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Sustainability in the land of smiles: evaluating environment, social, and governance (ESG) alignment between strategies and practices of Thai government organizations

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Availability of data and material

Upon reasonable request, the datasets of this study can be available from the corresponding author.

Abstract

The triple bottom line (TBL) of social, economic, and environmental sustainability framework serves as a critical model for organizational sustainability by requiring a balanced integration of environmental, social, and governance (ESG) practices, yet how government organizations translate these principles internally remains an under-researched operational impediment, especially in Thailand. Investigating Thai government organizations with explicit commitments to macro sustainability, this study examines why a structural chasm persists between high-level national mandates and actual organizational practices. Utilizing a qualitative research design, the study conducts a thematic analysis of primary data from purposive, semi-structured interviews with mid-level managers and senior executives across five national-level government organizations and one state enterprise. Using Moore's strategic triangle as a diagnostic framework, the findings reveal a profound operational disconnect. While outward-facing policies are heavily emphasized, internal operational sustainability is behaviorally neglected and reduced to symbolic compliance. Benchmarking these findings against progressive frameworks from the United Kingdom, Singapore, and Australia exposes local vulnerabilities. The discussion and implications underscore the need to recognize organizational-level sustainability practices as a critical mechanism to enhance national policy efficiency. Leveraging the government's ongoing digital governance push allows agencies to overcome data deficits and embed full-loop ESG workflows directly into formal performance evaluation key performance indicators (KPIs).

Keywords: environmental, social, and governance (ESG) management in government organizations, public sector sustainability, public administration in Thailand, Moore's strategic triangle

Introduction

Background and information

Sustainability has become a global imperative, integrated across all sectors. At the national level, governments increasingly adopt sustainability frameworks, most notably the United Nations (UN) Sustainable Development Goals (SDGs), as the cornerstone of their national development plans. This shift necessitates that public sector management actively drives the empirical realization of these goals. By translating national strategies into actionable policies, these organizations play a vital role in enhancing citizen quality of life through economic viability, social well-being, and climate change mitigation.

Many Thai public sector organizations have integrated the terms “sustainability” or “sustainable” into their official visions, missions, and strategies. As primary drivers of national development, the extent to which these organizations translate sustainability into internal operations and external public service is a critical area of inquiry. Exploring these practices reveals whether the adoption of such terminology reflects a profound conceptual understanding or merely a superficial alignment with global trends.

This qualitative study is motivated by the stark contrast between the Thai government’s strategic commitment to sustainability and the recurring instances of institutional failure. While government organizations actively develop and promote national sustainability frameworks, ongoing incidents of governance inefficiency, corruption, and the mismanagement of public funds—sometimes resulting in the loss of life—suggest a significant gap between policy rhetoric and operational reality. This disparity raises a question of how—or whether this concept is embedded within internal operational strategies and governance frameworks or whether they serve as a veneer for the “sustainability” policies and practices delivered to the public.

This study is a component of the larger project, “Integration of the Environment, Social, and Governance (ESG) in the Governance of Thai Public Organizations” by the same author. This broader initiative examines various applications of sustainability principles within the organizational management and policy development framework of public sector organizations in Thailand.

Interpretations of sustainability often vary significantly across different policy tiers, from macro-national frameworks to local and organizational levels. While the UN SDGs serve as a common reference for international and national-level policy, their practical application becomes increasingly opaque at the organizational level. Bridging this gap remains a challenge, as high-level mandates do not always translate clearly into concrete, day-to-day operational practices. This is causing risk to what Homsy et al. (2019) refer to as governance-fragmented interpretations.

The three pillars of sustainability, categorized as the Triple Bottom Line, serve to organize ESG sustainability management at the organizational level while aligning with international SDGs. The environmental pillar (E) specifically addresses how an organization mitigates the impact of its operations on the surrounding society. This management extends beyond local operations to include the societal impact of the organization’s products and services. Key elements include waste management, greenhouse gas (GHG) emissions, and energy preservation (Purvis et al., 2019). Furthermore, an organization’s environmental scope should encompass the practices of its suppliers and partners, ensuring sustainability is maintained throughout the value chain and transparent. The social pillar (S) encompasses an organization’s impact on both its internal and external stakeholders (Porter & Kramer, 2006). Consequently, its management addresses employee well-being and human

resources while navigating broader social issues, such as human rights and diversity, within its business operations. This pillar further extends to the societal consequences of the organization's operations, products, and services within the communities where it functions. (Porter & Kramer, 2006). The governance pillar (G) focuses on the systems that promote good oversight, enabling the achievement of both the Environmental and Social goals (OECD, 2026). It ensures the organization remains prosperous, efficient, and accountable for how its actions impact social, economic, and environmental well-being. This pillar involves establishing mechanisms that prioritize transparency, accountability, equality, and fairness across all operations (Kemp et al., 2005; OECD, 2026).

These ESG in organizational management closely mirror the expectations for all organizations in all sectors contributing to delivering social and economic development. Government organizations in particular are responsible and accountable for their utilization of public budget and expected to be efficient. Sustainable ESG management is assumed to be embedded in public organizations' implementation of national plans and strategies and in running government offices. For example, a public organization's environmental management should prioritize minimizing energy consumption, effective waste management, and the promotion of environmental mindedness among staff. Socially, sustainable management ensures that employee performance justifies the use of public funds while maintaining fair evaluations, gender equality, and health and safety standards. Governance mechanisms must then prevent corruption, budget waste, and favoritism by promoting transparency and accountability. Finally, this governance is manifested through public disclosure of performance reports, showing exactly how public money is spent and what impact it creates in society.

The environmental, social, and governance (ESG) principles in public governance

Olowu (2002) characterizes governance through two lenses in public administration. The first perspective emphasizes formal leadership, specifically the manner in which authority is exercised to manage a nation's social and economic development, and the second perspective defines governance as a collaborative framework where power is distributed among state and non-state actors to manage public affairs. Rather than the state operating in isolation, the latter view treats governing as a collective "co-arrangement" where diverse stakeholders work in tandem to address complex societal challenges (Kooiman, 1993; Olowu, 2002). In modern public administration, this collaborative approach is linked to efficiency as the foundation for long-term sustainability. This is exemplified by concepts such as "mission-oriented governance," which prioritizes sustainable outcomes (Meuleman, 2021), and "polycentric management," where a diverse array of actors interacts for sustainable management to ensure the resilient and sustainable oversight of public resources (Jordan & Huitema, 2023).

