing intersections of financial and non-financial data. This digital transformation enables corporations to automate the monitoring of sustainability indicators, acquire environmental expenditure data, and formulate Environmental, Social, and Governance (ESG) performance dashboards in a real-time and systematic manner. AIS quality is reflected in its ability to collect, process, store, and generate accurate, relevant, timely, and integrated accounting information, which is highly strategic in reducing information asymmetry. The modernization of AIS transforms traditional bookkeeping into an integrated management information system capable of automatically monitoring sustainability indicators and ESG performance dashboards (Purwati et al., 2026).

Legitimacy and Stakeholder Theory: Legitimacy Theory asserts that companies will continuously strive to ensure their operational activities run in accordance with existing societal norms and boundaries to gain social acceptance (Nisaa & Hidayati, 2025; Surianti & Hutagalung, 2025). Meanwhile, Stakeholder Theory demands that companies convey accurate information to all interested parties to support business sustainability (Hidayah et al., 2025). As a theoretical foundation, Legitimacy Theory postulates that corporate entities are bound by a "social contract" and will constantly calibrate their operational activities to be congruent with the institutionalized constructs of norms, expectations, and boundaries within the societal ecosystem. This alignment is a strategic imperative to embrace and maintain social acceptance and legitimacy for the company's existence. Complementarily, Stakeholder Theory posits that a company's survival heavily relies on the support and reciprocal relationships with various entities holding interests (such as investors, creditors, regulators, and communities). Therefore, this theory demands that corporations proactively disseminate accurate, relevant, and comprehensive information to all stakeholders as a fundamental basis to strengthen

3. Methodology

This study employs a literature review methodology with an exploratory and descriptive research design. Data collection was conducted by examining 10 scientific journal articles and academic conference proceedings published between 2025 and 2026. A thematic analysis was applied to classify the findings based on the impacts of green accounting, the integration of information systems, financial performance, and the adoption challenges encountered by business organizations.

4. Results and Discussion

This systematic review synthesizes evidence from 28 studies to examine the relationship between green accounting, Accounting Information Systems (AIS), and corporate financial performance.

Table 1 Summary of the Reviewed Studies

Author & Year	Article Title	Main Findings
Purwati et al. (2026)	Developing An Accounting Information System For Green Accounting and ESG Reporting To Enhance SME Sustainability	An integrated digital Accounting Information System (AIS) enables SMEs to systematically capture ESG indicators and environmental costs, thereby enhancing long-term business sustainability and resilience.
Hidayah et al. (2025)	Redefinisi Strategis Peran Akuntan Sebagai Agen Perubahan Dalam Implementasi Green Accounting di Perusahaan Berbasis ESG	The role of accountants has transformed from financial reporters to strategic actors in evaluating ESG risks and designing sustainability reports, which positively impacts organizational efficiency.
Sari (2025)	Green Accounting 5.0: Transformasi Akuntansi Hijau Dalam Mendorong Keberlanjutan Keuangan Perusahaan Indonesia	The Green Accounting 5.0 concept, which leverages AI and big data technologies, improves measurement accuracy; however, its implementation in Indonesia is hindered by low awareness and regulatory constraints.
Achmar & Susanti (2025)	Green Accounting Dan Implikasinya Terhadap Kinerja Perusahaan Di Sektor Industri Manufaktur	Green accounting enhances corporate image, operational efficiency, and regulatory compliance within the manufacturing sector, although it remains constrained by limited resources and internal resistance.
Nisaa & Hidayati (2025)	The Impact of Green Accounting, Environmental Disclosure, and Company Characteristics on Firm Value	Green accounting and environmental disclosures do not significantly impact the value of manufacturing firms due to a lack of understanding and the investor perception that SDG reporting constitutes a cost burden.
Imtikhanah et al. (2025)	Peran Tata Kelola Perusahaan Dalam Memoderasi Pengaruh Implemantasi Green Accounting, Corporate Social Responsibility dan Firm Size Terhadap Kinerja Keuangan	Firm size and CSR significantly influence performance; however, overly bureaucratic corporate governance can attenuate the impact of green accounting implementation on financial performance.
Prasetyaningsih et al. (2025)	The Influence of Green Accounting and Carbon Emission Disclosure on Company Value	The application of green accounting and carbon emission disclosures does not exert a significant influence on firm value within the energy sector.
Surianti & Hutagalung (2025)	The Effect of Green Accounting and Green Intellectual Capital on Profitability	Statistical testing demonstrates that neither green accounting nor the three types of green intellectual capital (structural, human, and relational) have a significant impact on profitability.
Endiana et al. (2020)	The Effect of Green Accounting on Corporate Sustainability and Financial Performance	The study of 38 Indonesian manufacturing companies found that green accounting, implemented through environmental cost allocation and a Corporate Sustainability Management System (CSMS), supports corporate sustainability and financial performance.
Khan & Gupta (2024)	The Interplay of Sustainability, Corporate Green Accounting and Firm Financial Performance: A Meta-Analytical Investigation	The meta-analysis reports an overall positive relationship between corporate green accounting and financial performance, providing broader evidence that environmental accounting practices may yield financial benefits.
Ahmad et al. (2025)	The Mediating Role of Green Accounting Management on Financial Performance: Integrated Stakeholder Theory and Natural Resource-Based View	Green accounting management mediates the relationship between environmental policy, industrial ecosystem adaptability, and financial performance. The findings highlight the strategic role of environmental accounting in translating environmental initiatives into financial outcomes.

