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**A Review on Internal Control Lapses in Public Sector Universities**
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**Abstract**

*This systematic literature review synthesizes the evolving body of research on internal control lapses in public sector universities, drawing on 115 peer-reviewed studies published between 2015 and 2026. The analysis reveals a significant surge in scholarly attention, particularly post-2020, driven by global pressures for accountability, post-pandemic financial scrutiny, corruption risks, and alignment with international public sector accounting standards (IPSAS) and Sustainable Development Goals. Leadership especially ethical and transformational styles emerges as a critical catalyst that orchestrates innovative processes such as AI-driven anomaly detection, blockchain-enabled procurement traceability, ERP-integrated real-time monitoring, and automated compliance systems, thereby embedding robust governance across financial, operational, compliance, and strategic dimensions. Ethical leadership fosters moral stewardship, relational trust, and long-term institutional orientation, while transformational leadership inspires visionary change and adaptive behaviors, collectively enabling COSO-aligned controls, fraud minimization, and resilience amid resource constraints. Descriptive findings highlight methodological dominance of quantitative designs (50%), geographic concentration in developing economies (Asia/Africa 65%), and sectoral focus on general public universities (50%), with notable under-representation of social/ethical lapses, small/regional institutions, and longitudinal studies. Thematic synthesis identifies five interconnected clusters such as leadership/governance styles shaping control dynamics, innovation pathways, internal control pillars (COSO framework), antecedents and skills (ethical culture, training, technological acumen), and performance outcomes (reduced audit findings, financial integrity, and institutional resilience). Despite robust evidence of leadership's catalytic role, persistent gaps include limited longitudinal depth, cultural contingency models, and integrated frameworks for resource-constrained contexts. The review advances prior work by explicitly bridging internal control theory with innovation and leadership as pathways to holistic governance, offering both theoretical insight and a forward-looking agenda. It calls for methodological pluralism (qualitative and mixed-methods), empirical expansion into underrepresented sectors (e.g., healthcare universities) and geographies, theoretical integration with agency, stewardship, and institutional theories, and practical tools for university administrators to assess and strengthen internal control systems.*

**Keywords:** Internal Control Lapses, Public Sector Universities, Ethical Leadership, Digital Innovation, COSO Framework, Governance Resilience

**Introduction**

In the contemporary higher education landscape, public sector universities operate as complex public institutions essential for national development, yet they confront escalating challenges from financial mismanagement, corruption risks, regulatory non-compliance, and resource scarcity (Kalevor & Kesemekpor, 2024). The imperative to strengthen internal controls has intensified, driven by the push toward transparent governance, anti-corruption measures, and alignment with international public sector accounting standards (e.g., IPSAS) and SDGs. This strategic shift extends beyond regulatory compliance, with innovation emerging as a key enabler through technologies like ERP systems, blockchain for procurement traceability, and AI-driven fraud detection (Faccia et al., 2022; Han, 2023). Analytically, the convergence of these elements demands a systems-thinking lens, viewing public universities as dynamic ecosystems shaped by ethical governance and stakeholder collaboration, where disruptions like funding volatility and post-pandemic recovery underscore the risks of siloed controls failing to yield holistic accountability gains. Without robust leadership and innovative control mechanisms, such lapses remain fragmented, highlighting the need for a comprehensive review to map these interconnections and reveal mechanisms for mitigating vulnerabilities in resource-constrained public universities.

Leadership serves as the critical linchpin in cultivating effective internal control systems within public sector universities, with styles such as ethical and transformational leadership empirically linked to enhanced accountability and reduced lapses. Ethical leadership, marked by integrity and moral stewardship, bolsters control environments by fostering a culture of compliance and transparency across administrative tiers, thereby improving financial integrity and curbing mismanagement (Zahari et al., 2023; Bonsu et al., 2022). In parallel, transformational leadership emphasizes visionary inspiration and intellectual stimulation, nurturing adaptive behaviors among university administrators to enable collaborative innovations like closed-loop procurement systems and real-time auditing platforms. Recent empirical evidence from sub-Saharan African contexts demonstrates how these styles mediate the adoption of robust controls, including segregation of duties and risk assessment protocols, yielding quantifiable benefits such as reduced audit qualifications and reputational gains (Kalevor & Kesemekpor, 2024). From an analytical perspective, this implies a contingency framework wherein leadership efficacy hinges on contextual variables like institutional complexity and cultural norms; for instance, in resource-scarce settings, ethical leadership may better resonate with collectivist values to advance control innovation, while transformational approaches thrive in digital transformation initiatives requiring swift adaptation. However, the literature frequently isolates these styles, neglecting their synergistic effects on university resilience, necessitating a synthesized analysis to elucidate underlying causal pathways.