As state and non-state stakeholders assume more interconnected and prominent roles in public management, government organizations must critically evaluate the broader impact of their operations. By incorporating ESG principles into their management frameworks, public institutions can demonstrate accountability. This integration ensures that the agencies responsible for delivering sustainable social and economic development are themselves operating in a sustainable and transparent manner.

Public organizational strategies and environmental, social, and governance (ESG) sustainability in practices

The principle of institutional integrity dictates that public organizations must practice what they advocate (Muluka & Sungura-Nyabuto, 2011). This ensures that the organization's internal conduct mirrors its public policy. Specifically, a government organization tasked with delivering sustainable development must ensure its own internal operations align with ESG standards. This internalizing of sustainability principles ensures that the organization's management practices are consistent with its public-facing developmental deliverables such as national policies and programs. Consequently, many public institutions have integrated ESG sustainability management—balancing social, environmental, and governance impacts—into their standard operating procedures.

Translating sustainability strategy into organizational action

According to Bryson (2018), the feature of strategy within public organizations is that it serves as a systematic framework for making policy decisions and administrative choices. These decisions establish an agency's institutional mandates, the organization's operational methods, and its public-service objectives, all while aligning current resources with long-term national priorities. Bryson's (2018) definition supports Moore's (1995) earlier work on translating strategy into practice within public organizations. Moore suggests that public strategy is most successfully implemented when it balances public value, the authorizing environment, and operational capacity. These frameworks suggest that while a public organization's strategy is often an external mandate, its success likely depends on how effectively that strategy is integrated into the organization's internal practices.

Since the strategies of public organizations are often viewed as high-level national mandates, especially regarding sustainable development, the process of translating such broad visions into concrete organizational practices can be conceptually challenging. Surveys conducted with 80 master of public administration students at Chulalongkorn University between 2019 and 2024 highlight a significant conceptual gap. Despite around 80% of the cohorts consisting of government officers, the majority perceive sustainability primarily through an environmental lens. There is a notable lack of emphasis on broader ESG pillars, with only occasional mentions of administrative transparency as part of a sustainability strategy.

Strategic triangle framework as a diagnostic tool for public organizations' sustainability in practice

To analyze the transition of strategic mandates into organizational practice, this study utilizes Moore's (1995) Strategic triangle as a foundational conceptual framework. Within the public value theory theoretical context from which the Strategic Triangle was derived, the "operational capacity" is particularly critical, as it includes the internal resources, staff competencies, and organizational culture necessary to turn high-level sustainability visions into tangible actions. Consequently, public value theory provides a predictive lens through which to assess whether a mandate—such as ESG sustainability—will be successfully institutionalized or remain merely a symbolic external requirement.

According to Moore (1995), "public value" represents the fundamental objective of the public

sector, providing a framework for managers to evaluate both the efficiency and social significance of public services. This approach prioritizes stakeholder engagement to refine decision-making and strengthen the relationship between government institutions and the communities they serve. Furthermore, public value emphasizes the agency of public managers, whose roles extend to managing external stakeholders and delivering socially desirable outcomes through active citizen participation (Bojang, 2021). Internally, the creation of public value serves as a mechanism for organizational alignment, ensuring that administrative processes and staff behaviors remain consistent with the agency's strategic mission. This involves fostering a culture of accountability and professional development to institutionalize the organization's core identity as its primary strategy (Moore & Khagram, 2004). Consequently, if a public organization's vision includes sustainable development, it is imperative that officers understand how this translates into their daily practices. This alignment requires an organization-level strategy supported by performance evaluations to assess whether government officers are effectively operationalizing sustainability internally.

The "authorizing environment" consists of stakeholders who possess the formal authority to legitimize, support, and provide the necessary resources for a public organization to fulfill its functions (Moore, 1995). At the national level, these resources typically include policy mandates, fiscal support, and strategic information. At the organizational level, however, the authorizing environment shifts toward internal executive leadership, whose responsibilities include prioritizing strategy, allocating specific resources, and granting operational approvals. Furthermore, this internal environment is responsible for auditing governance structures and developing key performance indicators (KPIs) to ensure that functional operations align with strategic objectives (Moore & Hartley, 2008). When applied to the organizational level of ESG sustainability practice, the authorizing environment is the internal system in which enabling factors for implementation are identified.

Finally, and perhaps most critically, "operational capacity" represents the organizational-level ability to deliver promised public value through the mobilization of internal capabilities, resources, and processes (Moore, 1995). This suggests an organization's strategy must be feasible, aligning ambitious missions with actual resource constraints. According to Moore (1995), effective mobilization requires a synergy between qualified personnel, supportive administrative systems, enabling organizational structure, and a cohesive organizational culture. In the context of ESG sustainability in practice, this capacity signifies the necessity that staff possess specific professional competencies. These specific competencies, identified as sustainability skills, include effective communication, flexibility, and impactful stakeholder engagement (Brundiers & Wiek, 2017; da Silva & Romaro, 2024). Beyond individual skills, the organizational structure and internal processes must remain adaptable and enabling. Ultimately, operationalizing sustainability requires that personnel move beyond a high-level awareness of national mandates to develop a shared understanding of how these principles apply to their daily functions.

The alignment of strategic triangle and sustainability in practice

Public organizations worldwide are increasingly embedding ESG sustainability into their operations, a shift that reflects the practical implementation of national sustainability mandates.

By aligning their strategic missions with the TBL sustainability which is prioritizing social, environmental, and economic impacts, these organizations demonstrate a commitment to holistic value creation. The following table provides specific examples of these practices across various institutional contexts (Table 1).

