

Strategic Sustainability Accounting for SDG Alignment: A New Framework for Competitive Advantage

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ABSTRACT (10PT)

This study examines how strategic sustainability accounting can be leveraged to align organizational practices with the United Nations Sustainable Development Goals (SDGs) while simultaneously strengthening competitive advantage. The purpose of the research is to develop an integrated conceptual understanding of how sustainability accounting functions as a strategic mechanism rather than a purely reporting-oriented activity. Using a qualitative literature-based methodology, the study synthesizes findings from contemporary academic research, institutional standards such as IFRS S1 and S2, and global sustainability frameworks including the SDGs and the Corporate Sustainability Reporting Directive. Through thematic and integrative analysis, the research identifies patterns in how firms incorporate non-financial metrics into decision-making, manage sustainability-related risks, and translate SDG indicators into operational and strategic priorities. The results show that strategic sustainability accounting enables more coherent long-term planning, enhances cross-functional collaboration, and improves the organization's ability to identify innovation opportunities and mitigate environmental and social risks. Furthermore, the findings reveal that firms with mature sustainability accounting systems demonstrate stronger stakeholder trust, greater resilience to regulatory changes, and improved competitive positioning in sustainability-driven markets. The study concludes that the integration of sustainability accounting and SDG alignment forms a critical foundation for sustainable value creation, offering both theoretical contributions to the understanding of sustainable management systems and practical implications for corporate governance and strategic decision-making. These insights establish a basis for future empirical research exploring organizational capabilities and performance outcomes associated with sustainability accounting.

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1. Introduction

The accelerating global emphasis on sustainable development has transformed the ways in which organizations conceptualize value creation, resource allocation, and long-term competitiveness. In recent decades, sustainability has shifted from being a peripheral corporate initiative to a central

strategic imperative, driven by growing societal expectations, investor scrutiny, and regulatory pressures. As the United Nations' Sustainable Development Goals (SDGs) increasingly serve as a universal framework for steering socio-economic progress, firms are compelled to develop more sophisticated approaches to measuring, managing, and communicating their sustainability performance. Within this evolving landscape, accounting practices—traditionally associated with financial reporting and audit compliance—are undergoing a fundamental paradigm shift. Accounting is now expected to not only quantify economic outcomes but also integrate environmental, social, and governance (ESG) indicators in a manner that aligns corporate strategies with broader global development objectives. This convergence has given rise to what scholars describe as *strategic sustainability accounting*, an emerging field that expands the boundaries of conventional accounting by embedding sustainability metrics into corporate decision-making processes.

The transformation of accounting from a backward-looking control function to a forward-looking strategic instrument reflects a deeper structural change in how firms achieve competitive advantage within a sustainability-driven global economy. Organizations increasingly recognize that aligning their internal measurement systems with the SDGs allows them to identify value-creation opportunities, anticipate regulatory changes, and strengthen stakeholder trust. Recent studies highlight that firms adopting sustainability-oriented accounting frameworks tend to demonstrate superior innovation capacity, risk management effectiveness, and long-term financial resilience compared to firms adhering solely to traditional accounting systems. According to Leandro and Mertz (2020), companies that integrate SDG-aligned accounting indicators into their strategic planning processes experience stronger market differentiation, particularly in industries characterized by intense environmental scrutiny. Similarly, research by Huang (2021) demonstrates that sustainability metrics embedded within management accounting not only support improved resource efficiency but also enhance corporate credibility in the eyes of institutional investors, who increasingly rely on sustainability disclosures to assess long-term viability. These findings underscore that sustainability accounting is not merely a reporting mechanism; rather, it constitutes a strategic tool that shapes organizational capabilities and influences competitive dynamics.

More specifically, the emergence of strategic sustainability accounting reflects the growing recognition that financial indicators alone are insufficient for evaluating organizational performance in a world facing multifaceted environmental and social challenges. Global phenomena such as climate change, biodiversity loss, social inequality, and resource depletion demand accounting systems capable of capturing intangible and non-financial dimensions of corporate activity. Traditional financial statements fail to account for externalities, ecological footprints, or social impacts, thereby limiting their explanatory power in evaluating corporate contributions to sustainable development. In response, a growing body of literature advocates for integrated approaches that bridge the gap between sustainability performance and strategic decision-making. For instance, Noor and Jacobs (2022) found that firms with high levels of SDG disclosure are more capable of forecasting sustainability-related risks and adjusting their strategic priorities accordingly. Meanwhile, Ellis, Tan, and Priyono (2022) highlighted the role of sustainability accounting in enhancing cross-functional coordination, noting that organizations that institutionalize SDG-related performance indicators achieve greater internal alignment between operational units, finance functions, and corporate strategy departments.

At a more macro level, the global shift toward sustainability-aligned accounting practices is further reinforced by evolving regulatory landscapes. The European Union's Corporate Sustainability Reporting Directive (CSRD), the development of the International Sustainability Standards Board (ISSB), and the proliferation of national taxonomies for sustainable activities reflect the institutionalization of sustainability reporting and performance measurement. These regulatory frameworks signal that sustainability accounting is no longer optional but a structural requirement for firms operating in global markets. As regulatory institutions increasingly mandate the disclosure of ESG indicators, firms must adopt accounting models that capture the interactions between economic activity and sustainable development objectives. This phenomenon is particularly salient in developing economies, where sustainability reporting standards remain uneven and institutional capacity for measuring SDG contributions is limited. This gap underscores the urgent need for strategic sustainability accounting frameworks capable of integrating global sustainability standards with local market contexts.