Author & Year	Article Title	Main Findings
Lusiana et al. (2021)	A Review of Green Accounting, Corporate Social Responsibility Disclosure, Financial Performance and Firm Value Literature	The review of 30 peer-reviewed articles concludes that green accounting and CSR disclosure are generally associated with financial performance and firm value, partly through cost efficiency, corporate reputation, and investor confidence.
Tanchangya et al. (2026)	Leveraging Green Capabilities and Digital Accounting Under ESG Pressure: Strategic Insights From an Emerging Market's Global Value Chains	Based on 412 manufacturing-sector professionals in Bangladesh, the study finds that sustainability management accounting mediates the effects of green capabilities on sustainable organizational performance, while business analytics adoption strengthens the relationship between sustainability management accounting and performance.
Suhardjo et al. (2024)	Implementation of Digital Accounting on the Effectiveness of Corporate Social Responsibility and Environmental, Social, and Governance Reporting	Digital accounting systems improve the accuracy, timeliness, and transparency of CSR and ESG reporting. High implementation costs, data security issues, and organizational resistance remain barriers.
Hertati et al. (2026)	Detection of Climate Change and Sustainable Accounting Practices in Environmental Accounting Information Systems: Through International Accounting Standards in South Sumatra	The qualitative study of illegal oil mining in South Sumatra identifies weak environmental accountability and the absence of environmental accounting information systems as obstacles to monitoring climate and environmental risks. It supports the need for stronger sustainability disclosure and environmental information systems.
Dillard et al. (2016)	Dialogic Framing of Accounting Information Systems in Social and Environmental Accounting Domains: Lessons From, and for, Microfinance	The study argues that AIS design and implementation in social and environmental accounting should accommodate competing stakeholder interests. Dialogic accounting can support innovation and prevent economic priorities from dominating social and environmental objectives.
Susanto & Meiryani (2019)	The Impact of Environmental Accounting Information System Alignment on Firm Performance and Environmental Performance: A Case of Small and Medium Enterprises of Indonesia	Environmental requirements and organizational capabilities positively influence EAIS alignment. Better alignment is positively and significantly associated with both firm performance and environmental performance among Indonesian SMEs.
Stanescu et al. (2021)	Conceptual Model for Integrating Environmental Impact in Managerial Accounting Information Systems	The proposed model incorporates environmental impacts into production costs and management accounting systems. Integrating financial and nonfinancial information can improve environmental cost allocation and support managerial decisions.
Muliawan et al. (2024)	The Impact of Sustainability Reporting and Digital Accounting Systems on the Financial Performance of Corporations	The literature review argues that transparent sustainability reporting and digital accounting can improve operational efficiency, investor confidence, and financial decision-making. Implementation costs and regulatory uncertainty remain challenges.
Ali et al. (2021)	Accounting Information System and Financial Sustainability of Commercial and Islamic Banks: A Review of the Literature	The review identifies AIS as an important support for organizational information processing and financial sustainability. However, previous studies show inconsistent results regarding the relationship between AIS and financial performance, indicating the need for further research.