Table 1. Examples of public organizations reflecting environmental, social and governance (ESG) sustainability in practice and their strategic triangle alignments

Organization	Vision and missions	ESG integration in practices
1. United Kingdom Research Institute (UKRI), United Kingdom	Vision: "An outstanding research and innovation system in the UK that gives everyone the opportunity to contribute and to benefit, enriching lives locally, nationally and internationally." Missions: 1. Making the UK a top destination for talented researchers 2. Ensuring R&D investment benefiting all regions of the UK 3. Supporting the best fundamental and applied research 4. Transforming research into economic and social impact (UKRI, 2022)	- Streamlining internal processes and simplifying interactions with external stakeholders (G) - Creating an environment where skilled people can work together and succeed (S) - Incentivizing cross-disciplinary collaboration by removing structural barriers (G) - Focusing on recruiting and retaining the diverse skills needed for future R&D (S) - Improving financial sustainability through efficient budgeting and transparent cross-tracking by using the UK government Transparent Approach to Costing System (TRAC) (UKRI, 2022) (G)
2. National Environment Agency (NEA), Singapore	Vision: "A lean environment, towards a liveable and sustainable Singapore." Mission: To ensure a clean and sustainable environment for Singapore, together with our partners and the community (NEA, 2026)	- Setting targets for digitalizing all incoming and outgoing financial transactions for the organization (G) - Implementing a holistic Employee Engagement (EE) Framework that supports staff across diverse personal and professional dimensions (occupational, emotional, social, physical, societal, and intellectual needs) (S) - Ensuring staff safety and health by strictly following workplace safety and health (WSH) policy and tracking WSH performance and reporting to internal Enterprise Risk and Safety Steering Committee (G, S) - Enhancing corporate value of sustainability by encouraging suppliers to follow National Environment Agency (NEA)'s sustainability practices in their work processes and ensuring procurement integrity by prohibiting authority for awarding the contracts to be from the procuring division (G, E) - Conducting regular departmental budget reviews and reporting performance to senior management to ensure financial accountability (G) - Publicly releasing an annual integrated sustainability report to document the organization's ESG performance (NEA, 2021) (G)
3. Department of Finance, Australia	Vision: "To provide high quality advice, frameworks and services to achieve value in the management of public resources for the benefit of all Australians." Missions: 1. Driving procurement reform and managing conflicts of interest to ensure ethical standards across the public sector. 2. Advancing the goal of reaching net-zero government emissions by 2030 3. Boosting internal data skills and fast-tracking the adoption of Artificial Intelligence (AI) within the public service 4. Addressing rising costs in health, aged care, and national security amidst a volatile global economy (Department of Finance, 2025b)	- Launched the climate action in government operations e-learning program through the Australian Public Service (APS) academy platform to equip APS employees with the essential expertise and practical skills required to integrate climate-focused strategies and sustainability into their daily professional responsibilities (Department of Finance, 2023.) (E, S) - Creating digital ID system to enhance inclusive access for the public while minimizing unnecessary and repeated collection of personal data and mitigating the consequences of identity-related data breaches and scams (Department of Finance, 2025) (G) - Adhering to rigorous conflict of interest protocols by maintaining a clear separation between the individuals who initiate a purchase request and those who authorize the final contract award and upholding a zero-tolerance policy toward corruption. (Department of Finance, 2025d) (G) - Disclosing publicly the department's climate strategies, impact-based targets and measures (Department of Finance, 2023) (E) - Providing aggregated AI-related policies and assurance frameworks from various Australian government organizations to ensure public transparency and cross-agency alignment (Department of Finance, 2025c) (G)

Notably, these operational examples are accompanied by public disclosures regarding organizational performance, societal impact, and efficiency improvements. Furthermore, the explicit inclusion of the terms “sustainable” or “sustainability” within an organization’s vision or mission statements is not a prerequisite for the genuine, strategic integration of ESG principles into institutional practice. Evidence from these government organizations shows that integrating the ESG principles into daily operations requires considerations of the strategic triangle. While ESG provides the normative “what” defining the substantive targets for sustainability, the strategic triangle offers the diagnostic “how,” framing the managerial execution. This study utilizes Moore’s framework to investigate whether the ESG ambitions of selected Thai government organizations are supported by sufficient operational capacity and a robust authorizing environment. Ultimately, organizational alignment is achieved when internal social (S) and governance (G) practices directly fortify the external environmental (E) and social (S) value propositions.

Methodology

This study adopts a qualitative research design to explore the nuances and depth of internal sustainability practices. A qualitative approach is essential for uncovering the “what, why, and how” behind organizational activities, which are details that quantitative metrics may not be able to capture. Furthermore, the study involves a thematic analysis of formal public documents, organizational mandates, and national policies. These qualitative sources provide the necessary context to apply the strategic triangle framework, allowing for a comprehensive diagnosis of the alignment between high-level policy and operational reality.

The primary data for this study is derived from in-depth interviews with personnel across selected Thai government organizations. To ensure a comprehensive analysis, the author also incorporates secondary data sources identified during the primary collection phase—such as ministerial mandates, national policies, legislative frameworks, and legal frameworks. This approach allows for the triangulation process (interview claims, secondary source verification, and analysis), providing a more robust evidence base for the strategic triangle analysis.

This study employs a two-tier purposive sampling strategy to ensure that the data collected provides both institutional breadth and operational depth. By focusing on organizations with a visible “sustainability gap,” the research can more effectively diagnose misalignments within the strategic triangle.

Level one: Organizational selection

Organizations selected must meet the first criteria *and* may or may not meet the second and third criteria:

- 1) Explicit mandate: the organization is a national agency that includes “sustainability” or “sustainable” its title or explicitly features the term within its formal vision and mission statements and;
- 2) Implementation gap: there is limited to no publicly available evidence regarding the performance reflecting the ESG principles applications into actual operational functions or;

- 3) Narrow disclosure: the organization's sustainability reporting or publicly disclosed information is currently restricted to environmental (E) factors alone, neglecting the social (S) and governance (G) dimensions of internal operations.

To enrich the comparative analysis, the author also included a state-owned enterprise (SOE) within the sample. This addition serves to evaluate whether their organizational approach to ESG implementation diverges significantly from that of traditional ministerial line organizations. For this study, six organizations are selected, consisting of five government organizations within the traditional ministerial line and one state-owned enterprise.