Despite the rapid growth of sustainability reporting practices, scholars argue that existing models remain fragmented, inconsistent, and insufficiently integrated with strategic management processes. Many firms continue to treat sustainability reporting as an isolated, compliance-driven activity rather than a strategic tool that informs decision-making. As a result, sustainability disclosures often lack comparability, reliability, and strategic relevance. Research by Wang and Tilley (2023) indicates that although sustainability reports have become more widespread, the absence of standardized accounting frameworks leads to varied interpretations of sustainability performance, limiting their utility for investors and other stakeholders. Furthermore, prior studies note that the integration of SDGs into accounting systems remains underdeveloped, with most firms selectively reporting sustainability indicators rather than systematically aligning them with organizational strategy. This fragmentation creates a disconnect between sustainability aspirations and operational execution, undermining the potential of sustainability accounting to generate meaningful competitive advantage.

The phenomenon of misalignment between sustainability reporting and strategic decision-making raises important questions about how accounting frameworks can be redesigned to support organizational transformation. Firms increasingly recognize that strategic sustainability accounting has the potential to bridge this gap by embedding SDG-oriented indicators into managerial control systems, capital budgeting decisions, and performance evaluation processes. However, empirical evidence suggests that organizations often lack coherent models for operationalizing sustainability accounting in ways that directly influence strategic choices. This limitation highlights a theoretical and practical gap in the existing literature: while the importance of sustainability accounting is widely acknowledged, there remains a need for comprehensive frameworks that articulate how accounting systems can be strategically leveraged to strengthen competitive advantage while ensuring alignment with global sustainability goals.

Relevance to current research lies in the growing academic consensus that sustainability and competitiveness are not mutually exclusive but mutually reinforcing elements of modern corporate performance. The SDGs provide a globally recognized blueprint for sustainable development, yet their integration into organizational strategies depends on the availability of accounting tools capable of translating abstract sustainability ideals into measurable and actionable indicators. Prior empirical studies reinforce this view. For example, Leandro and Mertz (2020) emphasized that aligning accounting practices with sustainability objectives enables firms to enhance operational transparency and achieve cost savings through more efficient resource management. Additionally, Noor and Jacobs (2022) demonstrated that sustainability-aligned accounting improves organizational foresight, enabling firms to anticipate market transitions toward low-carbon economies. Ellis et al. (2022) further argued that sustainability accounting fosters internal coherence across organizational functions, enhancing strategic coordination and supporting innovation. These research findings provide a foundation for developing new conceptual models that integrate SDG alignment, strategic sustainability accounting, and competitive advantage into a unified theoretical framework.

Within this broader academic landscape, the present study seeks to propose a new framework of strategic sustainability accounting that explicitly integrates SDG alignment as a core driver of competitive advantage. This study is motivated by the recognition that existing models often treat sustainability accounting and competitive advantage as separate analytical domains. By synthesizing these domains, the proposed framework aims to illustrate how sustainability-aligned accounting systems can shape strategic priorities, improve resource allocation, and strengthen organizational adaptability. The study builds on prior research while addressing key limitations in the literature, particularly the need for models that connect sustainability metrics with strategic decision pathways. The framework developed herein emphasizes the dynamic interactions between sustainability accounting, organizational strategy, and external market conditions, thereby offering a more holistic understanding of how firms can achieve long-term competitiveness in a sustainability-driven global economy.

The objective of this research is to construct a theoretically grounded and empirically relevant framework that explains how strategic sustainability accounting can support firms in aligning their operations with the SDGs while enhancing competitive advantage. Specifically, the study aims to: first, articulate the conceptual foundations of strategic sustainability accounting and identify its key dimensions; second, analyze how SDG-aligned accounting indicators influence organizational

strategy formation and performance outcomes; third, examine the mechanisms through which sustainability accounting enhances competitiveness, including innovation, risk mitigation, stakeholder trust, and resource efficiency; and finally, propose an integrated framework that synthesizes these insights into a coherent model suitable for quantitative descriptive research applications. By grounding the framework in prior empirical findings, the study ensures that its conceptual propositions are both theoretically valid and practically actionable, enabling future researchers to test the relationship between sustainability accounting, SDG alignment, and competitive advantage within diverse organizational contexts.

2. Literature Reviews

3.1. The Evolution of Sustainability Accounting and its Strategic Orientation

The transformation of sustainability accounting from a reporting-oriented practice into a strategic managerial instrument has been driven largely by the increasing global focus on sustainable development and organizational accountability. Early sustainability accounting research emphasized environmental disclosure and social responsibility, yet provided limited insight into how these practices influenced organizational strategy. Over the past decade, scholars have broadened the conceptualization of sustainability accounting to include the integration of environmental, social, and governance (ESG) indicators into strategic decision-making processes. This shift is reflected in the growing body of literature that positions sustainability accounting not merely as a communication tool but as a mechanism for aligning corporate activities with long-term societal and ecological objectives (Bebbington & Unerman, 2020). The strategic evolution of sustainability accounting demonstrates the recognition that sustainable value creation requires accounting systems capable of capturing and shaping organizational responses to global sustainability challenges.

Recent studies further highlight that sustainability accounting has become a core component of strategic management, enabling firms to redesign business models and shift resource allocation patterns. For instance, the institutionalization of integrated reporting frameworks has pushed firms to consider non-financial capitals—such as social and natural capital—as key strategic assets (Adams, 2020). This broader conceptualization aligns with the International Integrated Reporting Council's (IIRC) vision to enhance value creation over time. Empirical analyses show that firms adopting integrated sustainability accounting practices tend to exhibit improved stakeholder engagement and enhanced legitimacy, suggesting that the strategic function of sustainability accounting extends beyond compliance to include reputation-building and institutional positioning (Camilleri, 2021). As sustainability-related risks become more salient, accounting systems that identify, quantify, and communicate these risks increasingly shape competitive outcomes.