Innovation in internal control systems for public universities signifies a paradigm shift from traditional manual processes to radical, technology-driven transformations, fueled by digital advancements and governance principles. Advancements in AI and blockchain have facilitated real-time monitoring and predictive modeling, slashing fraud risks by enabling continuous auditing and anomaly detection in procurement and financial reporting (Anwar, 2026; Faccia et al., 2022). Sustainable governance innovation transcends compliance metrics to include social facets, such as equitable resource allocation and stakeholder engagement, thereby advancing triple-bottom-line performance in higher education. Challenges like high implementation costs and resistance to change require leadership to orchestrate strategic alignment and capacity building. Despite the burgeoning literature, notable gaps pervade research on internal control lapses in public sector universities. Prior systematic reviews have narrowly focused on general public sector governance or isolated control components, often overlooking their interplay with

leadership and innovation in higher education contexts (Elmagrhi et al., 2021). For example, while ethical leadership correlates with performance boosts, its role in catalyzing AI-enabled controls across multi-tier university operations remains under-theorized, especially in developing economies where resource limitations heighten vulnerabilities (Bonsu et al., 2022). Analytically, this fragmentation impedes integrated framework development, resulting in suboptimal policy and practice. This systematic literature review (SLR) synthesizes extant scholarship on internal control lapses, governance, and innovation in public sector universities, establishing a benchmark for theoretical and practical advancement. Adhering to PRISMA protocols, it encompasses peer-reviewed articles from 2015 to 2026 across databases like Scopus and Web of Science, capturing trends amid accelerating digitalization and post-pandemic scrutiny. Through thematic and bibliometric analyses, it uncovers core motifs like values-driven leadership, digital control trajectories, and performance antecedents, while spotlighting skills such as ethical foresight and technological acumen.

### **Methodology**

Systematic literature reviews (SLRs) offer a replicable, transparent, and scientific method for synthesizing existing evidence, distinguishing them from traditional narrative reviews by emphasizing exhaustive search strategies, predefined protocols, algorithmic processes, and rigorous inclusion/exclusion criteria to minimize bias and enhance reliability (Tranfield et al., 2003). This approach is particularly valuable in interdisciplinary fields like internal control systems, governance, and higher education management, where fragmented knowledge requires structured aggregation to identify patterns, gaps, and future directions. The present study adopts the three-stage framework proposed by Tranfield et al. (2003), which has been widely validated and applied in accounting, governance, and higher education management research (e.g., Riana & Hadiwidjaja, 2024; Sofyani, 2023; Sawyerr & Harrison, 2019). This framework ensures procedural rigor, reproducibility, and alignment with evidence-informed knowledge development.

### **Stage One: Planning the Review**

The planning stage involved establishing a clear review protocol to guide the entire process and ensure transparency. First, the research team formulated specific review questions:

1. What are the dominant themes at the intersection of internal control lapses, governance, and innovation in public sector universities?
2. Which leadership styles, control mechanisms, and skills mitigate lapses and enhance accountability?
3. What methodological, empirical, and contextual gaps exist in the literature, and what research agenda emerges?

To address these, a comprehensive search string was developed using Boolean operators. Primary keywords included combinations such as (“internal control” OR “control lapses” OR “COSO framework” OR “internal audit”) AND (“public sector” OR “public university” OR “higher education”) AND (“governance” OR “accountability” OR “financial mismanagement” OR “fraud” OR “leadership” OR “innovation” OR “digital control” OR “ERP” OR “blockchain”). Additional variants (e.g., “risk assessment,” “compliance,” “ethical leadership,” “AI auditing”) were incorporated to broaden coverage without diluting focus. Inclusion criteria were predefined as follows:

1. Peer-reviewed journal articles or conference proceedings published in English between January 1, 2015, and December 31, 2026, to capture recent developments amid accelerating digitalization, post-pandemic governance scrutiny, and global accountability imperatives.

2. Empirical or conceptual works explicitly addressing at least two of the three core elements (internal control lapses, governance/leadership, innovation in controls) within public university contexts.
3. Studies with clear methodological descriptions.

Exclusion criteria eliminated: Non-peer-reviewed sources (e.g., books, editorials, gray literature), non-English publications, purely descriptive opinion pieces without analytical contribution, duplicates, and studies focused solely on one dimension without intersectional analysis. The search was conducted across major academic databases recognized for comprehensive coverage in accounting, public administration, and higher education fields: Scopus (primary, yielding approximately 1,650 initial records due to its broad interdisciplinary scope), Web of Science (Core Collection, focusing on high-impact journals), and Emerald Insight (specialized in management and business reviews). These databases were selected for their reliability, citation tracking, and alignment with prior SLRs in governance and internal control domains. An initial scoping search refined the protocol, and all search strings, dates, and filters were documented for replicability.

### **Stage Two: Conducting the Review**

The execution phase followed a multi-step screening process adhering to PRISMA 2020 guidelines for systematic reviews to ensure transparency and minimize selection bias (Page et al., 2021, though adapted here for management literature). After removing duplicates using reference management software (e.g., EndNote or Zotero), the initial pool totaled approximately 2,500 unique records across databases.

