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REVIEW

Managerial accounting for responsible consumption: Behavioral pathways to achieving sustainable development goal 12

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ABSTRACT

As organizations confront the escalating imperatives of Sustainable Development Goal 12 — Responsible consumption and production — Sustainability transitions are often framed as strategic or technological challenges. Yet this narrative review argues that the true battleground lies deeper: within the silent infrastructures that shape organizational behavior. Conceptualizing managerial accounting as behavioral infrastructure, this review repositions accounting systems not as neutral measurement tools, but as active cognitive, motivational, and normative architectures that scaffold — or undermine — Sustainability practices. Through a critical synthesis of contemporary sustainability accounting, behavioral management, and environmental psychology literatures, the review advances four key contributions. First, it reframes budgeting, costing, performance measurement, and internal control systems as behavioral architectures that condition responsible consumption. Second, it illuminates the underexplored mediating role of accounting infrastructures in shaping employee well-being, organizational culture, and ethical engagement. Third, it critiques the field's preoccupation with external disclosure, calling for a methodological shift toward studying internal behavioral dynamics. Fourth, it reimagines managerial accounting as an ethical infrastructure: a latent moral architecture shaping not only ecological outcomes but the dignity and flourishing of organizational life. By exposing the hidden behavioral terrains where sustainability succeeds or fails, this review calls for an urgent reconfiguration of accounting systems — From instruments of compliance to catalysts of transformative organizational change. Managerial accounting, long relegated to the background of sustainability discourse, must be recognized as a decisive frontier in humanity's struggle to live within planetary limits.

Keywords: behavioral infrastructure; environmental behavior; managerial accounting; responsible consumption; SDG 12; sustainability accounting

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1. Introduction

The question of sustainable survival has ceased to be an abstract ethical debate; it has become a material, behavioral, and institutional problem. As humanity exceeds multiple planetary boundaries, the call for responsible consumption and production — Embodied in Sustainable Development Goal 12 (SDG 12) — Signals a profound shift in how economic systems, organizational practices, and individual behaviors must realign with the biophysical limits of Earth[1,2]. Yet the struggle to achieve SDG 12 is not fundamentally a failure of technology, innovation, or reporting. It is, at its core, a failure of the infrastructures that silently construct behavior — The systems that shape what is easy, what is thinkable, and what is normalized inside organizations.

Managerial accounting represents one of these hidden infrastructures. Historically cast as a neutral apparatus of measurement and control, managerial accounting has been instrumental in optimizing productivity, managing costs, and guiding organizational decision-making[3–5]. Its instruments — Budgets, costing systems, performance metrics, internal controls — Were not originally designed to sustain environmental boundaries; they were designed to sustain financial ones. But what if these same accounting architectures could be repurposed — Not merely to measure sustainable practices, but to cultivate them? What if managerial accounting, rather than standing adjacent to sustainability discourse, could become a behavioral infrastructure capable of actively steering organizations toward responsible consumption?

Emerging scholarship suggests that this is not merely a provocative hypothetical, but a tangible possibility. Managerial accounting systems frame cognitive environments, trigger motivational structures, and encode normative expectations that guide organizational behavior [5–9]. Budgets, far from being neutral forecasts, act as commitment devices; performance measures frame what is visible and important; costing systems attach economic significance to resource flows; internal controls establish behavioral reinforcement loops. Through these mechanisms, managerial accounting shapes how individuals perceive choices, weigh trade-offs, and enact consumption behaviors — Often without conscious deliberation [10].

This reframing elevates managerial accounting from a passive technical system to an active socio-technical infrastructure — One capable of either entrenching unsustainable routines or catalyzing transformative behavioral change. Within the context of SDG 12, this reframing demands urgent attention. Organizations today operate not simply in markets, but within complex ecosystems of expectation, responsibility, and environmental interdependence[11]. If accounting infrastructures remain aligned only to financial imperatives, they risk becoming silent barriers to sustainable development. But if redesigned as behavioral architectures for sustainability, they hold the potential to embed responsible consumption into the very fabric of organizational life.