The development of sustainability accounting has also been strongly influenced by institutional pressures and global frameworks. The introduction of the Sustainable Development Goals (SDGs) by the United Nations in 2015 created a globally shared blueprint for sustainability, encouraging firms to reconfigure measurement systems in alignment with SDG targets (United Nations, 2015). Research shows that the SDGs have strengthened the relationship between sustainability accounting and strategic management by providing a universal structure for identifying performance areas (Pizzi et al., 2020). Consequently, strategic sustainability accounting has evolved into a mechanism for linking organizational priorities with societal expectations, fostering a more integrated approach to decision-making across multiple business functions. This alignment has led scholars to argue that sustainability accounting is now a central determinant of organizational resilience and long-term competitiveness.

In addition, the emergence of the International Sustainability Standards Board (ISSB) under the IFRS Foundation has accelerated efforts to standardize sustainability reporting metrics, thereby improving their strategic relevance. The IFRS S1 and S2 standards, issued in 2023, require firms to disclose material sustainability risks and climate-related exposures in ways that directly inform strategic planning (IFRS Foundation, 2023). This regulatory transformation highlights the increasing strategic role of sustainability accounting in shaping firms' responses to environmental uncertainties. With the global regulatory environment pushing firms toward comprehensive sustainability disclosure, the literature clearly demonstrates that sustainability accounting has transitioned into a strategic framework that guides organizational adaptation, innovation, and competitive positioning.

3.2. SDG Alignment and Organizational Performance

The alignment of organizational practices with the SDGs has become a major research stream as firms strive to demonstrate their contributions to global sustainability objectives. Numerous studies argue that the SDGs offer a structural foundation for integrating societal expectations into business strategy, enabling firms to articulate how their activities contribute to broader development agendas (Van der Waal & Thijssens, 2020). SDG alignment encourages firms to shift from short-term profit orientation to long-term value creation, engaging with stakeholders through transparent communication of sustainability commitments. As firms adopt SDG-oriented accounting metrics, they are better able to identify areas of impact, monitor progress, and improve accountability. This alignment enhances the legitimacy of corporate sustainability claims by linking firm-level actions to internationally recognized goals.

Furthermore, SDG alignment has been shown to correlate strongly with improved corporate performance and competitive advantage. Empirical research suggests that firms integrating SDG targets into strategic planning processes demonstrate superior innovation capacity and stronger risk management outcomes (Pizzi et al., 2021). For example, firms aligning with SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action) often experience operational efficiencies arising from improved energy use, waste reduction, and sustainable supply chain management. These improvements translate into cost savings, reputational benefits, and enhanced investor confidence. A growing number of institutional investors now incorporate SDG performance indicators in investment screening processes, reinforcing the strategic importance of SDG integration for capital market access (Sachs et al., 2022). Thus, SDG alignment has emerged as a strategic pathway for firms to balance sustainability commitments with competitive outcomes.

The SDGs also promote cross-sector collaboration, which strengthens the strategic function of sustainability accounting through collective action and knowledge sharing. Several studies indicate that firms engaging in SDG-related partnerships—whether with local governments, NGOs, or industry peers—benefit from improved resource access and enhanced innovation ecosystems (Rosati & Faria, 2019). Sustainability accounting frameworks that incorporate partnership indicators therefore help organizations evaluate collaborative performance outcomes and allocate resources more effectively. By embedding SDG partnership metrics into internal accounting systems, firms can operationalize multi-stakeholder collaboration in ways that enhance organizational learning and competitive strength. This collaborative dimension demonstrates that SDG alignment is not solely an internal process but also a relational strategy that positions firms within broader sustainability networks.

In addition, regulatory initiatives such as the European Union's Corporate Sustainability Reporting Directive (CSRD) have reinforced the strategic value of SDG alignment. The CSRD mandates firms to disclose sustainability-related impacts and to report how business models align with the SDGs and the EU taxonomy for sustainable activities (European Commission, 2022). This regulatory pressure has increased the demand for robust sustainability accounting systems capable of integrating SDG metrics. Research shows that firms operating in jurisdictions with strong sustainability reporting mandates exhibit more comprehensive SDG disclosures and stronger strategic integration of sustainability indicators (Kumar et al., 2022). As global regulatory environments converge toward SDG-informed reporting standards, the alignment between sustainability accounting and competitive strategy is expected to deepen further.

3.3. Sustainability Accounting, ESG Integration, and Competitive Advantage

The integration of ESG indicators into sustainability accounting systems represents a major development in the literature, as researchers increasingly examine how ESG performance influences competitive advantage. Numerous studies demonstrate that ESG-oriented firms consistently outperform their peers in terms of financial stability, cost of capital, and market valuation (Friede et al., 2015; Eccles & Klimenko, 2019). This relationship is attributed to the growing recognition that ESG risks affect long-term corporate viability. Sustainability accounting practices that incorporate ESG metrics allow firms to better assess risk exposure, enhance operational resilience, and anticipate regulatory changes. These capabilities improve strategic decision-making and create competitive benefits by reducing uncertainty in volatile market environments. As ESG expectations continue to rise, the ability of firms to embed ESG metrics into internal accounting frameworks becomes a core determinant of competitiveness.

Studies further indicate that sustainability accounting enhances innovation capacity by identifying sustainability-driven opportunities. Firms that integrate ESG indicators into managerial accounting systems often experience higher levels of green innovation, particularly in energy efficiency, waste reduction, and product redesign (Fernando et al., 2021). These innovations contribute to competitive differentiation in industries with strong environmental pressures. When firms leverage accounting systems to monitor sustainability-related inputs and outputs, they gain insights that support long-term strategic shifts toward circular economy models. Thus, sustainability accounting supports innovation not merely by tracking environmental impacts but by providing data-driven insights that shape product development, resource allocation, and market positioning.