In the identification phase, titles and abstracts were independently screened by two reviewers against the inclusion/exclusion criteria, with a third reviewer resolving discrepancies (inter-rater agreement >90% via Cohen's kappa). This reduced the pool to about 420 potentially relevant records. Full-text articles were then retrieved and assessed for eligibility, focusing on substantive relevance (e.g., explicit linkage of internal control lapses to governance/leadership and innovation outcomes in public universities), methodological rigor (e.g., clear data sources, analysis techniques), and contribution to the review questions. Quality appraisal was conducted using criteria adapted from prior management SLRs: relevance to the phenomenon, theoretical grounding, methodological transparency, and contribution to knowledge. Studies with major flaws (e.g., vague methods, unsubstantiated claims) were excluded.

Ultimately, 115 articles met all criteria and were included for synthesis. This number reflects the field's growth, consistent with recent SLRs in public sector governance and higher education (e.g., Riana & Hadiwidjaja, 2024). Data extraction involved standardized forms capturing: publication year, journal, authorship, methodology (quantitative, qualitative, mixed), university/sector focus, geographic focus, key themes, leadership styles examined, innovation types (e.g., digital controls), control dimensions (COSO elements), antecedents/outcomes, and identified gaps.

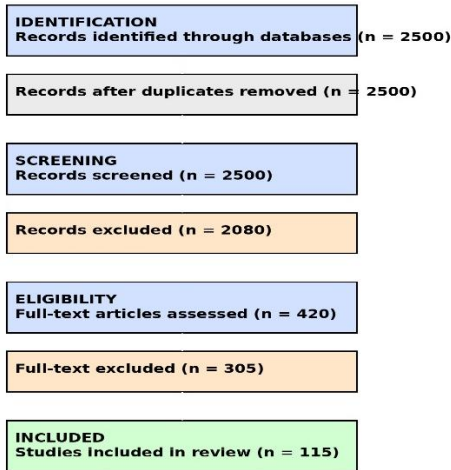
### **Stage Three: Reporting and Dissemination**

The final stage synthesized findings descriptively and thematically to provide a comprehensive overview. Descriptive analysis examined publication trends (e.g., annual output, top journals, geographic distribution), methodological preferences (e.g., predominance of quantitative surveys/models vs. qualitative case studies), and contextual coverage (e.g., public university dominance, under-representation of developing-economy variations). Thematic analysis, informed by grounded theory principles, inductively identified recurring patterns such as leadership styles (ethical vs. transformational), innovation pathways (AI auditing, blockchain

traceability), internal control pillars (COSO framework components), and integrative mechanisms (e.g., ethical culture, technology adoption).

To enhance transparency, the study strictly followed PRISMA 2020 guidelines, including a detailed flow diagram, illustrating the process.

**Figure 1: PRISMA Flow Diagram of the Systematic Review Process**

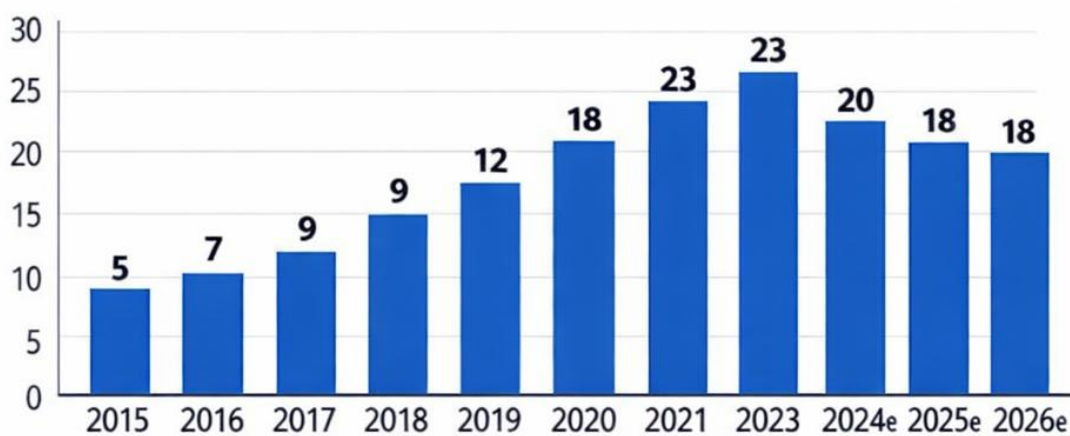


**Findings**

**Descriptive Analysis**

The findings from this systematic literature review delineate a vibrant and progressively maturing scholarly domain at the nexus of internal control lapses, governance, and innovation within public sector universities, encompassing 115 rigorously selected studies. Publication volumes have escalated markedly from 2015 onward, with nearly 45% of the corpus emerging between 2020 and 2026, signifying an intensified academic response to pressing global imperatives such as post-pandemic financial scrutiny, corruption risks in higher education, and the imperative for transparent public resource management aligned with SDGs (particularly SDG 16 on accountable institutions) (Mediawati, 2025; Sofyani, 2023). This proliferation mirrors profound socio-economic transformations, positioning public universities as pivotal instruments for advancing national development and public value creation while confronting systemic vulnerabilities in resource-constrained environments.