Author & Year	Article Title	Main Findings
Orlitzky et al. (2003)	Corporate Social and Financial Performance: A Meta-Analysis	The meta-analysis of 52 studies and 33,878 observations finds a generally positive association between corporate social performance and financial performance. The relationship varies depending on how each construct is measured.
Krasteva-Hristova & Moneva (2026)	Digitalization, ESG Reporting, and Circular Economy: Accounting Challenges for Women-Led SMEs	The conceptual analysis suggests that digital accounting capabilities can make ESG reporting more efficient, reliable, comparable, and scalable. Measurement, valuation, disclosure, professional judgment, and limited SME capacity remain important challenges.
Wahyuningtyas et al. (2022)	Does Sustainability Reporting Improve Financial and Non-Financial Performance in Indonesia Companies?	The study of Indonesian companies finds that the economic dimension of sustainability reporting has a positive and significant relationship with selected financial and market measures. Several social and environmental relationships with market and operational performance are not statistically significant.
Ameyaw et al. (2023)	Sustainability Reporting and Corporate Financial Performance: Moderating Effect of Financial Slack Resource	Using panel data from 110 South African listed firms, the study finds a negative relationship between sustainability reporting and ROA, while the relationship with Tobin's Q is positive but insignificant. Financial slack resources moderate these relationships.
Pratiwi et al. (2020)	The Effect of Environmental Management Accounting on Corporate Sustainability	The study of Indonesian companies finds a positive relationship between environmental management accounting and corporate sustainability. Energy eco-efficiency and lower energy use are associated with improved environmental and social outcomes.
Irmi & Hamzah (2025)	Environmental Management Accounting, Green Transformational Leadership and Environmental Performance: Evidence From Hoteliers	Based on 108 respondents from hotels in Palembang, both environmental management accounting and green transformational leadership have positive and significant relationships with environmental performance.
Christy & Tjun (2024)	Green Accounting and Sustainable Corporate Performance: Environmental Performance as a Moderating Variable	Environmental costs, used as a proxy for green accounting, have a negative relationship with sustainable corporate performance in the study's model. More efficient environmental cost allocation is associated with better ROE, while environmental performance does not significantly moderate the relationship.
Chyntia et al. (2025)	Green Accounting and Financial Performance: Evidence From Basic Materials Manufacturing Companies	The study of Indonesian basic-materials manufacturers finds that environmental costs and environmental performance affect ROA. The findings support evaluating green accounting together with environmental performance when assessing financial outcomes.

Source: Processed data (2026)

The reviewed literature highlights the complementary roles of green accounting and Accounting Information Systems (AIS) in supporting corporate sustainability, environmental accountability, and financial performance. Green accounting provides a mechanism for identifying, measuring, and reporting environmental costs, while AIS facilitates the systematic collection, integration, processing, and dissemination of financial and non-financial information. Purwati et al. (2026) emphasize the importance of developing an integrated digital AIS to help small and medium-sized enterprises (SMEs) capture environmental costs and ESG indicators

systematically. Similarly, Susanto and Meiryani (2019) find that the alignment of environmental accounting information systems with organizational requirements is positively associated with firm performance and environmental performance among Indonesian SMEs. Stanescu et al. (2021) further propose a conceptual model for integrating environmental impacts into managerial accounting information systems, demonstrating how environmental information can be incorporated into production costing and managerial decision-making. Collectively, these studies suggest that the contribution of green accounting depends not only on identifying environmental costs but also on the capacity of information systems to integrate environmental data into routine management processes.

The relationship between environmental accounting and corporate sustainability is also supported by Endiana et al. (2020), who associate green accounting practices with corporate sustainability and financial performance, and Pratiwi et al. (2020), who identify a positive relationship between environmental management accounting and corporate sustainability. Irmi and Hamzah (2025) similarly find that environmental management accounting and green transformational leadership are positively associated with environmental performance in the hotel sector. These findings indicate that environmental accounting can support sustainability objectives when it is embedded in organizational practices and accompanied by appropriate managerial capabilities. Nevertheless, environmental performance, corporate sustainability, and financial performance represent different outcomes and should not be treated as interchangeable. Improvements in environmental management may require initial investments, while their potential financial benefits may emerge over a longer period.

Digital transformation provides another important dimension of this relationship by expanding the capacity of accounting systems to manage sustainability information. Suhardjo et al. (2024) associate digital accounting implementation with the effectiveness of corporate social responsibility and ESG reporting, particularly through improvements in information accuracy, timeliness, and transparency. Krasteva-Hristova and Moneva (2026) likewise discuss the potential of digitalization to improve the efficiency, reliability, comparability, and scalability of ESG reporting, while identifying challenges related to environmental measurement, professional judgment, and limited organizational capacity. Tanchangya et al. (2026), based on evidence from manufacturing-sector professionals in Bangladesh, further demonstrate the relevance of green capabilities, sustainability management accounting, and business analytics adoption to sustainable organizational performance. These studies collectively suggest that digital accounting should be understood as more than the automation of financial transactions. Its strategic contribution depends on the quality of environmental data, the integration of accounting information, and the ability of organizational members to use that information in sustainability-related decisions.