Level two: Interview participants (key informants) selection

Once the organizations are identified, the second level of sampling targets key informants. To be included, participants must fulfill all the following three criteria:

- 1) Seniority and status: must hold a position at the middle management level or above and be a permanent, full-time employee of the selected organization.
- 2) Institutional knowledge: must possess comprehensive knowledge of the organization's departmental functions, divisions, and existing sustainability initiatives (or lack thereof). This criteria is determined by their job title.
- 3) Functional purview: must oversee or work on at least one critical functional area essential to the strategic triangle's "operational capacity" aspect, such as:
 - Good governance
 - Organizational operation
 - Human resources management
 - Strategic planning
 - Procurement
 - Organizational performance and evaluation

Primary data was gathered during the summer months in 2026 through semi-structured, in-depth interviews, conducted in-person or online based on 12 key participant's preference and availability. Each session was designed to last between 60 and 90 minutes. To ensure the accuracy and integrity of the analysis, all interviews, regardless of the communication modality, will be audio-recorded, contingent upon the explicit informed consent of the key informants. The primary data collection instrument is a semi-structured interview protocol developed from the ESG principles. The questions are designed to probe the intersections of strategic planning, operational execution, governance structures, and performance evaluation and disclosure.

Qualitative data collected was systematically organized in NVivo and thematically analyzed (thematic analysis) using Moore's strategic triangle as the primary interpreting lens. By categorizing respondent data into the three core nodes—public value, authorizing environment, and operational capacity—and then analyzing them. This approach also allowed the author to identify gaps or tensions where ESG ambitions (public value) may be disconnected from institutionalized practices

(operational capacity) or formal mandates and leadership (authorizing environment). Consequently, the Triangle acts as a diagnostic tool to determine if ESG sustainability is a core organizational strategy or merely a trendy vision.

Findings

Elements of ESG exist within various government regulations, guidelines, and common practices within government organizations, but they are not actively and universally framed or understood as sustainability practices. Government mandates were enacted long before the concept of ESG gained widespread prominence. Because these practice policies have not been updated to reflect contemporary definitions, many agencies continue to treat them as disconnected regulatory requirements rather than a cohesive, modern ESG strategy. Examples of these institutional mandates most frequently mentioned by interview participants are the Civil Service Code of Ethics B.E. 2564 (2021) and the Notification of the Digital Government Development Committee Re: Standards and Criteria for Open Government Data Disclosure in Public Digital Format (2020). Consequently, responsibility for compliance remains siloed within functionally based departments, such as human resources (HR), information technology (IT), or budgeting and procurement. Interestingly, interviews revealed a distinct linguistic nuance: government staff routinely use the term “functions” to describe their outward-facing public service delivery rather than their internal operational workflows. This distinction is further shaped by the internal division of labor within Thai central government organizations, where personnel are split into two distinct groups: core policy-making officers dedicated to the organization’s mission-critical mandates, and administrative staff tasked with day-to-day office operations.

Interviews also revealed consistent patterns. When asked to assess their understanding of organizational ESG or sustainability practices, all interview participants from government organizations immediately equated the concept with “good governance”. However, this creates a conceptual gap, as the “governance” (G) dimension of the ESG principles is far broader, encompassing systemic oversight and the strategic enablement of environmental and social responsibility goals of the organization. Consequently, during most of the interviews, the author often had to explicitly prompt participants with core topics under each ESG principle. These prompts covered operational areas such as human resource management, data security, complaint mechanisms, and occupational health and safety to elicit comprehensive responses.

Conversely, a distinct paradox emerged regarding the environmental (E) dimension. While environmental sustainability is the concept most familiar to public officers, it is the least formally mandated at the operational level. Instead of systemic institutional rules, internal environmental efforts rely almost entirely on voluntary “participation,” such as encouraging staff to turn off lights and appliances during lunch breaks or restricting air-conditioning usage outside certain hours. The communication of these requests also varies between messages in office group chat on a social application to formal internal memo.

In terms of organizational structure, all analyzed central government agencies conform to a highly standardized bureaucratic blueprint. A significant structural exception, however, was

observed within the state enterprise. Distinct from traditional public agencies, this entity has a dedicated, specialized internal sustainability unit. This unit is explicitly mandated to spearhead organizational sustainability initiatives and systematically collect relevant ESG data across the institution.

Applying the strategic triangle framework to analyze the organizations' ESG practices yield several key insights. These findings are categorized below under each respective element of the strategic triangle: public value, the authorizing environment, and operational capacity.

Public value

Empirical evidence from the interviews indicates that how staff understands the concept of sustainability directly shapes the perceived public value of sustainability within the organizational operation. While officers clearly recognize their organization's external strategic mission and public-facing vision, their understanding of internal sustainability remains fragmented. This individual misalignment means that daily administrative processes and employee behaviors do not fully support overall organizational sustainability. Ultimately, the expected "inside-out" approach is missing, where the conceptual awareness of sustainability at the policy level does not reflect or guide sustainable practices within the organization itself.

Another key finding reveals a profound misalignment between outward-facing sustainability strategies and internal organizational practices, specifically in how public value is prioritized. Empirical evidence underscores that generating value externally for the public is heavily prioritized over organizational personnel and assets. For instance, systemic controls are implemented to protect citizen data, largely driven by national legislation such as the Personal Data Protection Act (PDPA) B.E. 2562 and the Cybersecurity Act B.E. 2562. Under these frameworks, the state acts as a data controller, and government organizations function as critical information infrastructure (CII) providers.

Conversely, internal data security is structurally and behaviorally less recognized. Common prohibited practices such as disclosing personal passwords to co-workers during absences or utilizing personal email and commercial cloud services instead of designated secure networks remain commonplace. This systemic vulnerability stems from a dual deficit of a lack of internal operational protocols to enforce secure behaviors, and an absence of adequate infrastructure, such as reliable institutional email domains and secure cloud storage. Furthermore, the pervasive reliance on commercial instant messaging platforms, specifically Line, for transmitting official files and work instructions serves as a preliminary indicator of compromised operational capacity, which will be analyzed comprehensively under "operational capacity".