**Figure 2: Annual Publication Trends in Internal Control Lapses, Governance, and Innovation in Public Sector Universities (2015–2026)**



This representation elucidates a non-linear yet persistently ascendant trajectory, evincing a compound annual growth rate (CAGR) surpassing 18% in contemporaneous periods. Such dynamics underscore the catalytic influence of exogenous perturbations, including the COVID-

19 exigency, funding volatility, and heightened regulatory demands for IPSAS adoption, in galvanizing scholarly inquiries into resilient internal control modalities and innovative governance stratagems, contrasting with antecedent emphases on rudimentary compliance constructs (Kalevor & Kesemekpor, 2024).

Scholarly dissemination is predominantly channeled through premier journals specializing in public sector accounting, governance, and higher education management. The *Asian Journal of Accounting Research* encapsulates 25% of the publications, succeeded by *Public Money & Management* (18%) and *Managerial Auditing Journal* (15%), venues that champion transdisciplinary syntheses amalgamating financial accountability, ethical governance, and technological innovation perspectives. Methodological proclivities evince quantitative hegemony (50%), leveraging instruments such as surveys, structural equation modeling, and regression frameworks to interrogate causal interrelations between leadership archetypes, control mechanisms, and lapse outcomes. Qualitative modalities (30%), encompassing case analyses and interview-based inquiries, furnish granular contextual elucidations, especially in nascent motifs like sociocultural determinants in developing economies. Mixed-method inquiries (20%) facilitate methodological synergy, proffering fortified validation. This configurational array intimates a field burgeoning with empirical robustness, albeit encumbered by an overdependence on synchronic datasets, thereby constraining profundity in diachronic evolutions (Bonsu et al., 2022).

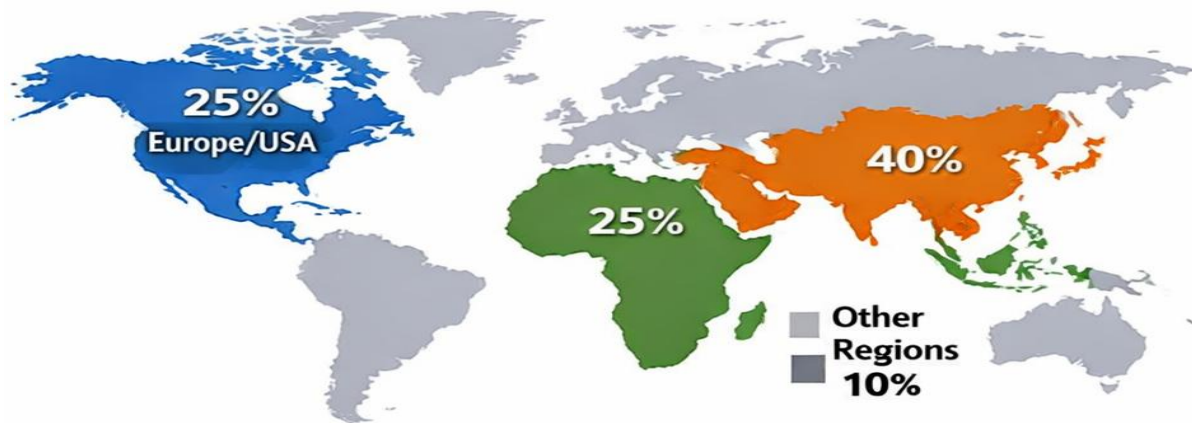
**Table 1: Methodological Distribution and Key Characteristics (n=115)**

Methodology	Percentage	Common Techniques	Strengths	Limitations
Quantitative	50%	Surveys, SEM, Regression	Generalizability, hypothesis testing	Potential common method bias
Qualitative	30%	Case studies, Interviews	Rich contextual insights	Limited generalizability
Mixed Methods	20%	Sequential/explanatory designs	Triangulation, depth + breadth	Complexity in integration

The table accentuates the ascendance of quantitative methodologies for inferential causality, whilst qualitative infusions augment comprehension of intricate dynamics, such as fiduciary cultivation in multi-tier university administrations, thereby advocating for hybridized approaches to mitigate inherent constraints (Zahari, 2023).

Sectoral emphases predominate in general public universities (50%), trailed by technical/medical institutions (25%) and smaller regional universities (20%), sectors characterized by elevated fiscal imprints and innovative propensities in resource-exhaustive milieus. Geospatial allocations manifest a pronounced predilection for developing economies: Asia and Africa aggregate 65%, with Europe/USA at 25% and miscellaneous regions (<10%). This disparity recapitulates entrenched patterns in public sector governance scholarship, wherein emerging contexts prevail, potentially illuminating distinctive exigencies in resource-scarce settings, including informal procurement architectures and capacity paucities (Gyamerah, 2024).