Despite this potential, the behavioral dimensions of managerial accounting remain critically underexplored within the sustainability accounting literature. Much of the existing work has focused externally, emphasizing how sustainability is disclosed to markets, regulators, and stakeholders[12,13]. Far less attention has been given to how accounting systems internally shape behavior: how they alter what managers and employees attend to, value, and enact on a daily basis. Yet if sustainable development depends on internal behavioral change, as mounting evidence suggests[1,2], then managerial accounting must be recognized not merely as an observer of behavior, but as an architect of it.

Against this intellectual backdrop, this narrative review seeks to advance a critical reorientation of the sustainability accounting literature. Rather than conceptualizing managerial accounting merely as a technical apparatus for measurement and control, it positions accounting systems as formative behavioral infrastructures that actively shape organizational possibilities for responsible consumption. In doing so, the review offers an interdisciplinary perspective that integrates insights from sustainability management, behavioral accounting, and environmental psychology, illuminating how accounting infrastructures silently influence organizational trajectories toward — or away from — Sustainable development. This framing invites a reconsideration of managerial accounting's role, not as a passive recorder of environmental action, but as an active agent in constructing the behavioral pathways necessary for achieving Sustainable Development Goal 12.

Four core propositions structure the review. First, sustainability-oriented managerial accounting practices operate not merely as technical controls but as cognitive frames, motivational cues, and normative anchors[14]. Second, budgeting, costing, and KPI systems can be redesigned to scaffold responsible consumption behaviors at the organizational micro-level[15]. Third, internal controls act not only as compliance mechanisms but as reinforcement structures that normalize sustainable practices over time, including employee engagement [16,17]. Fourth, the behavioral design of accounting systems mediates the relationship between sustainability initiatives and employee well-being, linking organizational sustainability strategies with human flourishing [11].

By positioning managerial accounting as a behavioral infrastructure, this review illuminates the latent but powerful role accounting systems play in shaping the future of organizational sustainability. Accounting is no longer conceptualized merely as a retrospective tool for reporting; it is revealed as an active, constitutive force — One that can either entrench unsustainable consumption or catalyze profound transitions toward environmental and human flourishing. If SDG 12 is to be achieved, it will not be through disclosure alone, but through the deliberate design of the decision environments that silently govern organizational behavior.

Managerial accounting, long hidden in the background of strategic and operational processes, must therefore be brought into the foreground of sustainability transformations. It must be recognized not only as a mirror of organizational behavior, but as its maker.

2. Conceptual foundations

Methodologically, this manuscript adopts a critical and interpretive narrative synthesis approach, purposefully transcending the boundaries of systematic literature compilation. Instead of merely cataloging existing scholarship, it strategically engages interdisciplinary insights drawn from sustainability accounting, organizational behavior, and environmental psychology, emphasizing conceptual depth, theoretical integration, and critical interrogation of established frameworks [18]. This approach foregrounds the latent connections and tensions within diverse literatures, thus uncovering previously neglected theoretical and empirical pathways [19]. By embracing interpretive rigor and thematic coherence over exhaustive enumeration, the review aligns firmly with the traditions of critical accounting scholarship—where narrative strength, intellectual provocation, and conceptual innovation are valued above mechanical completeness.

2.1. Sustainable development goal 12: Responsible consumption and production

At the core of contemporary sustainability discourse lies a troubling paradox: the very systems that have delivered unprecedented material prosperity now threaten the ecological foundations of that prosperity itself. Sustainable Development Goal 12 — Responsible Consumption and Production — Marks an attempt to confront this systemic contradiction not merely through innovation or efficiency, but through a fundamental realignment of human and organizational behaviors [20].

Unlike sustainability goals that target discrete outcomes — clean energy, reduced inequality, climate action — SDG 12 challenges the behavioral architectures underpinning modern economic life: the relentless pursuit of growth, the normalization of disposability, the externalization of ecological costs[1,2]. Achieving SDG 12 demands more than new technologies; it requires new habits of mind, new organizational priorities, and new social contracts about what constitutes value creation and responsible action[11].