The importance of accounting systems also extends to environmental accountability and stakeholder engagement. Dillard et al. (2016) emphasize the need for accounting information systems in social and environmental accounting to accommodate competing stakeholder interests rather than prioritize economic objectives exclusively. Hertati et al. (2026), in their study of illegal oil mining in South Sumatra, identify weak environmental accountability and the absence of environmental accounting information systems as obstacles to monitoring environmental and climate-related risks. These findings highlight the importance of reliable information infrastructures in supporting environmental oversight and organizational accountability. However, digital systems alone cannot guarantee effective sustainability reporting. Data quality, measurement consistency, professional competence, implementation costs, and organizational

resistance remain important conditions affecting the usefulness of environmental information. Thus, the effectiveness of digital transformation depends on the interaction between technological infrastructure, accounting practices, and organizational capabilities.

Despite these potential benefits, the relationship between green accounting and financial performance is not consistently positive across the reviewed studies. Khan and Gupta (2024), through a meta-analytical investigation, report an overall positive relationship between corporate green accounting and financial performance. Lusiana et al. (2021) similarly conclude that green accounting and corporate social responsibility disclosure are generally associated with financial performance and firm value, with potential benefits arising from cost efficiency, corporate reputation, and investor confidence. At the company level, Endiana et al. (2020) associate green accounting with corporate sustainability and financial performance, while Ahmad et al. (2025) highlight the mediating role of green accounting management in the relationship between environmental policy, industrial ecosystem adaptability, and financial performance. These findings indicate that environmental accounting may contribute to financial outcomes when it is incorporated into corporate strategy and supported by effective information management.

However, other studies report insignificant or negative relationships between sustainability-related practices and financial outcomes. Nisaa and Hidayati (2025) find that green accounting and environmental disclosure do not significantly affect firm value among manufacturing companies. Prasetyaningsih et al. (2025) similarly report no significant influence of green accounting and carbon emission disclosure on firm value in the energy sector, while Surianti and Hutagalung (2025) find that green accounting and the three dimensions of green intellectual capital (structural, human, and relational) do not significantly affect profitability. Ameyaw et al. (2023) report a negative relationship between sustainability reporting and return on assets (ROA), while its relationship with Tobin's Q is positive but statistically insignificant. Christy and Tjun (2024) also report a negative relationship between environmental costs, used as a proxy for green accounting, and sustainable corporate performance in their empirical model. These results challenge the assumption that greater environmental disclosure or investment necessarily produces immediate financial benefits.

Differences in organizational conditions and performance measures may help explain these divergent findings. Imtikhanah et al. (2025) find that firm size and corporate social responsibility significantly influence financial performance, while overly bureaucratic corporate governance can weaken the positive effect of green accounting implementation. Ameyaw et al. (2023) further indicate that financial slack resources moderate the relationships between sustainability reporting and financial performance. Wahyuningtyas et al. (2022) find that the economic dimension of sustainability reporting has a positive and significant relationship with selected financial and market measures, whereas several relationships involving social and environmental dimensions are statistically insignificant. These findings suggest that the financial relevance of sustainability information varies according to reporting dimensions, organizational resources, governance arrangements, and the indicators used to measure corporate performance. Orlitzky et al. (2003), in a broader meta-analysis of corporate social and financial performance, also identify an overall positive association while showing that the strength of the relationship varies with measurement choices. Although their study does not focus exclusively on green accounting or AIS, it provides a useful broader perspective for interpreting the heterogeneous financial outcomes reported in the reviewed literature.

Organizational capabilities also influence how environmental accounting information is translated into sustainability outcomes. Hidayah et al. (2025) describe the changing role of

accountants from financial reporters to strategic participants in ESG risk assessment and sustainability decision-making. Tanchangya et al. (2026) highlight the importance of green capabilities and business analytics in strengthening sustainability management accounting outcomes, while Irmi and Hamzah (2025) demonstrate the relevance of leadership alongside environmental management accounting. These findings suggest that the usefulness of AIS depends not only on its technical functionality but also on the competencies of those who interpret and apply its information. In addition, stakeholder expectations and the credibility of sustainability disclosures may influence whether environmental initiatives are recognized as sources of corporate value. Consequently, improvements in reporting infrastructure should be accompanied by professional development, effective governance, and the integration of sustainability indicators into organizational decision-making.