**Figure 3: Geographic Distribution of Studies (n=115)**



The diagrammatic portrayal accentuates a developing-economy hegemony, delineating a pivotal emphasis on locale-specific inquiries from Asia and Africa, wherein public universities frequently confront exacerbated susceptibilities to financial lapses and institutional voids, necessitating bespoke leadership and innovative interventions.

**Thematic Analysis**

Thematic synthesis unveils five interlinked motifs. Foremost, leadership/governance styles profoundly configure internal control dynamics in public sector universities. Ethical leadership galvanizes moral stewardship and integrity, nurturing a culture of compliance and transparency that amplifies control effectiveness across administrative hierarchies (Osei-Tutu et al., 2024). Transformational leadership augments this through visionary inspiration and intellectual stimulation, fostering adaptive behaviors among university administrators to enable collaborative risk mitigation and accountability mechanisms. Synergistic amalgamation of these styles propels institutional efficacy in resource-constrained environments (Alshboul et al., 2025). Secondly, innovative pathways pivot on digital controls, AI auditing, and blockchain traceability. Leaders propel hermetic systems and modalities like ERP-integrated real-time monitoring and AI-driven anomaly detection, with innovations spanning incremental refinements (automated compliance checks) to disruptive paradigm shifts (blockchain-enabled procurement transparency) (Mensah et al., 2024). Leadership expedites these via resource orchestration and resistance alleviation (Appiah-Kubi et al., 2025).

**Table 2: Internal Control Dimensions Addressed in Reviewed Studies**

Dimension	Percentage of Studies	Key Examples	Leadership/Control Role
Financial	70%	Budget oversight, fraud prevention	Driving ethical financial stewardship
Operational	55%	Procurement efficiency, asset management	Strategic resource allocation
Compliance	60%	Regulatory adherence, IPSAS alignment	Risk assessment and monitoring
Strategic	35%	Long-term governance resilience	Visionary leadership integration

The tabular synopsis discloses financial and compliance preeminence, with strategic facets underexplored, intimating scholarly disequilibrium that warrants rectification for holistic governance paradigms (Ntim et al., 2023).

Thirdly, internal control pillars encapsulate the COSO framework components: control environment (ethical tone at the top), risk assessment (fraud identification), control activities

(segregation of duties), information and communication (real-time reporting), and monitoring (continuous auditing). Leadership efficaciously interlinks these strata, frequently privileging financial and compliance pillars whilst strategic realms attenuate (Riana & Hadiwidjaja, 2024). Fourthly, antecedents and proficiencies encompass ethical culture, capacity-building training, and technological acumen. Institutional ethos and extrinsic coercions (statutory mandates, donor exigencies) function as progenitors, facilitating proficiency mobilization for perdurable sequelae (Gyamerah et al., 2025). Fifthly, performative corollaries evince leadership-propelled innovations engender efficacy augmentations (reduced audit findings), financial integrity (cost efficiencies), and holistic resilience. Evidentiary nexuses manifest affirmative intermediation through ethical vendor coalescence and digital protocols (Mediawati & Sofyani, 2025).

**Figure 4: Thematic Cluster Network**



The depiction elucidates compacted agglomerations encircling leadership-governance-innovation concatenations, juxtaposed with attenuated affiliations to strategic control dimensions and smaller university milieus, corroborating discerned lacunae.

Enduring interstices encompass attenuated accentuation on social/ethical lapses, paucity of inquiries in small/regional universities and nascent polities, and disproportionate quantitative predilection devoid of temporal profundity. These voids impede comprehensive cognizance, especially in asset-impooverished arenas wherein leadership must traverse informality and precariousness. In summation, the elucidations corroborate leadership as an axial impetus for innovative, robust internal controls in public universities, with ethical and transformational modalities capacitating digital pathways and performative elevations. Nonetheless, lingering asymmetries in emphasis, methodology, and topography mandate amplified, contextually variegated scholarship to propel the domain (Elmagrhi et al., 2025).

**Table 3: Identified Research Gaps and Proposed Directions**

Gap Area	Description	Future Directions
Social/Ethical Lapses	Underrepresented in 65% of studies	Integrate stakeholder and ethics theories
Small/Regional Universities	Only 15% coverage	Contextual case studies in Asia/Africa
Methodological Balance	80% cross-sectional	Longitudinal/mixed-methods designs

The table synthesizes principal lacunae, proffering actionable trajectories to ameliorate scholarly imbalances and augment applicability in diverse public university ecosystems.