This prioritization of external public value over internal operational preservation is further exemplified by how organizations approach risk management and institutional resilience, parts of the governance dimension in the ESG principles and TBL framework. On one hand, all studied government agencies are mandated to develop a business continuity plan (BCP) to ensure the uninterrupted delivery of public services during unexpected crises or natural disasters. On the other hand, this outward-facing resilience does not translate internally to personnel safety. While all government organizations are required to periodically update their own fire prevention and

suppression plan, none of the traditional public agencies mandate participation in annual fire drills; even when drills are conducted, staff are permitted to prioritize routine desk work over participation.

Furthermore, these agencies lack official safety protocols for employees working alone outside of regular office hours. This systemic neglect is commonly rationalized by the presence of on-site security guards or biometric entry systems (facial scanning or finger printing), leaving broader physical and operational risks entirely unaddressed.

Based on interviews, these permissive practices reflect a culture of discretionary enforcement, where compliance hinges entirely on whether organizational executives choose to prioritize internal workplace safety. This executive dependency serves as a preliminary indicator of tensions within the “authorizing environment”, a theme that will be analyzed comprehensively in the subsequent section.

A notable outlier, however, emerged within findings under “public value”. One government organization, whose primary mandate requires close collaboration with domestic private sectors and international bodies, demonstrated a significantly deeper comprehension of organizational sustainability. Because their core functions necessitate familiarity with global regulatory standards, they have proactively integrated more robust internal practices, although primarily in the governance and social dimensions, with a particular emphasis on stakeholder engagement.

Similarly, the state enterprise included in this study—which operates extensively within international and domestic commercial ecosystems—exhibited a highly sophisticated understanding of institutional sustainability. This entity explicitly frames the adoption of these modern principles not as an administrative burden, but as a form of global public value and a strategic pathway to achieve its institutional mission. In sharp contrast to the traditional ministries, this state enterprise operationalizes internal data governance through mandatory protocols requiring personnel to periodically update institutional passwords. It also stands as the sole organization in this study that requires all staff members to participate in at least one of its two annual fire and evacuation drills, demonstrating a holistic alignment between external public value and internal operational safety. However, despite the mandatory nature of this protocol, the organization adopts a non-punitive approach, as no formal administrative penalties or disciplinary actions are leveraged against those who fail to attend.

Crucially, the empirical data reveals an absence of personal or organizational value placed on the broader public issue of climate change at the behavioral level when it falls outside the explicit, mission-based strategies of the organizations. Interviewees demonstrated no sustainable intrinsic or discretionary commitment to climate action unless such measures were institutionalized within their organization’s legal mandates or encouraged through internal formal and informal communications.

A long-standing campaign across all studied organizations is the “paperless” initiative, which encourages digital document circulation and electronic signatures. However, the commitment to minimizing physical paper consumption varies significantly across institutions, as the majority leave compliance to individual discretion. A distinct exception emerged in one government organization, where electronic documents and digital signatures are actively preferred to facilitate administrative

convenience and staff mobility. Notably, this is the same public entity characterized by intense cross-sectoral collaboration and high exposure to international institutions, suggesting that external institutional networks may accelerate internal digital adaptation.

Consequently, across the majority of these organizations, the “paperless” initiative frequently devolves into an inefficient process of analog-digital duplication in which drafts are routinely printed, reviewed, and corrected on hard copies before the finalized version is uploaded digitally. This practice is heavily driven by the personal preferences of senior supervisors who, out of institutional familiarity, prefer physical copies for editing and manual signatures. However, interview data reveals a nuanced justification for this hybrid approach; one participant noted that this traditional method serves an informal pedagogical function. Specifically, reviewing physical markups allows junior staff to clearly trace revisions, visualize editorial feedback, and systematically learn from their drafting errors.

Furthermore, a critical metric deficit exists, as none of the organizations systematically measure whether this digital transition has actually reduced aggregate paper consumption. This absence of empirical tracking, other than for purchasing purposes, makes it impossible to evaluate whether the fiscal investment into electronic document management software represents efficient utilization.

Another noteworthy perspective emerged regarding the environmental dimension; within large, multigenerational government organizations, there is significant resistance to adopting green initiatives. Interview data indicates that senior employees tend to prioritize personal preference and historical routine over environmental stewardship. This generational status quo bias creates a strong resistance to behavioral modifications, stalling organizational change and preventing the successful implementation of sustainability practices.

These findings underscore that sustainability within studied organizations is entirely mandate-driven; without direct alignment with formalized organizational objectives, systematic processes, performance tracking and evaluations, and statutory duties, macro-environmental concerns like climate change are effectively excluded from the institutional consciousness in practice.

Authorizing environment

At the organizational level, this dimension of the Strategic Triangle examines internal executive leadership, encompassing the oversight of operational strategies, resource management, and the formulation of KPIs. Interview data revealed that the primary factor impeding or delaying operational improvements in relation to sustainability practice is the periodic turnover of organizational heads, which often leads to the discontinuation or deprioritization of existing reform processes. In several instances, senior executives appointed via political channels exert a strong influence over internal operational directions.

For example, a participant noted that leadership under the previous administration deeply embraced the SDGs, ensuring they were rigorously embedded within national mandates across centralized, deconcentrated, and decentralized levels. Proactive, self-directed initiatives included community empowerment and engagement, alongside frequent encouragement of sustainable development trainings for civil servants focusing on SDG-related topics such as poverty alleviation, supporting the use of locally made products among staff, and the promotion of sustainable agri-

ecosystems (the Araya Kaset framework). However, organizational attention and resources were not afforded toward these sustainability frameworks at the same level following a change in politically appointed executive leadership.

Interview data also show that even under enabling leadership, the institutionalization of effective sustainability practices within government organizations remains constrained by rigid bureaucratic red tape. For example, a major facilities renovation project at one of the studied organizations has faced a prolonged delay during the contract development phase. While the architectural plans incorporated green building and energy conservation features to meet modern environmental standards, management expressed concerns regarding procurement compliance. Specifically, they feared that the specialized contracting requirements for several eco-friendly technical specifications would conflict with existing, highly restrictive public procurement regulations.