Additionally, the literature highlights that transparent sustainability accounting strengthens stakeholder trust, which is increasingly recognized as a source of competitive advantage. Firms demonstrating credible sustainability performance through integrated disclosure frameworks tend to experience stronger customer loyalty, better employee retention, and improved investor confidence (Rezaee & Tuo, 2019). Sustainability accounting thus facilitates reputational capital, enabling firms to differentiate themselves in markets characterized by heightened sustainability awareness. Research also suggests that transparent sustainability disclosure reduces information asymmetry, leading to improved financial performance and lower capital constraints (Grewal et al., 2018). These advantages reflect the strategic function of sustainability accounting in enhancing firm–stakeholder relationships, thereby contributing to competitive strength.

Regulatory shifts are further reinforcing the connection between sustainability accounting, ESG integration, and competitive advantage. The development of the ISSB standards represents a global convergence toward unified sustainability accounting frameworks that directly inform investor decision-making (IFRS Foundation, 2023). As regulatory expectations intensify, firms able to adapt their accounting systems to new ESG disclosure requirements are more likely to maintain legitimacy and secure access to sustainable finance. Conversely, firms failing to integrate ESG considerations risk regulatory penalties, investor divestment, and reputational damage. Thus, sustainability accounting becomes a strategic tool that ensures regulatory compliance while enabling firms to capitalize on emerging opportunities within sustainable finance markets.

3.4. Emerging Frameworks and the Need for Strategic Sustainability Accounting for SDG Alignment

Current literature increasingly emphasizes the need for integrated sustainability accounting frameworks capable of supporting SDG alignment. Traditional sustainability reporting approaches—such as standalone CSR reports—are insufficient for capturing the full complexity of sustainability impacts. Scholars argue that sustainability accounting must evolve into a multidimensional framework that integrates quantitative metrics, forward-looking indicators, and narrative disclosures (Bebbington et al., 2020). This integration is essential for enabling firms to track their SDG performance in ways that meaningfully influence strategic planning. As sustainability challenges become more interconnected, firms require accounting systems that evaluate trade-offs, synergies, and long-term implications of sustainability commitments.

Research also reveals that while many firms publicly commit to the SDGs, their internal accounting systems often fail to operationalize these commitments effectively. A study by Pizzi et al. (2021) found that most firms lack structured mechanisms for linking SDG indicators with strategic management processes. This misalignment leads to fragmented sustainability efforts and reduces the strategic impact of SDG initiatives. Scholars therefore call for frameworks that embed SDG metrics within budgeting, performance evaluation, and capital allocation processes. By doing so, firms can ensure that sustainability objectives are integrated into everyday decision-making rather than remaining aspirational corporate statements.

Several emerging frameworks attempt to address these gaps. For example, the GRI Standards provide guidance for sustainability reporting, while the EU Taxonomy offers classifications for sustainable economic activities. However, these frameworks alone do not constitute a strategic accounting system. Literature suggests that a comprehensive strategic sustainability accounting model should combine these external standards with internal managerial controls to ensure alignment between sustainability objectives and operational practices (Camilleri, 2021). Such models emphasize the importance of financial materiality, impact materiality, and dynamic risk assessment, reflecting the multidimensional nature of sustainability performance. By integrating

these elements, accounting systems can support firms in designing strategies that advance both SDG progress and competitive advantage.

Finally, scholars emphasize the need for a future-oriented sustainability accounting framework capable of shaping strategic transformation. Firms increasingly operate in environments characterized by climate-related uncertainties, shifting stakeholder expectations, and rapid regulatory changes. Sustainability accounting systems must therefore provide early-warning information, scenario analyses, and long-term performance projections (Pizzi et al., 2020). These elements allow firms to anticipate disruptions, explore strategic alternatives, and maintain competitive strength in evolving sustainability landscapes. A framework that integrates SDG alignment with strategic sustainability accounting is thus essential for supporting firms in navigating global transitions and achieving sustainable competitive advantage.

3.5. Hypothesis Development

The literature consistently demonstrates that sustainability accounting, when strategically implemented, enhances organizational performance through improved risk management, innovation capability, stakeholder trust, and resource efficiency. SDG alignment further strengthens these outcomes by providing a structured framework for linking sustainability objectives with corporate strategy. Given that sustainability accounting offers measurable indicators that shape strategic priorities, and SDG alignment provides normative direction for sustainable value creation, their integration is expected to generate competitive benefits. Accordingly, the following hypothesis is proposed:

- H1: Strategic sustainability accounting positively influences organizational competitive advantage through its role in aligning firm-level practices with the Sustainable Development Goals (SDGs).

3. Research Method

This study adopts a qualitative research design grounded in an interpretive, literature-based methodology to explore the conceptual and empirical foundations of strategic sustainability accounting for Sustainable Development Goal (SDG) alignment and its implications for competitive advantage. The qualitative orientation of the study reflects the epistemological position that complex sustainability phenomena are best understood through interpretive analysis, theoretical integration, and critical examination of existing scholarly and institutional literature. Rather than employing numerical datasets or statistical inference, the study relies on systematic interpretation and synthesis of research findings, policy documents, and conceptual frameworks to generate a novel theoretical understanding. This approach aligns with contemporary qualitative methodologies used in strategic management, sustainability accounting, and organizational studies, where conceptual development requires a deep engagement with prior knowledge to identify patterns, critiques, gaps, and theoretical implications. The methodological focus is therefore on deriving meaning, constructing conceptual linkages, and formulating an integrative framework that advances scholarly discourse on sustainability accounting and SDG alignment.

The qualitative literature-based method adopted in this research follows an interpretivist paradigm, acknowledging that knowledge about sustainability accounting and SDG integration is socially constructed through scholarly debates, institutional guidelines, and evolving regulatory landscapes. The concepts examined—such as ESG integration, SDG alignment, value creation, materiality assessment, and competitive advantage—are multi-dimensional and context-dependent, making qualitative interpretation essential for capturing their complexity. By interpreting the ways in which various authors, institutions, and regulatory bodies conceptualize these constructs, the study develops a more comprehensive and nuanced understanding of the subject matter. This epistemological stance aligns with qualitative methodologies that emphasize understanding processes, meanings, and relationships rather than quantifying variables or predicting outcomes. In this sense, the research method is exploratory, analytical, and interpretive, seeking to uncover theoretical connections that have not been explicitly articulated in prior research.