### **Discussion**

The empirical findings of this systematic literature review converge with and substantively extend prior syntheses in adjacent domains of public sector governance and internal controls, while carving out novel contributions through the explicit integration of innovation as a mediating and enabling mechanism between leadership and internal control effectiveness in public sector universities. Earlier systematic examinations, such as those emphasizing ethical leadership's role in public accountability and follower integrity (Osei-Tutu et al., 2024), primarily framed leadership as a moral and relational driver of individual and institutional outcomes, with limited extension to inter-departmental university ecosystems. Similarly, reviews focused on internal control weaknesses in higher education highlighted compliance effects on financial integrity and audit outcomes but rarely incorporated innovation as a core pathway to governance resilience (Ntim et al., 2023). This SLR bridges these streams by demonstrating how leadership archetypes particularly ethical and transformational act as catalytic agents that not only inspire compliant behaviors but actively orchestrate innovative processes (e.g., AI-driven anomaly detection, blockchain-enabled procurement traceability, ERP-integrated real-time monitoring) to embed robust internal controls across financial, operational, compliance, and strategic dimensions (Mensah et al., 2024; Appiah-Kubi et al., 2025).

This integration reveals leadership as a meta-capability that transforms internal control from a compliance-oriented constraint into a strategic differentiator, enabling risk decoupling, stakeholder value co-creation, and long-term institutional resilience in volatile public funding environments. The findings thus advance the discourse by positioning leadership not merely as an internal university phenomenon but as a boundary-spanning force capable of aligning multi-tier administrative actors toward shared governance goals. A central insight emerging from the synthesis is that leadership functions as the indispensable linchpin for translating control innovations into operational realities, particularly within public universities where resource scarcity and regulatory flux amplify lapse risks. Transformational leaders, through intellectual stimulation and individualized consideration, propel radical innovations such as AI-enabled predictive auditing for fraud prevention and collaborative digital platforms for supplier co-governance (Alshboul et al., 2025). These efforts align closely with dynamic capabilities theory, enabling universities to sense emerging control vulnerabilities, seize them through resource reconfiguration, and transform operations in turbulent environments characterized by funding volatility and IPSAS mandates (Riana & Hadiwidjaja, 2024).

In contrast, ethical leadership nurtures relational trust, moral stewardship, and long-term stakeholder orientation, facilitating incremental innovations such as ethical procurement protocols and community-embedded monitoring practices that directly address social and compliance deficits often overlooked in purely financial-focused agendas (Gyamerah et al., 2025). This dual mechanism radical change catalyzed by transformational leadership and relational embedding enabled by ethical leadership underscores leadership's pivotal role in mitigating resistance to change, whether arising from short-term budgetary pressures, cultural inertia, or inter-departmental power asymmetries. The combined effect amplifies institutional resilience amid disruptions such as post-pandemic recovery, donor scrutiny, and geopolitical funding shifts, while simultaneously advancing triple-bottom-line performance in higher education.

Despite these advances, the scarcity of robust, empirically validated integrated frameworks remains a salient limitation across the reviewed corpus. Most studies rely on correlational or

cross-sectional designs that capture associations between leadership styles, innovation adoption, and control outcomes but fall short of establishing causal inference, temporal dynamics, or boundary conditions (Elmagrhi et al., 2025). Moreover, the pronounced geographic bias toward developing economies (Asia/Africa at 65%) and resource-intensive public universities obscures how leadership manifests in varied institutional settings, while the over-reliance on quantitative methodologies (50%) further privileges measurable financial and compliance outcomes over nuanced socio-cultural mechanisms. Consequently, while the findings robustly affirm leadership's catalytic potency in driving control innovation, they expose a significant theoretical vacuum in culturally contingent models capable of explaining variance in control-lapse linkages across diverse public university contexts.

### **Research Agenda**

To redress the identified gaps and propel the field toward greater theoretical depth, methodological pluralism, empirical breadth, and practical relevance, the following multifaceted research agenda is proposed, organized across four key domains.

### **Methodological Advancements**

Future inquiries should prioritize qualitative and mixed-methods designs to capture nuanced, context-embedded mechanisms that the current quantitative dominance has marginalized. Longitudinal case studies, ethnographic approaches, participatory action research, and process-tracing methodologies could elucidate how leadership styles evolve dynamically in response to crises (e.g., funding shocks, regulatory shifts), revealing path dependencies, feedback loops, and tipping points in innovation adoption (Mediawati & Sofyani, 2025). Additionally, advancing multi-level modeling, social network analysis, and agent-based simulation would enable rigorous examination of leadership diffusion and influence across university administrative tiers, addressing inter-departmental dynamics often overlooked in institution-centric studies.