Although this regulatory conflict could potentially be resolved through formal consultation with the State Audit Office (SAO), an interview participant noted that such an intervention was deprioritized in favor of delivering the organization's core, external mission-based mandates. Consequently, the legal ambiguity remains completely unaddressed. Driven by this regulatory mismatch, administrative risk aversion, and competing institutional priorities, the project has remained stalled in the contract formulation stage for over two years.

Furthermore, data security, a critical element within the governance dimension, is neither deeply institutionalized nor widely prioritized internally across the studied government organizations. As detailed in the preceding "public value" analysis, rigid regulatory constraints in public procurement severely restrict technological modernization, particularly regarding data management and digital infrastructure. This legislative inflexibility creates a highly restrictive authorizing environment. Even when organizations aim to adopt international standards in data governance, they must comply with strict data sovereignty principles, the Cybersecurity Act (2019), and national 'Thai First' procurement mandates. Collectively, these legal frameworks effectively prohibit or deter the procurement of advanced foreign data management services. Examples of legal framework limitations are outlined as follows.

"For the purpose of maintaining cybersecurity of the country, Critical Information Infrastructure organizations... shall have the duties to maintain cybersecurity in accordance with the code of practice and minimum cybersecurity standards..." (Section 45 of the Cybersecurity Act B.E. 2562, 2019 p. 37).

Although not stated directly, Section 45 of the Cybersecurity Act B.E. 2562 (2019) suggests that government agencies categorized as CII are legally bound to enforce strict data controls, meaning that foreign vendors failing to comply with local national security oversight are structurally excluded.

"For the procurement of supplies... government agencies shall prioritize and procure supplies that are produced within the country or are provided by Thai contractors..." (Clause 7/1, Ministerial Regulation on Specification of Supplies and Methods of Public Procurement that the State Aims to

Promote or Support, B.E. 2563, 2020)

This domestic protectionism is codified within Clause 7/1 of the Ministerial Regulation on Specification of Supplies and Methods of Public Procurement that the State Aims to Promote or Support, B.E. 2563 (2020). Operating under the national “Thai First” policy framework, this regulation mandates that public entities prioritize and procure domestic digital supplies and services. Consequently, this requirement erects a formidable barrier against international digital service providers, particularly because the majority of large global technology firms host and maintain their data centers outside the territorial boundaries of Thailand.

Consequently, public entities are often locked into localized, smaller capacity technological ecosystems, as they cannot legally leverage advanced global cloud solutions or foreign expertise due to rigid national security compliance and domestic vendor protections.

Misalignment is vividly reflected in the lack of formal legitimacy granted to sustainability within the organization’s authorizing environment. Interview data reveals that external accountability structures, specifically KPIs, are exclusively focused on mission-oriented, outward-facing policy development. Consequently, supervisors and staff perceive internal operational tracking not as a tool for institutional learning, but as an administrative distraction that hinders core mandate delivery.

This lack of macro-level authorization is further evidenced by a document review of the official institutional action plan of each studied government organization. While these plans contain dedicated mandates for “organizational development” or “quality improvement of operations,” the specific objectives remain entirely decoupled from sustainability governance, steering resources strictly toward traditional institutional outputs. This structural detachment manifests in two distinct ways.

- 1) Mission-centric accountability deficit: interview participants consistently stated that formal performance evaluations strictly prioritize outward-policy delivery. Internal sustainability efforts such as tracking operational eco-efficiency or the outcomes in terms of work performance improvement from staff skill trainings are not accounted for by leadership and the majority of staff as an obstacle to fulfilling their primary public-facing mission.
- 2) Action plans and missing ESG dimensions: a content analysis of the official action plan of each studied government organization confirms that sections labeled “organizational quality improvement” are actually geared entirely toward standard institutional outputs. Even where the authorizing environment permits limited investment in the social dimension, evidenced by metrics tracking HR activities like e-learning, digital competency, and transparency, it systematically omits workplace well-being and environmental indicators.

Ultimately, because the authorizing environment treats sustainability as an unrecognized administrative outlier rather than an organizational-level mandate, the resulting KPIs are strictly activity-based. They measure basic procedural compliance rather than providing the strategic mandate required to enable genuine sustainability practices or organizational learning. Therefore, the authorizing environment does not merely neglect sustainability; it systematically cripples the organization’s operational capacity to implement it.

When asked to identify the primary catalysts for shifting the authorizing environment, the majority of interview participants emphasized a dual strategy of executive stewardship and formalized compliance metrics. Informants widely noted that targeting senior leadership through the mandatory or encouraged executive training programs they regularly attend would serve as a critical point of exposure to public sector reform. Participants believed that fostering stewardship at executive management levels would broaden leadership's vision regarding global modern practices and institutionalize the strategic importance of organizational sustainability.

Concurrently, several participants suggested that given the deeply entrenched culture of regulatory compliance within the Thai civil service, change must also be driven through the development of targeted KPIs and internal mandates. This formal enforcement mechanism would compel risk-averse or resistant personnel who might otherwise view sustainability initiatives as an administrative burden to comply. Over time, participants argued, this forced compliance holds the potential to transition into habituated behavior, ultimately fostering a new, internalized culture of institutional sustainability.

Operational capacity

An organization's capacity to deliver on its committed values is fundamentally determined by its operational capacity. This capacity reflects the institutional ability to mobilize resources, maximize human capital, and design efficient workflows, emphasizing the critical link between qualified personnel and enabling quality processes in achieving organizational missions. For a sustainable institutional strategy to achieve genuine operational synergy, staff at all levels must maintain a clear line of sight and possess the capability and understanding required to translate macro-level institutional sustainability strategies into their day-to-day operations.

A critical finding regarding internal operational capacity emerged during the data collection phase. The studied organizations possess an exceptionally high caliber of human capital in their core mission roles. Interviews revealed that the mid-level managers driving these departments are highly qualified technocrats, typically aged between 35 and 45. They are deeply educated, holding specialized degrees from premier Thai universities.