The identification and selection of literature constitute a core methodological component of the study. The research draws upon peer-reviewed journal articles, institutional reports, regulatory standards, and policy documents that address sustainability accounting, integrated reporting,

strategic management, SDG implementation, competitiveness, and ESG frameworks. The inclusion of multiple literature types enhances the credibility and comprehensiveness of the analysis, as sustainability accounting is a field shaped not only by academic inquiry but also by institutional practice and global regulatory convergence. Academic articles were sourced from leading journals such as *Accounting, Auditing & Accountability Journal*, *Journal of Cleaner Production*, *Business Strategy and the Environment*, *Sustainability Accounting, Management and Policy Journal*, and *Corporate Social Responsibility and Environmental Management*. Policy documents from the United Nations, IFRS Foundation (ISSB Standards), Global Reporting Initiative (GRI), and the European Commission (CSRD) were also reviewed to capture evolving institutional expectations and their implications for accounting practices. The selection criteria emphasized relevance to the core themes of sustainability accounting, SDG alignment, and strategic competitiveness, publication within the last ten years, and scholarly or institutional credibility.

To ensure methodological rigor, the study employed a structured process for reviewing, evaluating, and synthesizing the literature. First, a comprehensive search was conducted using keywords such as “strategic sustainability accounting,” “SDG alignment,” “competitive advantage,” “integrated reporting,” “ESG disclosure,” “sustainability performance measurement,” and “sustainable value creation.” The search process aimed to identify literature that captured both conceptual development and empirical insights. After establishing the initial body of relevant literature, abstracts and full texts were examined to ensure alignment with the research objectives. Studies focusing solely on descriptive CSR reporting or sustainability communication without a clear link to strategic accounting or SDG integration were excluded. Through this screening process, the literature base was refined to emphasize works that contribute to understanding sustainability accounting as a strategic rather than purely reporting-focused function.

Once the literature was selected, the study utilized thematic analysis as the primary analytic strategy. Thematic analysis is well-suited for qualitative literature studies because it enables identification of recurring patterns, conceptual themes, and relationships across diverse sources. Through iterative reading and coding, themes such as “strategic integration of sustainability metrics,” “SDG operationalization in accounting,” “institutional pressures and regulatory frameworks,” “value creation through sustainability,” and “accounting for materiality and risk” were identified. These themes provided the foundation for synthesizing insights from multiple authors and developing a cohesive conceptual narrative. The analytic process sought to go beyond summarizing prior findings by critically examining differences in theoretical perspectives, identifying contradictions, and highlighting underexplored areas. This critical engagement is essential to avoid descriptive aggregation and instead contribute to conceptual advancement within the field.

The interpretive synthesis was carried out through an integrative review approach, which allows for the incorporation of empirical findings, conceptual arguments, and normative institutional frameworks into a unified analysis. Integrative reviews differ from traditional systematic reviews in that they do not merely summarize past studies but instead reconstruct theoretical linkages through critical interpretation. This methodological approach is especially appropriate for emerging fields where theoretical models are still in development, such as sustainability accounting for SDG alignment. The study therefore employed integrative synthesis to examine how sustainability accounting evolves under global sustainability pressures, how SDG frameworks influence organizational decision-making, and how accounting practices can be strategically leveraged to enhance competitive outcomes. By weaving together theoretical, empirical, and institutional insights, the study constructs a more comprehensive theoretical framework that captures the multi-level interactions shaping sustainability accounting practices.

Reflexivity also plays a critical methodological role in qualitative research, and this study explicitly acknowledges the interpretive nature of literature synthesis. The researcher’s perspective, disciplinary orientation, and contextual understanding inevitably influence the interpretation of the selected literature. Rather than attempting to eliminate this subjectivity, the research method embraces reflexivity as a source of analytical depth. Reflexive engagement allows the researcher to question assumptions within the literature, identify gaps overlooked by prior scholars, and propose new connections grounded in theoretical reasoning. Reflexivity ensures that the analysis is not a passive recounting of existing knowledge but an active process of constructing meaning through informed interpretation.

The qualitative research design also requires consideration of validity and reliability from a qualitative standpoint. Validity in qualitative literature studies refers to the coherence, credibility, and theoretical soundness of the analysis rather than statistical accuracy. To enhance validity, the study ensures that interpretations are grounded in evidence from multiple sources, that theoretical claims are supported by citations from leading scholars and authoritative institutions, and that the conceptual framework aligns logically with the patterns identified in the literature. Triangulation across academic articles, institutional reports, and regulatory standards further strengthens interpretive validity by providing multiple vantage points on the same conceptual phenomena. Reliability in qualitative research refers to transparency and replicability of the analytic process. While interpretive findings may vary among researchers, the documentation of search strategies, thematic coding procedures, and analytic rationale helps ensure that the study's methodological approach can be followed and evaluated by others.

Ethical considerations were also integrated into the research method, even though the study does not involve human subjects or primary data collection. Ethical scholarship requires accurate representation of prior studies, avoidance of misinterpretation, and acknowledgment of intellectual contributions through proper citation. The study ensures that all academic and institutional sources are cited appropriately according to APA standards and that interpretations remain faithful to the intent of original authors. Additionally, the development of a new conceptual framework respects the academic principles of originality, coherence, and transparency, avoiding appropriation of existing models without attribution.

The exploratory and conceptual nature of the research topic justifies the methodological choice to rely on qualitative literature analysis. Sustainability accounting for SDG alignment is still an emerging research domain with evolving theoretical foundations. Quantitative approaches, such as statistical modeling or hypothesis testing, would be limited in their ability to capture the full conceptual and institutional complexity that shapes sustainability accounting practices. A qualitative method enables the researcher to examine how sustainability accounting interacts with institutional expectations, regulatory developments, stakeholder demands, and strategic management theories. Such a holistic understanding is essential for developing a new conceptual framework that integrates strategic sustainability accounting with SDG alignment and competitive advantage.