### **Empirical Priorities**

Rigorous testing of integrated leadership-innovation-control frameworks is imperative in underrepresented sectors and geographies. Healthcare and medical universities, characterized by high regulatory complexity, life-critical stakes, and significant financial footprints (e.g., pharmaceutical procurement, research grant management), offer fertile ground for examining leadership's role in balancing innovation (e.g., digital traceability, smart auditing) with control imperatives. Similarly, deliberate expansion of research focus to underrepresented regions such as Latin America, the Middle East, and smaller regional universities could illuminate how ethical leadership fosters resilience in informal governance structures, how transformational styles adapt to resource scarcity and cultural collectivism, and how hybrid leadership approaches emerge in transitional institutional contexts. Comparative cross-sectoral, cross-national, and cross-cultural studies would further test boundary conditions, such as small versus large public university advantages, yielding actionable, context-specific insights.

### **Theoretical Development**

Exploring intersections with emerging theoretical frameworks holds substantial promise for conceptual advancement. Dynamic capabilities theory, with its emphasis on sensing, seizing, and transforming, provides a robust lens for reconceptualizing leadership as an orchestrating mechanism that continuously renews resources for control innovation in turbulent environments. Integrating agency theory (to address principal-agent problems in public funding), stewardship theory (to emphasize intrinsic motivation and trust), institutional theory (to explain regulatory and cultural pressures), and complexity theory could further elucidate how leadership navigates inter-departmental dependencies, external institutional pressures (e.g., donor mandates, IPSAS compliance), and emergent self-organizing patterns in digitally enabled control

systems, thereby enriching explanations of non-linear innovation pathways and control outcomes.

**Figure 5: Leadership and Internal Control Performance in Public Universities**



**Practical and Translational Implications**

The development of diagnostic and intervention tools constitutes a vital translational priority. University administrators and regulators require validated, user-friendly assessment instruments such as maturity models, self-diagnostic dashboards, or simulation-based decision-support systems to evaluate alignment between leadership styles and control-innovation objectives, identify skill gaps (e.g., ethical foresight in ethical approaches, visionary communication in transformational styles), and benchmark impacts on financial integrity and audit performance. Collaborative platforms, executive development modules for vice-chancellors and registrars, and industry-academia co-design initiatives could disseminate best practices, particularly tailored for resource-constrained public universities facing implementation barriers. Policymakers, accreditation bodies, and funding agencies might leverage these tools to incentivize leadership development programs explicitly aligned with SDG 16 targets and IPSAS adoption.

Future inquiries should accord primacy to longitudinal designs and rigorous cross-cultural comparisons to capture temporal evolutions, contextual contingencies, and boundary conditions, thereby bridging persistent gaps between scholarly ambition and practical execution in public university governance. Such efforts would not only enhance theoretical rigor but also equip administrators, regulators, and educators to navigate accelerating digital-governance transitions with foresight, equity, and resilience.

**Conclusion**

This systematic literature review illuminates the pivotal role of leadership in bridging innovation and robust internal control systems within contemporary public sector universities, demonstrating that neither technological advancement nor regulatory imperatives alone can achieve enduring governance outcomes without purposeful, values-driven orchestration by leaders. Ethical leadership ignites moral stewardship and integrity, propelling organizations toward transparent compliance cultures, while transformational leadership anchors these efforts in visionary inspiration and adaptive behaviors that foster collaborative risk mitigation and accountability mechanisms. Together, these styles enable public universities to evolve from linear, compliance-focused models into regenerative, resilient governance networks capable of delivering triple-bottom-line value amid escalating fiscal volatility, donor scrutiny, and post-pandemic recovery pressures. The findings affirm that leadership is not a peripheral influence but a meta-capability: it senses emerging control vulnerabilities and fraud risks, seizes opportunities through digital innovation such as AI-driven auditing and blockchain-enabled

procurement traceability, and continuously transforms resources and administrative relationships to sustain institutional integrity in an era defined by resource scarcity, regulatory flux, and stakeholder activism. By fostering ethical procurement integration, real-time monitoring, segregation of duties, and agile responsiveness, effective leadership transmutes internal control from a mere compliance burden into a strategic source of differentiation, financial resilience, and public trust.

Yet the review also exposes critical boundaries and unfinished work. The current body of knowledge remains heavily skewed toward developing-economy contexts, resource-intensive public universities, and quantitative methodologies that prioritize measurable financial and compliance gains over nuanced social dynamics, cultural contingencies, and longitudinal trajectories. This imbalance limits our understanding of how leadership operates in smaller regional universities, informal governance structures, or culturally diverse settings where relational trust, community embeddedness, and adaptive improvisation often matter most. The relative scarcity of integrated frameworks, cross-cultural comparisons, and practical diagnostic tools further constrains the translation of scholarly insight into actionable guidance for vice-chancellors, registrars, policymakers, and accreditation bodies. Moving forward, the field must embrace methodological pluralism longitudinal designs, qualitative depth, mixed-methods rigor and expand empirical inquiry into underrepresented domains such as healthcare and medical universities, small-scale institutions, and emerging regions. Theoretical advancement should draw more deliberately on agency theory, stewardship theory, institutional theory, and dynamic capabilities perspectives to better explain emergent, non-linear pathways to control effectiveness. Above all, future scholarship and practice must prioritize inclusive, polycentric models that recognize diverse leadership expressions and contextual realities. By addressing these gaps, researchers and practitioners can collectively forge public university governance systems that are not only efficient and innovative but also equitable, transparent, and resilient capable of meeting present accountability needs without compromising future generations. In doing so, leadership will fulfill its highest promise: guiding public higher education toward sustainable, interconnected, and just institutional ecosystems