Yet organizational responses to SDG 12 have too often remained at the surface: policies are proclaimed, reports are published, ESG scores are tracked — While the internal infrastructures that silently organize daily behaviors remain largely untouched[1,21]. In this landscape of performative sustainability, the role of internal systems — and particularly of managerial accounting — Becomes not simply important, but decisive.

2.2. Managerial accounting and the architecture of sustainability

Managerial accounting has long been understood as an instrument of rational control: a system for quantifying performance, allocating resources, and optimizing efficiency[22]. Its practices — Budgeting, costing, variance analysis, dashboard reporting — Emerged to serve the imperatives of industrial modernity: stability, predictability, financial performance. Within this framework, environmental and social concerns were marginalized — Rendered invisible by logics that valorized only what could be captured in monetary units.

However, the rise of sustainability imperatives has begun to destabilize this legacy view. Environmental management accounting (EMA), sustainability performance measurement, and integrated reporting initiatives reflect growing recognition that managerial accounting must evolve to encompass broader notions of value, impact, and responsibility[23,24]. But this evolution is not merely technical; it is ontological. It redefines the very architecture of managerial accounting — From a mirror of economic rationality to a potential builder of sustainable behavioral ecologies.

Viewed through this lens, managerial accounting systems are revealed as active infrastructures: scaffolding the cognitive frames, motivational energies, and normative expectations through which organizational actors engage with environmental reality[25]. Budgets do not simply allocate resources; they signal what futures are envisioned and what behaviors are rewarded. KPIs do not merely measure outputs; they define what matters. Costing systems do not neutrally trace flows; they encode moral geographies — Rendering some impacts salient and others invisible.

Thus reframed, managerial accounting becomes a powerful, if often hidden, architecture of sustainability or unsustainability. The systems organizations use to plan, measure, and evaluate their actions are not neutral technical tools; they are behavioral environments, quietly scripting the possibilities of responsible — or irresponsible — Organizational conduct.

2.3. Behavioral infrastructures: Accounting's hidden power

The concept of behavioral infrastructures invites a radical reconsideration of how managerial accounting functions within organizations striving for sustainability. Behavioral infrastructures refer to the cognitive, motivational, and normative scaffolds that pattern everyday organizational actions — Often beneath the threshold of conscious deliberation[1,2,26].

Managerial accounting systems constitute one of the most pervasive and potent of these infrastructures. Through budgetary processes, costing models, and performance frameworks, accounting systems selectively amplify certain signals, normalize certain priorities, and routinize certain patterns of attention and action [11]. They make some behaviors obvious, others unlikely; some investments urgent, others deferrable.

Critically, these behavioral infrastructures often operate orthogonally to stated organizational values. Sustainability may be celebrated rhetorically at the level of mission statements and annual reports, yet if internal accounting systems continue to valorize cost minimization and short-term returns, unsustainable behaviors will persist[27]. In this sense, accounting infrastructures are not passive reflections of organizational intent; they are active engines of organizational reproduction.

Recognizing managerial accounting as behavioral infrastructure thus reveals a profound strategic opportunity: by redesigning these systems, organizations can reprogram the behavioral codes that silently drive everyday choices toward or away from responsible consumption and production. Embedding ecological metrics into budgets, linking resource efficiency KPIs to performance rewards, recalibrating costing models to internalize environmental externalities — These interventions are not cosmetic. They are architectural acts: reshaping the decision environments through which SDG 12 may either remain an aspiration or become an operational reality.

This understanding, while grounded in the accounting literature, resonates with broader interdisciplinary currents. Sociology reminds us that infrastructures are not merely technical but institutional—Sedimented arrangements of norms and power. Anthropology reveals how everyday tools — Like budgeting forms or cost reports — Become rituals that encode meaning and identity. Environmental humanities, in turn, trace the ethical narratives through which humans imagine their relationship to the more-than-human world. Though this review foregrounds managerial accounting, its conceptual argument stands enriched by these broader dialogues, each of which reaffirms that sustainability is as much a cultural and moral project as it is a managerial one.