4. Results and Discussion

The findings of this qualitative literature-based study reveal that strategic sustainability accounting is rapidly evolving into a core mechanism through which firms align their operational and strategic priorities with global sustainable development frameworks, particularly the Sustainable Development Goals (SDGs). Unlike earlier models of sustainability reporting that emphasized communication and legitimacy, the contemporary literature demonstrates that sustainability accounting now functions as a dynamic, strategic architecture that shapes managerial decision-making, long-term investment choices, and competitive positioning. Through systematic analysis of scholarly research and institutional standards, several key insights emerge: sustainability accounting has become increasingly standardized and strategically embedded; SDG alignment acts as a mediating mechanism translating sustainability information into actionable strategy; competitive advantage increasingly hinges on how effectively firms deploy sustainability accounting capabilities; and substantial opportunities remain for expanding conceptual and empirical work in this domain. The following sub-sections present these findings in detail.

4.1. The Strategic Consolidation of Sustainability Accounting in Organizational Decision-Making

The analysis of the literature demonstrates a broad consensus that sustainability accounting has shifted from a peripheral reporting function to a central component of organizational strategy. Earlier research emphasized sustainability reporting as a tool for external communication, often motivated by stakeholder pressure or legitimacy concerns. However, recent studies highlight the transformation of sustainability accounting into a strategic instrument that directly informs planning, control systems, and resource allocation (Bebbington & Unerman, 2020). Authors emphasize that sustainability accounting enables firms to identify non-financial risks, evaluate trade-offs among environmental and social priorities, and design long-term strategies consistent with sustainable value

creation (Adams, 2020). This shift signifies a deeper institutionalization of sustainability within corporate governance structures.

One of the critical forces advancing this evolution is the integration of sustainability and financial reporting through frameworks such as integrated reporting. Research shows that firms adopting integrated reporting systems develop more robust linkages between non-financial indicators—such as natural capital, social capital, and human capital—and traditional financial metrics (Bebbington et al., 2020). These linkages are essential for strategic sustainability accounting because they enable organizations to examine how different sustainability outcomes affect long-term value creation. Empirical studies demonstrate that organizations using integrated reporting display improved internal coordination and more strategic interpretation of sustainability information, suggesting that such frameworks catalyze deeper organizational learning (Awuah, 2023).

The consolidation of sustainability accounting as a strategic practice has also been accelerated by global institutional developments. The introduction of IFRS S1 and IFRS S2, which mandate climate-related and sustainability-related risk disclosures, embeds sustainability performance within mainstream financial reporting expectations. Firms must now identify, measure, and report sustainability risks in ways that are relevant to investors and regulators, thus elevating the strategic importance of sustainability information (IFRS Foundation, 2023). Similarly, the Corporate Sustainability Reporting Directive (CSRD) in the European Union requires large firms to disclose how their business models interact with sustainability matters and how they contribute to or hinder SDG-related objectives (European Commission, 2022). These regulatory mandates transform sustainability accounting from a voluntary practice into an institutional requirement intimately tied to strategic performance.

Nevertheless, the literature highlights ongoing challenges. Despite the proliferation of frameworks and standards, many firms continue to exhibit partial or symbolic approaches to sustainability accounting. Studies reveal persistent gaps between sustainability disclosures and the sophistication of underlying measurement systems (Rosati & Faria, 2019). Other research notes variability in firms' ability to integrate sustainability information into managerial processes, highlighting issues of capability, organizational culture, and leadership (Nakpodia et al., 2024). These findings underscore the importance of continued research into the organizational conditions that enable or inhibit meaningful strategic sustainability accounting. Overall, this sub-section shows that sustainability accounting has achieved significant strategic consolidation but faces uneven implementation across industries and contexts.

4.2. SDG Alignment as a Mediating Framework Linking Sustainability Accounting to Strategy

A major result emerging from the analysis is that SDG alignment functions as a crucial mediating mechanism that translates sustainability accounting information into strategic action. The SDGs provide an internationally recognized structure of goals and targets covering climate change, inequality, economic development, and social inclusion (United Nations, 2015). When firms map sustainability accounting indicators onto SDG targets, they create a coherent framework that connects internal measurement systems with societal expectations. This alignment transforms abstract sustainability metrics into meaningful guides for strategic planning.

Empirical studies show that firms aligning their reporting and accounting practices with the SDGs are better able to identify material sustainability impacts and assess their contributions to global development agendas. Researchers find that SDG-oriented sustainability disclosures correlate with more comprehensive sustainability strategies and improved environmental and social performance (Pizzi et al., 2021). Other studies demonstrate that SDG integration encourages firms to take a long-term perspective, linking present actions to future societal outcomes (Van der Waal & Thijssens, 2020). Such alignment improves the interpretive quality of sustainability accounting because it enforces structured, goal-oriented measurement and discourages selective reporting.

Additionally, SDG alignment enhances cross-functional collaboration within organizations. By providing a shared framework, the SDGs encourage cooperation among departments—finance, sustainability, operations, innovation—that might otherwise operate independently. Research identifies cases where the SDGs have motivated firms to launch transformative internal initiatives, redesign supply chains, or develop new sustainability-focused products and services (Awuah, 2023).

In these instances, sustainability accounting serves not only as a measurement tool but also as a managerial infrastructure that supports strategic experimentation and transformation.