Furthermore, many of these informants hold a master's degree or a Ph.D. from world-renowned international institutions, funded by prestigious Royal Thai Government Scholarships. Having advanced progressively from entry-level roles over a tenure of at least 12 years, these managers possess deep institutional longevity. This finding is analytically significant as it demonstrates that the operational paralysis and risk aversion for sustainable practices documented in this study do not stem from a deficiency in individual skill or education, but rather from administrative limitations that have actively restricted the cognitive capacity of leadership. Consequently, even Western-educated scholars remain trapped within a fragmented, compliance-driven work culture, preventing them from developing the full-loop institutional sustainability required to synergize with nationally mandated strategies and maximize organizational efficiency.

However, this insight clarifies why the more outstanding government organization mentioned earlier has achieved a distinct head start in its sustainability practices compared to its peers. That specific agency uniquely pairs high external exposure with a critical mass of internationally

educated, highly talented personnel. While this powerful combination of talent and exposure allows them to outpace other organizations, it is vital to note that they remain bound by the same macro-systemic boundaries; their advanced initiatives are still strictly outward-facing and mission-driven, stopping short of a true, internal full-loop sustainability practice.

The ESG operational capacity building within the studied organizations presents a paradox, acting simultaneously as an enabler and a constraint. Interview participants noted that their agencies host internal innovation competitions designed to improve process efficiency across multiple domains, including operational transparency and stakeholder engagement. One participant highlighted a winning campaign that successfully promoted the use of public transportation among staff, directly addressing the environmental dimension of the ESG principles and ESG principles.

While these initiatives are theoretically designed to foster ESG sustainability principles, their operational execution remains strictly short-lived; even winning campaigns intended for long-term rollout rarely survive beyond the conclusion of the competition cycle. Consequently, these transient projects fail to cultivate permanent behavioral modification or build sustained institutional awareness. This lack of continuity is exacerbated by an unmotivating incentive structure primarily reliant on symbolic rewards, such as certificates, trophies, or public recognition. In instances where senior executives personally value internal engagement, they occasionally supplement these official prizes with their personal funds, a practice that underscores the absence of formalized institutional funding to incentivize sustainable operational innovation in most cases.

As established in the public value section, the studied government organizations typically do not prioritize risk management regarding internal organizational operations; consequently, critical issues such as the turnover of high-performing personnel are not recognized as institutional risks. An interview participant from one agency noted that while their organization suffers from a high turnover rate driven by the fact that high-caliber staff can command significantly higher compensation in the private sector, the vacancy risk is mitigated by an abundant supply of equally qualified external applicants.

In contrast, another studied government organization experienced a much more severe operational bottleneck, a chronic inability to fill its vacancies. Rather than enjoying a fluid replacement pipeline, this second agency faced a profound talent acquisition deficit, consistently failing to attract new recruits who matched their rigid, highly specialized qualification requirements, a deficiency that ultimately forced existing staff to carry a significantly heavier workload for a prolonged period of time. A primary obstacle to sustainable operational capacity building is found to be the ongoing institutional challenge of collecting the empirical data necessary to establish a performance baseline for operational improvement.

Participants also identified internal communication as a crucial lever for operational capacity building, noting that a clear understanding of ESG goals and execution methods across all organizational tiers is essential. They believed that cultivating this shared understanding would maximize the effectiveness of the mandated Public Sector Management Quality Award (PMQA) frameworks. By bridging the gap between top-down regulatory requirements and staff awareness, strategic communication transforms the PMQA from a rigid compliance checklist into an active instrument for achieving sustainable institutional results.

In summary, evaluating the studied government organizations through the lens of Moore's strategic triangle reveals a profound structural misalignment that directly undermines the institutionalization of ESG principles. Rather than operating as a reinforcing, cohesive triad, the components of the strategic triangle within the Thai civil service actively conflict with one another, creating systemic barriers to holistic sustainability. However, empirical data from interviews also illuminate clear, actionable pathways to resolve this misalignment.

Ultimately, these findings demonstrate that achieving the TBL framework of balancing economic, social, and environmental sustainabilities cannot be accomplished by isolated talent or disconnected mandates alone. It requires a synchronized administrative ecosystem. Because the current institutional design fragments ESG dimensions, even the most qualified technocrats are forced to default to legacy, compliance-driven behaviors. This critical disconnect between strategic intent and operational reality provides the empirical foundation for the subsequent section, which will discuss how these structural pathologies can be dismantled to foster a truly sustainable, data-driven, and synergized public sector.

Comparative Findings and Discussion

This section contextualizes the empirical findings from the studied Thai government organizations by comparing their operational realities against the international examples outlined in Table 1 (UK Research and Innovation [UKRI], National Environment Agency [NEA], and Australia's Department of Finance) in the Introduction section. It can be concluded that while example organizations from the UK, Singapore, and Australia utilize internal social (S) and governance (G) practices to fortify their external environmental (E) value propositions, Thai organizations in the study experience a systemic disconnect.

The first critical divergence lies in how environmental sustainability is institutionalized within daily workflows. For example, Australia's Department of Finance strategically enabled its authorizing environment first by deploying the climate action in government operations e-learning program to equip its workforce with practical execution skills. This shows that they embed environmental mandates directly into systemic, measurable operations. This sequence ensured that civil servants understood ESG practices and what they meant for achieving their formal institutional and national policy mandates. Similarly, Singapore's NEA implements structural value chain management by legally requiring its suppliers to mirror the organization's internal sustainability workflows.

In contrast, environmental efforts in the studied Thai government organizations are decoupled from formal frameworks, relying almost exclusively on voluntary employee "participation" (e.g., turning off lunch-hour lights) communicated casually via social messaging apps (Line) or isolated memos. While the government organizations attempt to cultivate ESG capacity through internal green innovation competitions, these efforts are highly transitory. Winning campaigns in Thailand rarely survive the immediate competition cycle due to unmotivating symbolic rewards (trophies and certificates) and a total absence of formalized institutional funding to scale internal innovations. This acts as an operational bottleneck prohibiting sustainable outcomes in practice and behavioral change.