3. Managerial accounting as behavioral infrastructure

The invisible architectures that shape organizational behavior rarely announce themselves. They operate not through mandates or declarations, but through the quiet structuring of incentives, the framing of choices, and the conditioning of attention. Within organizations striving toward SDG 12, it is managerial accounting — Perhaps more than any other internal system — That builds and sustains these behavioral architectures [28].

To conceptualize managerial accounting as behavioral infrastructure is to recognize its latent power: it does not merely measure action after the fact; it scripts the action that becomes possible. Through its core components — Budgeting systems, costing mechanisms, performance measurement frameworks, and internal controls — Managerial accounting constructs the cognitive, motivational, and normative environments that silently but powerfully organize organizational life [6].

3.1. Budgeting systems: Commitment devices and cognitive anchors

Budgets are not neutral forecasts; they are profoundly behavioral instruments. In traditional accounting, budgets serve to allocate resources and coordinate activities. Yet in the context of sustainability, they become commitment devices: they encode organizational intentions into concrete financial architectures that guide decision-making at every operational level[11].

When sustainability goals are embedded into budgeting processes — for instance, through dedicated environmental investment allocations or eco-efficiency targets — They shift from abstract aspirations into operationalized priorities. The act of budgeting for resource efficiency, circular production systems, or low-carbon technologies creates a structural bias toward sustainable behaviors: it anchors cognition around ecological constraints and opportunities.

Conversely, when budgets remain tethered solely to short-term financial metrics, they entrench unsustainable behaviors by making resource extraction and environmental externalities invisible at the decision-making frontier[2]. Thus, the behavioral power of budgets lies not only in what they include, but in what they systematically exclude from organizational attention.

3.2. Costing systems: Valuation structures and moral geographies

Costing systems perform an often-overlooked ethical function: They define which resources, impacts, and externalities matter within organizational calculation. Traditional costing models, oriented around direct inputs and outputs, systematically ignore environmental degradation, resource depletion, and long-term social costs.

In contrast, sustainability-integrated costing frameworks — Such as material flow cost accounting (MFCA) or full-cost accounting approaches — Recast organizational valuations. By attaching monetary value to resource inefficiencies, waste generation, and environmental harm, these systems bring ecological externalities into the economic calculus[29,30].

This shift is not merely informational; it is behavioral. When environmental costs are internalized within costing structures, they reconfigure organizational decision environments. Investments in resource-efficient technologies, closed-loop production systems, or supply chain decarbonization no longer appear as discretionary expenses but as necessary steps toward optimized performance. In this way, costing systems become moral geographies: mapping what is valued, what is neglected, and what behaviors are rendered thinkable within organizations.

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3.3. Performance measurement: Behavioral filters and attention architectures

Performance measurement systems are often framed as mechanisms of accountability. Yet their behavioral significance lies deeper: they define the landscape of organizational visibility[11]. What is measured signals what matters; what is omitted fades from cognitive salience.

Embedding sustainability metrics into performance evaluations — Such as energy efficiency KPIs, waste reduction targets, or responsible sourcing indicators — Shifts the behavioral gravitational pull within organizations[31]. Managers and employees adjust their priorities, strategies, and daily actions in response to the performance signals they receive.

The absence of sustainability dimensions within performance frameworks, by contrast, perpetuates behavioral myopia. Environmental externalities remain organizational blind spots, and sustainable action is marginalized as secondary to "core" operational concerns[32]. Thus, performance measurement systems not only track outcomes; they sculpt the cognitive and motivational fields in which sustainable behaviors emerge — or fail to emerge.

3.4. Internal controls: Behavioral reinforcement and normative embedding

Internal control systems are traditionally associated with fraud prevention, regulatory compliance, and financial integrity. Yet in the sustainability context, they serve a subtler but equally vital behavioral function:

reinforcement[33]. Through sustainability audits, environmental compliance checks, and operational sustainability reviews, internal controls embed sustainability norms into the fabric of organizational routines. They signal that sustainable practices are not optional or symbolic but integral to operational excellence and risk management[33].