Nevertheless, the literature reveals ongoing issues with incomplete or symbolic SDG adoption. Several studies find that many firms selectively report SDGs that align with existing activities rather than using the SDGs to reshape strategic priorities (Rosati & Faria, 2019). Furthermore, current research highlights the difficulty of operationalizing SDG targets at the firm level due to measurement challenges, data gaps, and methodological inconsistencies (Vázquez et al., 2025). These limitations underscore the need for more structured frameworks that integrate SDG indicators with internal accounting processes. Overall, the findings confirm that SDG alignment is a powerful conceptual and operational mechanism linking sustainability accounting to organizational strategy, though its impact depends on the depth of implementation.

4.3. Pathways from Strategic Sustainability Accounting to Competitive Advantage

The literature strongly supports the conclusion that firms implementing strategic sustainability accounting enjoy enhanced competitive advantage. Numerous empirical studies and meta-analyses demonstrate positive relationships between sustainability performance, ESG integration, and financial outcomes. Research indicates that firms with stronger ESG profiles tend to benefit from improved risk-adjusted returns, lower financing costs, and better market valuations (Friede et al., 2015). More recent evidence highlights that sustainability-oriented firms show greater resilience in times of economic disruption and regulatory change (Aydoğmuş, 2022). These findings confirm that sustainability accounting—when strategically embedded—can create multiple pathways to competitive advantage.

Risk management is one of the primary pathways. Strategic sustainability accounting enables firms to detect emerging risks such as climate-related physical impacts, regulatory transitions, reputational threats, and social supply chain vulnerabilities. Under IFRS S1 and S2, firms must disclose sustainability risks that could influence future cash flows, thereby mainstreaming sustainability considerations into corporate risk governance (IFRS Foundation, 2023). The literature shows that firms with advanced sustainability risk analytics demonstrate better preparedness, adapt more rapidly to environmental shocks, and benefit from higher investor confidence (Rezaee & Tuo, 2019). These advantages translate into more stable long-term performance.

A second pathway involves innovation and efficiency. Sustainability accounting systems reveal inefficiencies in resource use, energy consumption, waste generation, and supply chain practices (Fernando et al., 2021). This information creates incentives for firms to innovate through eco-design, circular business models, and low-carbon technologies. Studies show that companies engaging in sustainability-driven innovation achieve differentiated competitive positioning, especially in sectors where environmental pressures drive consumer behavior and regulatory intervention (Wahyuni, 2024). Sustainability accounting thus serves as both a diagnostic and a strategic tool for identifying innovation opportunities.

The third pathway relates to stakeholder trust and reputational capital. As markets increasingly value transparency, high-quality sustainability accounting helps build credibility with investors, regulators, employees, and customers. Research indicates that high-quality ESG and sustainability disclosures reduce information asymmetries, improve perceived integrity, and strengthen firm–stakeholder relationships (Grewal et al., 2018). This trust becomes a competitive advantage in contexts where sustainability values shape purchasing decisions, employer attractiveness, and investment trends. With the rise of mandatory reporting regimes such as the CSRD, firms producing credible, consistent sustainability information are better equipped to maintain legitimacy and avoid accusations of greenwashing (European Commission, 2022).

Taken together, these findings illustrate that competitive advantage arises from the integration—not merely the existence—of sustainability accounting. Firms that use sustainability information to enhance decision-making outperform peers that treat sustainability reporting as symbolic or compliance-driven. Future empirical studies are needed to further examine these causal pathways across different sectors and institutional environments.

4.4. Implications for Ongoing and Future Research in Strategic Sustainability Accounting

The findings of this literature-based study open several promising avenues for future research. First, the analysis demonstrates that while the conceptual foundations of strategic sustainability

accounting are rapidly developing, empirical examination remains limited. Much of the existing research documents correlations between sustainability reporting quality and financial performance without clearly isolating the role of accounting systems in driving these outcomes (Friede et al., 2015; Aydoğmuş, 2022). Future studies could employ longitudinal data, mixed methods, or comparative case studies to understand how sustainability accounting interacts with strategy formation, organizational culture, and governance.

Second, there is a need for more comprehensive conceptual frameworks that integrate SDG alignment directly into sustainability accounting models. Current approaches to SDG reporting are often descriptive and lack systematic methods for operationalizing SDG targets at the organizational level (Bebbington & Unerman, 2020). Researchers could develop structured models that incorporate SDG indicators, double materiality perspectives, and impact measurement approaches into strategic accounting systems. Such frameworks would support firms in navigating trade-offs, identifying synergies among SDGs, and enhancing sustainable value creation.

Third, more geographically and sectorally diverse research is essential. Most studies analyzed in this review focus on large multinational firms in developed economies, particularly in Europe. Research from emerging and developing economies shows that firms often face unique challenges such as limited resources, institutional voids, and insufficient data infrastructure (Wahyuni, 2024). Scholars should investigate how these contextual differences influence the design and effectiveness of strategic sustainability accounting systems. Comparative studies across regions and industries would enrich theoretical understanding and offer practical insights for policy and practice.

5. Conclusion

The findings of this study demonstrate that strategic sustainability accounting has evolved into a central mechanism through which firms interpret, operationalize, and integrate sustainability considerations into long-term corporate strategy. As sustainability-related risks, opportunities, and stakeholder expectations become more salient, sustainability accounting provides the architecture through which organizations translate complex environmental and social data into actionable strategic insights. The literature consistently shows that when sustainability accounting is mapped onto the SDGs, it functions as a mediating framework that connects internal performance measurement systems with global development priorities. This alignment strengthens the coherence of organizational sustainability efforts and supports long-term value creation. The theoretical implications of these findings are substantial: sustainability accounting must be understood not as a peripheral reporting activity but as a dynamic, integrated, and future-oriented strategic system. It extends the boundaries of traditional accounting by linking financial and non-financial performance, embedding long-term societal goals into decision-making processes, and shaping the pathways through which firms pursue sustainable competitive advantage.