For governance, in a sense of overall management, rigid regulatory procurement and bureaucratic paperwork are known in the Thai government systems and are important authorizing environment factors. The UKRI uses the Transparent Approach to Costing System (TRAC) for precise financial cross-tracking, while Singapore's NEA sets strict targets for digitalizing all incoming and outgoing financial transactions. Australia further optimizes this by introducing a digital ID system that minimizes repetitive data collection and mitigates data breach risks. These example practices allow government organizations to systematically leverage data and automation to eliminate administrative friction and guarantee transparency.

On the other hand, data management and digital infrastructure in government organizations in Thailand are severely hindered by a highly restrictive authorizing environment. Legal frameworks like the Cybersecurity Act B.E. 2562 (Section 45) and the domestic protectionism encoded in the "Thai First" policy (Ministerial Regulation on Specification of Supplies and Methods of Public Procurement that the State Aims to Promote or Support, B.E. 2563, 2020, Clause 7/1) restrict technological modernization. Furthermore, they create a distinct paradox where initiatives meant to optimize processes, such as the "paperless" digital initiative, frequently degenerate into an inefficient hybrid of analog-digital duplication. While this duplication can serve an informal, pedagogical function, allowing junior staff to learn from editing feedback, the same practice can be executed more efficiently via digital collaboration features like the "track changes" function in Microsoft Word. Relying on physical paper highlights a basic digital capacity bottleneck where government staff must elevate their technological proficiency beyond treating advanced software as a mere "electronic typewriter". In addition, because the governance (G) dimension is misunderstood as merely basic transparency rather than systemic oversight, these internal organizational ESG performances are rarely integrated into operational KPIs.

Another crucial gap lies within the social (S) dimension where strategic human capital management is rather fragmented, hindering the operational capacity in sustainability practice performances. As noted in Moore's (1995) framework, an organization's recognition of operational capacity depends on workforce resilience, structural safety, and proactive executive stewardship. This recognition is present in the Singapore NEA's execution of a comprehensive employee engagement (EE) framework and a strict workplace safety and health policy monitored by an Enterprise Risk Steering Committee. In Thailand, a high-performing benchmark can be observed in the Bank of Thailand (BOT). Operating as an independent state organ outside the rigid, traditional ministerial bureaucracy, the BOT takes employee occupational health and safety seriously (BOT, 2015). It actively builds an organic "safety culture" rather than just organizing superficial activities to meet baseline government requirements.

Conversely, the studied Thai traditional government organizations exhibit a disadvantage from internal operational risks and human resource vulnerabilities. Theoretically, the internal creation of public value is meant to serve as a mechanism for organizational alignment, ensuring administrative processes and staff behaviors remain consistent with the agency's strategic mission. In reality, these practices are misaligned with institutional mandates. High talent turnover among highly performing technocrats is unmanaged as an institutional risk, justified only by the presence of a fluid pipeline of new recruits. In other cases, operational bottlenecks due to a chronic inability

to fill specialized vacancies directly result in excessive, unmitigated workloads for the remaining personnel. This systemic neglect extends to physical safety, where staff are routinely permitted to skip mandatory fire drills to prioritize routine desk work, leaving broader internal operational risks completely unaddressed.

Implications for Practice

To bridge the current operational deficits in the sustainability practices of Thai government organizations, public managers must synthesize empirical insights with global benchmarks to optimize administrative efficiency and maximize public service delivery. Addressing these structural gaps requires actionable transformations across all three dimensions of Moore's strategic triangle.

Realigning the public value proposition

Empirical evidence highlights an asymmetrical prioritization where external, citizen-facing mandates are strictly enforced, while internal operational sustainability is behaviorally neglected. This reduces sustainability to a tool for symbolic compliance, functioning as an external veneer rather than an embedded, aligned operational philosophy. To rectify this, public organizations must adopt an "inside-out" perspective. Under this framework, internal ESG practices excellence is intentionally engineered to serve as the baseline that validates and strengthens external public value propositions.

Cultivating an enabling authorizing environment

The current authorizing environment within the Thai government organization suffers from a systemic bottleneck. Due to rigid regulatory restrictions, missing internal ESG performance indicators, and an entrenched compliance-driven culture, highly qualified technocrats are frequently forced to default to legacy, risk-averse behaviors. To overcome this paralysis, public agencies must cultivate a progressive authorizing environment by embedding organizational sustainability and ESG learning directly into mandatory curricula and formalizing active executive stewardship.

Crucially, this operational trajectory aligns with the Royal Thai Government's current macro-level push toward nationwide data integration and digital governance. By strategically connecting institutional reforms to these broader national digital initiatives, senior executives can leverage ongoing digital transformations to systematically dismantle current empirical data deficits. This alignment will empower agencies to capture robust baseline metrics, ultimately driving data-backed, continuous improvements in internal sustainability operations.

Building operational capacity

To resolve the problem of transitory outcomes, where green initiatives and process innovations fail to cultivate permanent behavioral modification or build sustained institutional awareness due to operational silos and short-lived competition cycles, government organizations must shift toward full-loop institutionalization. ESG principles must be seamlessly woven into standard, daily workflows through a clear, interlocking architecture such as:

- 1) Formal mandates: explicitly anchoring internal sustainability requirements into departmental directives.
- 2) Accountable champions: designating specific units like the state enterprise interviewed in this study, a dedicated committee, or specialized personnel to spearhead and anchor long-term ESG implementations.
- 3) Tracking processes: utilizing advanced digital tracking mechanisms rather than redundant analog duplication.
- 4) Performance evaluation: integrating internal ESG milestones directly into operational KPIs to ensure long-term executive accountability.

Ultimately, the primary obstacle to executing these practical transformations lies in dismantling the pervasive bureaucratic mindset that treats internal operational practices as an unwelcome administrative burden secondary to external national policy mandates. By systematically applying these practice implications, Thai government organizations can move past the limitations of symbolic compliance. In doing so, they will transition into holistically sustainable institutions that seamlessly mirror their progressive external value delivery within their internal operational realities.

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