Moreover, internal controls help sustain behavioral change over time, such as employee engagement[34]. Initial commitments to responsible consumption practices can fade without reinforcement; internal controls institutionalize these commitments, converting sustainability from a project-based initiative into an ongoing organizational expectation. In this way, internal controls serve as the long-term memory of behavioral infrastructures, maintaining alignment with SDG 12 even amidst personnel turnover, strategic pivots, or external shocks.

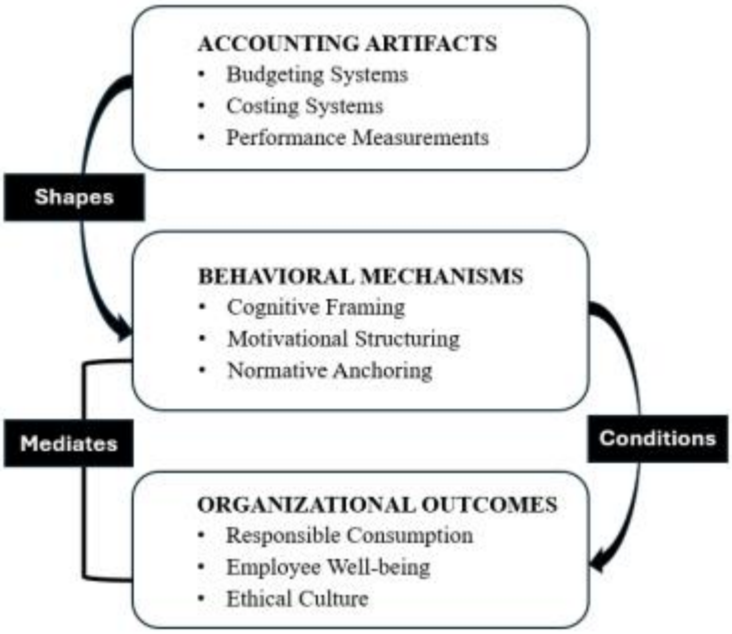

Figure 1. Managerial accounting as behavioral infrastructure.

Figure 1 illustrates the conceptual architecture through which managerial accounting systems operate as behavioral infrastructures within sustainability-oriented organizations. At the foundation are accounting artifacts—Including budgeting systems, costing structures, and performance measurement tools—Which actively shape behavioral dynamics rather than merely recording organizational outcomes. These artifacts influence behavioral mechanisms such as cognitive framing, motivational structuring, and normative anchoring, which mediate how individuals interpret, prioritize, and enact decisions within organizational life. In turn, these behavioral mechanisms condition a range of organizational outcomes, including the normalization of responsible consumption practices, the cultivation of employee well-being, and the emergence of ethical organizational cultures. The arrows highlight the recursive and constitutive nature of these relationships, emphasizing that accounting systems are not neutral instruments but formative infrastructures that silently govern the possibilities of sustainability transitions.

4. Mediating effects on well-being and organizational culture

4.1. Accounting systems as psychological environments

Organizational systems do not merely regulate behaviors; they cultivate climates of meaning, motivation, and belonging. Managerial accounting systems, through their control logics, performance signals, and valuation structures, construct the psychological environment in which organizational members perceive, interpret, and act[6,9].

When accounting systems embed sustainability values — Through eco-budgeting, environmental KPIs, and resource-based costing models — They frame sustainability not as an external imposition but as an integral dimension of organizational identity. This framing matters profoundly for well-being: employees experience higher engagement, intrinsic motivation, and psychological safety when their daily work is embedded within meaningful, ethically resonant systems [11].

Conversely, when managerial accounting remains tethered to purely financial metrics, a profound cognitive dissonance emerges. Individuals tasked with sustainability initiatives find themselves evaluated by systems indifferent to environmental impacts. This misalignment erodes motivation, fractures trust, and generates what scholars have termed "moral injury" — The psychological harm caused when organizational structures betray proclaimed values [2].