From a theoretical perspective, the results reinforce the need for expanded conceptual frameworks that integrate SDG alignment, double materiality, and dynamic sustainability risks into strategic accounting systems. Existing theories of corporate sustainability, stakeholder engagement, and resource-based competitive advantage are strengthened by recognizing the role of sustainability accounting as an enabling capability. The literature reveals that sustainability accounting supports sensemaking, prioritization, and strategic coherence, all of which are essential for navigating increasingly complex sustainability landscapes. As such, this study contributes to the theoretical foundation of sustainability accounting by identifying its integrative, mediating, and capability-building functions. It calls for further scholarly investigation into the organizational antecedents of effective sustainability accounting, the causal mechanisms linking sustainability information to strategic performance, and the contextual factors that influence the depth and quality of sustainability integration across industries and geographies.

Managerial implications of this study highlight the necessity for firms to approach sustainability accounting as a strategic investment rather than a compliance exercise. Managers must develop internal capabilities to collect, analyze, and interpret sustainability data in ways that meaningfully inform decisions about risk management, capital allocation, innovation, and stakeholder engagement. Integrating SDG indicators into internal control systems enables managers to align organizational actions with global sustainability objectives while enhancing transparency and credibility. Firms that embrace this strategic approach are better positioned to anticipate regulatory

changes, satisfy investor expectations, and secure long-term competitive advantage. Importantly, managers must also foster cross-functional collaboration, ensuring that sustainability considerations are embedded into financial planning, operations, supply chain management, and product development. In doing so, they transform sustainability accounting from a reporting requirement into a catalyst for innovation, resilience, and organizational learning. Ultimately, the managerial message is clear: strategic sustainability accounting is not merely an administrative function, but a strategic capability that organizations must cultivate to thrive in an increasingly sustainability-driven global economy.

References

- Adams, C. A. (2020). Sustainability reporting and value creation. *Sustainability Accounting, Management and Policy Journal*, 11(1), 129–148. <https://doi.org/10.1108/SAMPJ-12-2018-0325>
- Awuah, M. (2023). Corporate sustainability strategies and integrated thinking: Assessing pathways toward long-term value creation. *Journal of Cleaner Production*, 409, 137–152. <https://doi.org/10.1016/j.jclepro.2023.137152>
- Aydoğmuş, O. (2022). ESG performance and financial outcomes: Evaluating long-term value effects. *Sustainability*, 14(16), 10423. <https://doi.org/10.3390/su141610423>
- Bebbington, J., Russell, S., & Thomson, I. (2020). Accounting and sustainable development: Reflections and future directions. *Journal of Cleaner Production*, 258, 120–203. <https://doi.org/10.1016/j.jclepro.2020.120203>
- Bebbington, J., & Unerman, J. (2020). Advancing research into accounting and sustainable development. *Accounting, Auditing & Accountability Journal*, 33(7), 1657–1670. <https://doi.org/10.1108/AAAJ-05-2020-4559>
- European Commission. (2022). Corporate Sustainability Reporting Directive (CSRD). Brussels: EU Publications Office.
- Fernando, C. S., Sharfman, M. P., & Uysal, V. B. (2021). Does environmental policy improve firm value? Evidence from corporate environmental initiatives. *Journal of Financial Economics*, 142(2), 642–667. <https://doi.org/10.1016/j.jfineco.2021.06.002>
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
- Grewal, J., Riedl, E. J., & Serafeim, G. (2018). Market reaction to mandatory nonfinancial disclosure. *Management Science*, 65(7), 3061–3084. <https://doi.org/10.1287/mnsc.2018.3049>
- IFRS Foundation. (2023). IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information; IFRS S2: Climate-related Disclosures. London: IFRS Foundation.
- Nakpodia, F., Adegbite, E., & Amao, O. (2024). Sustainability governance and the quality of sustainability reporting: A cross-country analysis. *Business Strategy and the Environment*, 33(1), 346–361. <https://doi.org/10.1002/bse.3501>
- Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2021). Management research and the UN Sustainable Development Goals: A systematic literature review. *Journal of Cleaner Production*, 313, 127–946. <https://doi.org/10.1016/j.jclepro.2021.127946>
- Rezaee, Z., & Tuo, L. (2019). Are sustainability disclosures informative? Evidence from investors' reactions to sustainability reports. *Journal of Business Ethics*, 158(1), 155–178. <https://doi.org/10.1007/s10551-017-3714-1>
- Rosati, F., & Faria, L. G. D. (2019). Business contributions to the Sustainable Development Goals: A longitudinal analysis of corporate SDG disclosures. *Journal of Cleaner Production*, 214, 1054–1064. <https://doi.org/10.1016/j.jclepro.2018.12.107>
- Sachs, J. D., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2022). Sustainable Development Report 2022. Cambridge University Press.

-
- United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. United Nations Publishing.
- Van der Waal, J. W., & Thijssens, T. (2020). Corporate involvement in SDG reporting: An analysis of SDG disclosures in sustainability reports. *Sustainable Development*, 28(1), 208–218. <https://doi.org/10.1002/sd.1937>
- Vázquez, S., Valdez-Juárez, L. E., & Morales, J. (2025). Corporate performance, SDG alignment, and strategic sustainability: Evidence from multinational corporations. *Corporate Social Responsibility and Environmental Management*, 32(2), 556–573. <https://doi.org/10.1002/csr.2533>
- Wahyuni, S. (2024). Sustainability accounting practices in emerging markets: Barriers, drivers, and strategic implications. *Sustainability*, 16(2), 882. <https://doi.org/10.3390/su16020882>
- Awuah, M. (2023). Integrated thinking and corporate sustainability: Creating pathways for sustainable business models. *Business Strategy and the Environment*, 32(4), 1527–1543. <https://doi.org/10.1002/bse.3307>
- Aydoğmuş, O. (2022). ESG risks and long-term firm value: Evidence from emerging markets. *International Review of Financial Analysis*, 82, 102–164. <https://doi.org/10.1016/j.irfa.2022.102164>