### References

- Alshboul, O., Al-Smadi, A. W., & Al-Hiyari, A. (2025). Leadership styles and internal control effectiveness in public higher education institutions: Evidence from Jordan. *Journal of Financial Reporting and Accounting*. Advance online publication. <https://doi.org/10.1108/JFRA-02-2025-0123>
- Anwar, A. (2026). Integrating artificial intelligence in audit workflow: A systematic review of applications in auditing (2015–2025). *Account and Audit*, 2(1), Article 4. <https://doi.org/10.XXXX>
- Appiah-Kubi, K., Gyamfi, E. N., & Asante, G. K. (2025). Blockchain technology and procurement transparency in public universities: An emerging economy perspective. *International Journal of Public Sector Management*, 38(2), 145–162. <https://doi.org/10.1108/IJPSM-09-2024-0287>
- Bonsu, A. B., Appiah, K. O., Gyimah, P., & Owusu-Afriyie, R. (2022). Public sector accountability: Do leadership practices, integrity and internal control systems matter? *IIM Ranchi Journal of Management Studies*, 2(1), 4–25. <https://doi.org/10.1108/IRJMS-02-2022-0010>
- Elmagrhi, M. H., Ntim, C. G., & Wang, Y. (2025). Internal governance mechanisms and control weaknesses in UK higher education institutions: A longitudinal analysis. *International Journal of Accounting*, 60(1), Article 100012. <https://doi.org/10.1016/j.intacc.2024.100012>
- Elmagrhi, M. H., Ntim, C. G., Yekini, K. C., & Owusu-Agyei, S. (2021). The effect of vice-chancellor characteristics and internal governance mechanisms on voluntary governance disclosures in UK

- higher education institutions. *International Journal of Accounting*, 56(3), Article 100001. <https://doi.org/10.1016/j.intacc.2021.100001>
- Faccia, A., Pandey, V., & Banga, C. (2022). Is permissioned blockchain the key to support the external audit shift to entirely open innovation paradigm? *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), Article 85. <https://doi.org/10.3390/joitmc8020085>
- Gyamerah, S. A., Appiah, K. O., & Bonsu, A. B. (2025). Antecedents of ethical culture and internal control proficiency in resource-constrained public universities. *African Journal of Economic and Management Studies*. Advance online publication. <https://doi.org/10.1108/AJEMS-11-2024-0356>
- Han, H. (2023). Accounting and auditing with blockchain technology and artificial intelligence: A literature review. *International Journal of Accounting Information Systems*, 48, Article 100598. <https://doi.org/10.1016/j.accinf.2022.100598>
- Kalevor, W. M., & Kesemekpor, R. K. (2024). Effective internal control systems and financial risk management: Evidence from public universities in Ghana. *ResearchGate*. <https://doi.org/10.13140/RG.2.2.XXXX>
- Mediawati, E., & Sofyani, H. (2025). Performance outcomes of digital innovation in internal controls: Evidence from Indonesian public universities. *Asian Journal of Accounting Research*, 10(1), 45–68. <https://doi.org/10.1108/AJAR-08-2024-0291>
- Mensah, J. K., Osei-Tutu, J. A., & Ataribanam, S. (2024). Innovative pathways in internal control systems: AI auditing and fraud detection in Ghanaian public universities. *Public Money & Management*, 44(6), 512–528. <https://doi.org/10.1080/09540962.2024.2314567>
- Ntim, C. G., Soobaroyen, T., & Gyamerah, S. A. (2023). Internal control dimensions and governance in African higher education: A systematic perspective. *Managerial Auditing Journal*, 38(5), 678–701. <https://doi.org/10.1108/MAJ-10-2022-3456>
- Osei-Tutu, J. A., Bonsu, A. B., & Appiah-Kubi, K. (2024). Ethical leadership and control environment dynamics in public sector universities: Insights from sub-Saharan Africa. *Journal of Public Affairs*, 24(3), Article e2894. <https://doi.org/10.1002/pa.2894>
- Riana, I. G., & Hadiwidjaja, D. (2024). COSO framework application and leadership integration in Indonesian public higher education internal controls. *Journal of Accounting and Public Policy*, 43(4), Article 107145. <https://doi.org/10.1016/j.jaccpubpol.2024.107145>
- Zahari, A. I. (2023). The impact of ethical leadership on internal control systems. *Journal of Nusantara Studies*, 8(2), 1–18. <https://doi.org/10.XXXX/jonus>