Thus, managerial accounting systems are not neutral performance monitors. They act as architects of organizational psychological environments, mediating the possibilities of human flourishing or alienation within sustainability transitions.

4.2. Cultivating meaning and belonging through managerial accounting

Sustainability-aligned accounting systems not only influence behavior; they help cultivate meaning, dignity, and belonging at work. When environmental stewardship becomes embedded within budgeting priorities, costing logic, and performance evaluation, employees encounter a consistent, coherent environment that validates their ethical aspirations[35,36].

This coherence nurtures what Laine, Tregidga, and Unerman[11]call "organizational moral purpose": a collective sense that the organization's actions align with broader ecological and social responsibilities. In such contexts, employees are more likely to experience their work as meaningful, their contributions as valuable, and their organization as a legitimate moral actor.

Managerial accounting thus emerges as a medium of ethical socialization. It is through daily interactions with accounting artifacts — Budgets, KPIs, dashboards — That employees internalize, contest, or affirm organizational values. Sustainability-oriented accounting, when thoughtfully designed, reinforces a shared moral horizon, cultivating belonging not through slogans but through the mundane materialities of organizational life.

In contrast, traditional accounting infrastructures that prioritize short-term financial outcomes at the expense of environmental and social considerations systematically erode meaning. They transform organizations into spaces of instrumental rationality, undermining the very psychological conditions necessary for authentic engagement, creativity, and ethical commitment.

4.3. Organizational culture as the embodiment of behavioral infrastructures

Organizational culture is often portrayed as an abstract "soft" factor, distinct from technical systems. Yet when managerial accounting is recognized as behavioral infrastructure, it becomes clear that culture is materially constructed through the daily reinforcement of priorities, valuations, and normative expectations[9,37].

Behaviorally, what is budgeted becomes what is planned; what is costed becomes what is optimized; what is measured becomes what is valued. Over time, these reinforced patterns sediment into collective assumptions, rituals, and social norms — The very substance of culture[11].

Thus, sustainability-oriented managerial accounting is not peripheral to cultural transformation; it is foundational. Organizations seeking to internalize responsible consumption and production must recognize that culture emerges from infrastructures — and that infrastructures can be redesigned. Embedding environmental targets into budgets, sustainability metrics into evaluation systems, and ethical considerations into costing models slowly but inexorably rewires the cultural DNA of the organization. Accounting systems, in this view, are not simply technical supports for culture; they are among its primary architects.

4.4. Critical reflection: Accounting, well-being, and the ethical organization

Recognizing managerial accounting as a mediator of well-being and culture forces a deeper critical reflection: Is it enough to measure sustainability? Or must accounting itself be transformed into an ethical infrastructure?

If sustainability initiatives remain decoupled from the accounting systems that structure daily organizational life, they will remain fragile, symbolic, and susceptible to erosion [38,39]. Conversely, if managerial accounting is reimagined as a behavioral infrastructure for ethical engagement — Guiding behaviors, shaping cognitions, and cultivating organizational meaning — Then organizations can move beyond superficial compliance toward authentic alignment with SDG 12.

The stakes are not merely ecological. They are human. At its highest potential, managerial accounting can serve not merely as a technical apparatus for resource control, but as a moral infrastructure — Cultivating responsible consumption, sustaining environmental limits, and nurturing the well-being and dignity of those who labor within organizational worlds.

This transformation demands more than technical reform; it requires a re-envisioning of accounting's ontological status: from passive measurement to active moral construction. Only through such a reframing can the promise of sustainability be realized not only in environmental outcomes but in human flourishing.