Taken together, the reviewed literature identifies three interconnected dimensions in the relationship between green accounting, AIS, and corporate outcomes. Green accounting provides information about environmental costs and impacts; AIS facilitates the integration and communication of financial and non-financial data; and organizational capabilities, governance, and stakeholder relationships influence whether this information contributes to sustainability and financial performance. Nevertheless, the reviewed studies examine these dimensions from different analytical perspectives. Some focus on environmental accounting practices and profitability, others investigate information-system alignment and environmental performance, while still others examine digital reporting, organizational capabilities, or stakeholder accountability. This fragmentation makes it difficult to determine precisely how the integration of green accounting and AIS translates into measurable corporate outcomes and under what conditions these outcomes are likely to emerge.

The principal research opportunity therefore lies in developing an integrated understanding of how environmental accounting information is captured, processed, and utilized through AIS to support sustainability reporting, managerial decision-making, corporate sustainability, and financial performance. Such an approach should distinguish the informational benefits of digital integration from its environmental and financial consequences while accounting for organizational capabilities, governance arrangements, resource constraints, and differences in performance measurement. By synthesizing these interrelated dimensions, the present review can contribute to a more nuanced understanding of why the empirical relationship between green accounting, AIS, sustainability, and financial performance varies across organizational and sectoral contexts.

5. Conclusion

This systematic review highlights the complementary roles of green accounting and Accounting Information Systems (AIS) in supporting corporate environmental accountability, sustainability reporting, and decision-making. Green accounting provides information on environmental costs and impacts, while AIS can facilitate the collection, integration, processing, and reporting of relevant information. Their integration therefore offers a potential pathway to improve information transparency, strengthen accountability to stakeholders, and support more informed resource allocation. However, the extent to which these benefits translate into improved corporate financial performance depends on organizational capabilities, governance arrangements, regulatory conditions, and the effective use of sustainability-related information.

The empirical evidence reveals that the relationship between green accounting, AIS, and corporate financial performance is not uniform. Although some studies report positive

associations with operational efficiency, governance, or financial outcomes, others identify weak, insignificant, or context-dependent relationships. These divergent findings suggest that the adoption of environmental accounting practices and digital information systems does not automatically generate higher profitability or market valuation. Rather, financial benefits may depend on the quality of implementation, the relevance and credibility of disclosed information, the time horizon used to assess performance, and how stakeholders interpret corporate sustainability initiatives. Consequently, the distinction between improvements in environmental accountability and measurable financial returns is essential when evaluating the effectiveness of green accounting and AIS integration.

The review also indicates that implementation may be constrained by technological investment requirements, limited sustainability-related expertise, inconsistent reporting practices, and differences in regulatory and institutional environments. These challenges underscore the importance of treating green accounting and AIS integration as an organizational transformation rather than merely a reporting or technology adoption exercise. Companies need appropriate information infrastructure, competent accounting professionals, effective internal controls, and governance mechanisms to translate environmental data into actionable managerial insights. The contribution of this integration should therefore be assessed through a combination of environmental, operational, governance, and financial indicators rather than relying exclusively on conventional measures such as return on assets (ROA) or Tobin's Q.

Theoretically, this review contributes to the discussion of Legitimacy Theory and Stakeholder Theory by highlighting how environmental information systems can support corporate accountability and stakeholder engagement. It also identifies the need for further research into the mechanisms through which green accounting and AIS integration may influence organizational and financial outcomes. From a practical perspective, companies should strengthen the quality and consistency of environmental data, improve the integration of sustainability information into accounting systems, and develop the capabilities of accounting professionals to support environmental and strategic decision-making. Policymakers and regulators may also consider clearer sustainability reporting requirements, appropriate implementation guidance, and targeted incentives to encourage credible environmental accounting practices.

Future research should examine green accounting and AIS as related but distinct organizational mechanisms and investigate how their interaction affects environmental, operational, and financial performance. Comparative studies across industries, firm sizes, and regulatory settings would help explain why the reported outcomes differ across contexts. Researchers could also investigate potential moderating factors, including governance quality, digital capability, reporting credibility, and stakeholder awareness, provided these factors are theoretically justified and empirically measurable. Such research would help establish more clearly the conditions under which integrating green accounting and AIS contributes to corporate sustainability and long-term organizational resilience.

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