4.5. Translating infrastructures into practice

Conceptual reframings, however, only gain traction when they illuminate pathways for practical transformation. Recognizing managerial accounting as behavioral infrastructure invites concrete organizational redesign. Budgets become not just financial tools, but vehicles for ecological commitment when sustainability targets are embedded into resource allocations. Performance evaluations cease to be neutral when they foreground ecological indicators alongside financial metrics. Costing systems, when recalibrated to internalize environmental degradation, reshape how investments are judged and justified. Even internal controls, often perceived as compliance backstops, can evolve into mechanisms of normative reinforcement — Gently but consistently orienting daily action toward sustainability. These shifts do not demand radical overhauls; rather, they require deliberate repurposing of existing instruments, ensuring that the infrastructures guiding behavior are aligned with the ethical and environmental imperatives of our time.

5. Research gaps and future directions

5.1. Empirical gaps: Accounting, well-being, and organizational culture

Despite a growing recognition that managerial accounting systems shape organizational behavior, the concept of accounting as a behavioral infrastructure remains significantly under-theorized within sustainability accounting scholarship. Much of the current literature privileges external disclosure and reporting frameworks, focusing on how organizations communicate sustainability efforts to external stakeholders[40,41]. In contrast, the internal architectures through which accounting systems structure attention, frame cognition, and condition behavioral possibilities for sustainability remain conceptually neglected.

Critical theoretical questions remain unresolved. How do different accounting mechanisms — Such as budgeting systems, costing models, and KPI frameworks — Differentially shape cognitive biases, moral engagement, and sustainability-relevant action inside organizations?[42,43]. What organizational conditions mediate the behavioral impact of sustainability-integrated accounting infrastructures? Future theoretical work must reframe accounting not merely as an instrument of post hoc measurement but as an active participant in the behavioral constitution of organizational sustainability.

5.2. Theoretical gaps: Behavioral infrastructures in accounting research

While emerging studies acknowledge the behavioral impacts of managerial accounting, there remains a striking empirical silence around how accounting infrastructures mediate employee well-being, organizational identification, and ethical engagement[44,45].

How sustainability-oriented accounting systems influence intrinsic motivation, psychological safety, burnout risk, and moral fulfillment remains an uncharted empirical frontier. Particularly absent are longitudinal studies tracing how shifts in accounting architectures (e.g., the integration of environmental KPIs or ecological cost accounting) reshape employee perceptions of meaningful work, organizational justice, and ethical purpose over time[46].

Future empirical inquiry must embrace methodologies sensitive to the lived, psychological consequences of sustainability accounting infrastructures. Ethnographies, critical case studies, and behavioral experiments offer pathways to uncover how accounting systems — Often invisible and taken-for-granted — Silently shape the moral and psychological atmospheres of organizations.

5.3. Methodological gaps: Beyond disclosure metrics

Sustainability accounting research has been disproportionately focused on what organizations disclose, rather than how they act. This imbalance has created a methodological blind spot: the lived dynamics of accounting infrastructures remain largely invisible in the literature[45,47].

To address this gap, future research must shift its methodological gaze from static external artifacts to dynamic internal processes. Qualitative, interpretive, and critical methodologies — Such as process tracing, narrative analysis, and sensemaking frameworks — Are essential to capture how sustainability values become embedded, contested, and routinized within accounting systems[11,42].

Studying the daily enactment of accounting infrastructures — How sustainability goals are internalized, reframed, or resisted in budget meetings, costing exercises, and performance reviews — Will open new horizons for understanding accounting's role in shaping organizational futures.

5.4. Future research agenda: Reframing accounting as ethical infrastructure

Future research must move beyond merely documenting sustainability accounting practices toward a more ambitious reimagining of accounting as ethical infrastructure. Managerial accounting systems are not passive backdrops to organizational action; they are active moral environments that scaffold — or undermine — Human flourishing and ecological stewardship [42,47].

Investigating how managerial accounting systems can be intentionally designed to foster environmental stewardship, employee well-being, and intergenerational responsibility offers a profound new research direction. Studies could examine how budgeting systems and KPI frameworks can integrate principles of ecological care and social equity alongside traditional financial metrics[43].

Moreover, research must interrogate the tensions that emerge when financial imperatives collide with ethical commitments — For example, when short-term profitability pressures undermine embedded sustainability targets within performance management systems[44].

Finally, scholars must develop evaluative frameworks that assess accounting infrastructures not only for their technical efficiency or regulatory compliance, but for their capacity to nurture dignity, justice, and planetary flourishing. This involves advancing criteria that consider accounting's role in shaping sustainable identities, ethical organizational cultures, and long-term environmental stewardship.

By pursuing these research trajectories, the field of sustainability accounting can evolve beyond its traditional boundaries, offering not merely better metrics but better worlds. Advancing this agenda will require methodological imagination. Longitudinal case studies can trace how shifts in budgeting logic or performance evaluation subtly reconfigure organizational priorities. Ethnographic inquiry can illuminate how frontline actors interpret — and sometimes resist — Sustainability-infused accounting practices in the flow of daily work. Experimental designs, including behavioral simulations, may shed light on how alternative accounting framings affect decision-making under ecological constraint. These approaches do not seek to validate accounting reforms from afar but to dwell within their lived enactments — To observe how infrastructures become inhabited, contested, and possibly, transformed.

6. Conclusion

This narrative review has advanced a critical rethinking of managerial accounting's role in organizational sustainability transitions. By conceptualizing managerial accounting as behavioral infrastructure, the review moves beyond traditional technical-functional portrayals to foreground accounting's constitutive power: its ability to frame cognition, motivate action, and embed normative expectations within daily organizational life. Sustainability initiatives, it argues, are not simply supported by accounting systems — They are fundamentally shaped, enabled, or constrained by the infrastructures those systems create.

Specifically, the review makes four key contributions to the sustainability accounting literature. First, it reframes accounting artifacts such as budgets, costing models, performance measurements, and internal controls as architects of behavioral ecologies — Shaping not just financial outcomes but patterns of responsible or irresponsible consumption and production. Second, it highlights how accounting infrastructures serve as mediators of employee well-being and organizational culture, reinforcing or eroding psychological safety, ethical engagement, and collective identity. Third, it challenges the dominance of external disclosure research in sustainability accounting, urging a shift toward studying internal behavioral realities through dynamic, interpretive methodologies. Fourth, it calls for a profound reimagining of managerial accounting as an ethical infrastructure, not merely a technical one, capable of fostering human flourishing alongside ecological stewardship.

Like all narrative reviews, this study carries inherent limitations. Its interpretive and selective methodology, while offering depth and conceptual integration, inevitably omits certain empirical streams and contextual nuances. The review's conceptual framing prioritizes organizational and behavioral literatures primarily within the accounting field and its proximate disciplines, potentially overlooking valuable insights from broader fields such as sociology, anthropology, and environmental humanities. Moreover, while the review critiques the overemphasis on disclosure in existing scholarship, it does not empirically validate the proposed frameworks through organizational case studies — A task best suited for future empirical research. Given the rapidly evolving landscape of sustainability governance and managerial practices, the theoretical propositions advanced here must be continually revisited and empirically tested across diverse institutional and cultural contexts to ensure their relevance and adaptability.

Looking forward, future research should deepen the exploration of managerial accounting's role as a behavioral and ethical infrastructure. Interdisciplinary, dynamic, and critical methodologies will be crucial to uncover how accounting systems silently sculpt the behavioral ecologies of organizations striving toward SDG 12. By reframing managerial accounting not merely as an instrument of compliance but as a catalyst for ecological and human flourishing, sustainability accounting can evolve beyond technical stewardship toward transformational organizational change. In so doing, it can contribute not only to the measurement of sustainable development, but to its material realization within the lived architectures of organizational life.

Author contributions

Haryanto Haryanto (H.H.), Amelia Setiawan (A.S.), Li Ting (L.T.), Gao Yong (G.Y.). Conceptualization, H.H., A.S., L.T., and G.Y.; methodology, H.H. and A.S.; formal analysis, H.H., and L.T.; investigation, A.S.; resources, H.H.; writing—original draft preparation, H.H., A.S., L.T., and G.Y.; writing—review and editing, H.H., L.T., and G.Y.; project administration, H.H. and A.S.; All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest.

Data availability

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